2012 What a year!

The Annual Report of District Manager, David R. Rupert

he Armstrong Conservation District changed once again to cope with the fast changing times. The submission of a new Pennvest application for an abandoned mine drainage project in partnership with the Clarion conservation District, and numerous unanticipated situations and opportunities required the District to update our Long Term Strategic Plan. Our "2012 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 the previous year, the infusion of nearly \$1.6 million dollars of the American Recovery and Reinvestment Act (ARRA) funding created new opportunities and challenges for the District as we met the tight deadlines established by the funding source. An additional Pennvest grant created new challenges to close out the initial Pennvest ARRA grant and prepare for construction on the new site with the Clarion District.

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 semi-monthly 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- Chelsea Walker from the Apollo area and said good bye to our previous member-R. William Thomas. A Former AmeriCorps intern, A. Gregg Smith did not go far though since he was hired as the full time Dirt and Gravel Road /Pennvest Project Coordinator in July. 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, 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 11 Municipalities on 19 different projects funded with Pennvest ARRA Stimulus funding that addressed Non-Point Source Pollution sites affecting their municipal roads. 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. The District sponsored another Environmentally Sensitive Maintenance (ESM) workshop for Municipal Officials to improve maintenance practices on our many miles of Dirt and Gravel Roads. AmeriCorps and District Staff participated in updating the theme layers for public sewage and water and assisted in the creation of 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. 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 fourth Agricultural Conservation Easement on the George and Marsha Kepple farm in Brady's Bend 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. Work proceeded on several Watershed restoration Projects and those specific accomplishments may be found under the watershed specialist section of our Annual Report.

For 2012, the District continued its **Outreach and Education** efforts. Those efforts included the junior Naturalist and adventure Camp, the expansion of the County Envirothon to include additional schools, the Arbor Day Program, the Fruit Tree and Seedling sale, the Annual Combined Awards Banquet, maintenance 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 all of these efforts by the staff, I am proud of what the Armstrong District has accomplished in 2012 and look forward to implementation of our 2013 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 2013 doesn't blow by as fast as it seemed to in 2012. I know that approaching 32 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

Chris Cramer - <u>clcramer@co.armstrong.pa.us</u>

Erosion & Sediment Pollution Control Program (E&SPC)

he 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 2012.

Some of the activities for the past year have been:

- 1. E&SPC plans were received for 259 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 53 E&S plans received in this office.
- 3. E&S plan reviews were conducted on a total of 2260 acres with a total of 859 acres of disturbed earth.
- 4. Assistance was given in the review of 14 prime farmland reviews.
- 5. Environmental reviews were completed on 12 proposed projects.
- 6. NPDES permits were received, processed, and reviewed for 8 new General and 2 Individual Permits.
- 7. ESCGP-1 permits were received for 2 projects and 1 modified permit.
- 8. New district cooperator agreements were received for 9 landowners.
- 9. Received and investigated complaints relating to erosion and sedimentation.
- 10. Technical assistance was given to 404 persons during the year.

- 11. Conducted 56 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.
- 12. Terminated 7 permitted projects that were completed during the year.
- 13. A Legislative Breakfast Meeting is held annually and attended by State Senators, State Representatives, County Commissioners, District Directors, Associate Directors, Cooperating Agencies and District Staff to inform the Legislators and public of the goals and accomplishments of the Armstrong Conservation District. This was held March 23, 2012 with approximately 30 persons attending.

Total review fees received during 2012 were \$60,900. NPDES permit fees totaled \$6,500.00. There was 1 Civil Enforcement action taken in 2012 that totaled \$1,500.00.

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. 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. 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). Due to the increased workload and ever changes to the NPDES regulations in 2012, these workshops were not held during the past year but plans are being made to conduct them in 2013.

Due to the many changes in the NPDES permitting system, the reduced size of disturbed acreage that requires a permit, and the departure of the 2nd technician in 2011, the workload of the District Technician has increased greatly in the past several years. In 2012, I began to work with Gregg Smith on the process of recording and reviewing plans, do field checks and inspections, follow up on complaints, prepare and file reports with the possibility of him becoming an E&S Technician.

Some of the larger and many projects during 2012 were:

KEYSTONE GENERATING STATION

This was an ongoing project for the Keystone Generating Station that is located in Plumcreek Township for its flue gas desulfurization scrubber project that will improve the air quality in the area. Total project consisted of the site preparation for the chimney, absorber, replacement ammonia line installation, railroad track removal, tank removal, existing ammonia line removal, warehouse demolition stockpile area, laydown areas, railroad loading and unloading yard, 230

kilovolt electrical duct bank, pre-treatment building, intake at Plum Creek and its associated pipeline, and wetland mitigations on approximately 35 acres. The main work was completed in 2011 with the exception of the wetland mitigation area which was completed in early 2012 and the entire permitted project has been terminated.

NORTHPOINTE AT SLATELICK INDUSTRIAL PARK

This project began in the year 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 continues and new buildings are constructed. To date, there are 8 companies located in the park and a hiking trail. A new technology center construction began in 2010 with the work being completed and terminated in 2012. The permit has been renewed to allow the final grading of the main parcels for future development. Future plans include a Phase 2 with an additional 19 acres to be timbered and graded for development.

LENAPE HEIGHTS GOLF COURSE

This 7 acre project got underway at the end of 2010. A large sediment basin/stormwater facility was constructed in 2011 and will be used in the irrigation of the 16 acre golf course. The proposed 3 story hotel with 20 rooms and other features in the basement had been revised to a 2 story hotel with fewer rooms and constructed next to the existing club house/banquet facility with an expanded parking area. This project will be completed in 2012 with final inspection and termination in 2013.

ARMSTRONG COUNTY YMCA

This project began in the summer of 2011 on a 6.1 acre site near the intersection of North Water and Montieth Streets on the old Bauer Block site in Kittanning. The new building contains offices, pools, fitness and recreation areas, mini gym, multipurpose field adjacent to the building and 2 main parking areas. This project was completed, final inspection, and termination in 2012.

ROSEBUD MINING COMPANY SHOP STORAGE

This project is located in Kittanning Township and earthmoving began in late 2011 on 10 acres. The site was graded and an access road installed with diversion ditches and a sediment trap. This project area will allow Rosebud Mining to expand as needed for equipment storage.

CHRIST THE KING PARISH

This project began in the summer of 2011 on a 17.8 acre site at the former Assumption Church along Rt. 66 near Leechburg. Disturbance on the 7 acres expanded the current church building and added additional parking areas and a driveway with detention ponds. Work was completed in 2012 and a final inspection and termination is scheduled for 2013.

NORTHEASTERN ENERGY CONSULTING, INC. (NECI)

Located at the intersection of US Route 422 and SR 210 in Elderton Borough and Plumcreek Township, this 16.757 acre project began in 2007 with the construction of an office and shop building, diversion ditches and retention ponds on approximately 7 acres of the site. The project was renewed in 2012 for the purpose of adding 2 additional buildings and expanding the parking area. One building and additional parking has been completed.

WAL-MART EXPANSION PROJECT

This project began in December 2011 on this 15 acre site for the proposed addition of approximately 54,000 square feet to the existing Wal-Mart building in order to make it a Super Wal-Mart. The existing building will be expanded out to the right side and rear with stormwater facilities, conveyance system, landscaping and resurfaced parking lot. This project will continue in 2012 and be completed in 2013.

NISOURCE MIDSTREAM SERVICES, LLC – BIG PINE PIPELINE PROJECT

This 207.71 acre project for a pipeline/transmission line located in Burrell, Gilpin, Kiskiminetas, Parks, South Bend, South Buffalo Townships, and Freeport Borough consists of the installation of approximately 60 miles of 20" and 24" natural gas pipeline through Butler, Armstrong, Indiana, and Westmoreland Counties. This will be a lift and lay replacement of approximately 23 miles with directional bores under the Allegheny River and most streams and major highways in the county. Construction began in 2012 and scheduled for completion in 2013.

DOMINION TRANSMISSION

This 13 acre site in South Bend Township is for lift and lay replacement of existing pipelines and the associated well lines. Project began in November, 2012 and will be completed during the 2013 construction season.

UPCOMING PROJECTS

ARMSTRONG SCHOOL DISTRICT - ARMSTRONG JR. SR. HIGH SCHOOL

This 68 acre project along Buffington Drive in Manor Township will disturb 55 acres for the proposed construction of a new junior/senior high school. Access to the site will be off SR 422. The project will include the widening of Buffington Drive, new school, parking areas, utility installation, athletic fields, stormwater facilities and landscaping. The construction permit was issued in November, 2012; earthmoving is scheduled to begin in Spring 2013, and anticipated completion in Fall, 2014.

MAHONING CREEK HYDROELECTRIC COMPANY, LLC

Phase I of this project will consist 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 installed at the Dam will supply the powerhouse for a total disturbed area of 4.1 acres. A Phase II 8.84 acre project will construct two new access roads, widen the transmission corridor, and upgrade the power poles of the existing 12.5 kV distribution line extending 1.12 miles north from Belknap switching facility with total disturbed acreage of 2.31 acres. Applications and permits are still in the processing stage and have not been issued.

EAST FRANKLIN TOWNSHIP MUNICIPAL BUILDING

This project involves the construction of a new Municipal Building and parking lot adjacent to the existing salt storage building in along Cherry Orchard Avenue in East Franklin Township. Total project is 3.68 acres with 2.2 proposed acres of disturbance. Demolition of the existing

buildings, leveling of the site, installation of required utilities, and construction of the stormwater infiltration basin is proposed during this work.

COUNTY WATER AND SEWER PROJECTS

FORD CITY BOROUGH

This project began in December 2010 and continued through 2011 with the sewer separation project on 2.5 acres. The project covered 12th to 14th Streets along Third, Fourth, Fifth, and Sixth Avenues. A small section was also done along the 500 block of Fifth Avenue. The project was scheduled for completion in 2012 with the individual connections, sidewalk installations, and the revegetation of the disturbed areas but winter shutdown will delay the completion until Spring 2013.

MAHONING TOWNSHIP SANITARY SEWER PROJECT - PHASE IIB

This project began in 2012 and is a continuation of Phase II of a new public sanitary sewer collection/conveyance system along Putneyville Road (SR 1025) and Seminole Road (Township Route 613). The collected sewage will be conveyed by gravity sanitary sewers into a new sewage pump station located along Putneyville Road. Total project area will be 8 acres with 6.7 acres disturbed. Project began in 2012 and will be completed in 2013.

RAYBURN TOWNSHIP SANITARY SEWER COLLECTION & SEWAGE TREATMENT PLANT

This 30.4 acre site in Rayburn Township began in the Fall, 2012 is for 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. Renovation and additions will be done to the existing Armstrong Sewage Treatment Plant during this project. A rain garden will be constructed at the sewage treatment plant with all work scheduled to be completed during the 2013 construction season.

BRADYS BEND TOWNSHIP WATER AND SEWER AUTHORITY SEYBERTOWN ROAD WATERLINE EXTENSION PROJECT

This project involves the installation of approximately 22,000 feet of 8" waterline that will tie into existing lines on Seybertown Road, Dockside Lane, Bowser Road, Nine Acre Road and Vot Lane in Bradys Bend Township with a total of 2.5 disturbed acreage. This project began in 2012 and will be completed in 2013.

UPCOMING

WEST HILLS AREA WATER POLLUTION CONTROL AUTHORITY

This sanitary sewerage system project proposes to install sewer lines, force mains, and one pump station in East Franklin Township and North Buffalo Township. Approximately 56,983 L.F. of sewer lines will be installed in 3 separate areas: Furnace Run, Walkchalk and Center Hill. A total of 43 stream crossing and 8 wetland crossing are proposed on this 463 acre project that plans to disturb 13 acres. Construction was to begin in 2012 but still awaiting PENNVEST funding.

KITTANNING SURBURBAN JR. WATER AUTHORITY

This project involves the installation of various water line extensions in East Franklin and North Buffalo Townships on a total of 6 disturbed acres. Permit was issued in 2012 with anticipated construction to begin but to date the PENNVEST funding has not been secured.

PA. DEPARTMENT OF TRANSPORTATION PROJECTS

SR 268/422 BUSINESS INTERSECTION/WEST KITTANNING

This project is located in East Franklin Township and West Kittanning Borough on 4.5 acres and construction began in Spring 2011. The project consisted of the realignment and upgrade of the intersection of SR268 and SR1038 to improve safety to motorists. Whiskey Run stream channel was realigned through a box culvert and a retaining wall was constructed. Project went into winter shutdown in Fall 2011 and resumed in Spring, 2012 and completed in 2012. Offsite stream mitigation was also done during this project.

FREEPORT BRIDGE - SR 356/128

This 4 county project in Armstrong, Allegheny, Butler, and Westmoreland Counties began in August 2010 and is scheduled to be completed in Summer, 2013. Total project is 43.8 acres with 23.9 acres of disturbed earth with Armstrong County having approximately 9 disturbed acres. The project will consist of rehabilitation of the existing bridge over the Allegheny River and provide 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.

UPCOMING

SR28; SEC. 164 – SLABTOWN BRIDGE/BAUM CURVE

This 25 acre phased realignment project will disturb 19 acres of earth in Boggs Township. The project will involve the reconstruction and realignment of SR 28, Section 164 corridor, replace the existing Slabtown Bridge with a two-span multi-girder structure, replace existing culverts, and alignment of various township roads to connect with the new facility. This project has been awarded and construction will begin in Spring, 2013.

RT. 422 THEATER ROAD ALIGNMENT

This project will be for a roadway realignment of SR422 beginning at Lasher Road (T-850) in Manor Township and ending near the State Stockpile Road in Kittanning Township. The project will disturb 35.1 acres that will include the realignment of Theater Road and the permanent addition of a turning lane beginning east of Lasher Road and extending to just beyond Rupp Church Road (T-570). There will be extended site grading, drainage upgrades, and sight distance improvements. The project was bidded out in 2012 and construction will start in 2013 with an anticipated 2 years.

RT. 422 – MUSHROOM ROAD

This project of 9.4 acres will have approximately 1.9 acres of disturbed earth for roadway improvements for SR 422 at the Mushroom Farm Road Intersection in West Franklin Town ship.

The project will consist of widening the road, upgrading drainage facilities, and adding a center turn lane. The project was issued and awarded in 2012 and work will begin and end during the 2013 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 2012, the ACD filled requests for 10 churches and 25 schools and/or classrooms. These church requests were for 585 bulletin covers, 592 bulletin inserts, 360 litanies, 230 children's activity sheets, and 515 bookmarks. School requests were for 493 booklets for K-1, 364 for grades 2-3, 361 for grades 4-5, 200 for grades 6-8; 739 bookmarks, and 58 Leader and Educator Booklets. This program will be conducted again for 2013.

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

Dave Beale - <u>bealede@hotmail.com</u>

uring 2012 our watershed program had a variety of work. Early in the year we set up and carried out a native hardwood tree planting project on 12 acres of land belonging to the Roaring Run Watershed Association. The methods developed by the Appalachian Regional Reforestation Initiative of the Office of Surface Mining was done under the Penns Corner RC&D Forestry committee using funding from the Foundation for Pennsylvania Watersheds, GenON settlement.

The first task was to complete site preparation using a bull dozer with a ripping shank to loosen the soil. The second task was to install over 11,000 feet of 7' high woven wire deer exclosure fence.

A mix of 10 native hardwood species plus pitch pine were purchased for the site. The total number of trees seedling was about 9,000. Volunteer planters from 12 Lions Clubs, the Roaring Run Watershed Association, Apollo Boy Scouts, Leechburg Rotary Club, the Kiski Connemaugh Stream Team, the Foundation for PA Watersheds, Lenape Tech and others. The total number of volunteer planters was over 100 people.

An early summer drought set in within days of the planting resulting in a low survival. Plans are underway to replant the site.

During the early preparations for the Roaring Run planting we completed the Upper Scrubgrass Creek Growing Greener Project. This project involved the stabilization of a landslide by installation of an upslope grassland channel to collect ground water and convey it to a 100' + rock lined channel to Scrubgrass Creek. The erosion of the slump mass at the toe of the erosion scarp was reduced by the installation of 4 rock and log vanes and 7 root wads and a bank crib log. This project was carried out on the lands of Paul Manns in Wayne Township. The construction was carried out by Ken Atkinson.

During the summer of 2012, the Conservation District assisted with the Environmental Learning Center Summer Camp program. I led a forestry and tree identification class; a compass and map course, and assisted with the fishing program.

In July the Crooked Creek Watershed Association continued their annual Adopt-a-Lake project by constructing 20 more porcupine cribs and placing 20 rock rubble piles in Keystone Lake in cooperation with the PA Fish and Boat Commission. The Conservation District ordered and arranged delivery of materials for this. This is the 12th year for the annual project which has resulted in over 150 fish habitat structures in Keystone Lake.

In August and September the construction of 41 streambank stabilization / fish habitat structures on Plum Creek was completed. This is the fourth in a series of similar projects on Plum Creek between Keystone Lake and Crooked Creek. Approximately 1 mile of streambank was protected by this project. Overall 150 structures were installed in the 4 Growing Greener Projects covering approximately 5 miles.

September had the ACD staff working on the next round of Growing Greener Grant applications. Carnahan Run was designated by DEP as a priority watershed and the Armstrong Conservation District submitted applications for 4 project sites on this watershed.

The Fall Tour for public officials included the Arrowhead Chapter of Trout Unlimited trout nursery at Rural Valley, a nearby Dirt and Gravel Road site on Fisher Farm Road in Cowanshannock Township and a visit to the Plum Creek Project.

In October the Armstrong Conservation District hosted an AmeriCorps work crew named Raven V. Raven V consisted of 8 members from California, Utah, Texas, Georgia, Virginia, Minnesota, New Hampshire, and Connecticut. This crew worked on a rail / trail project in Kittanning Borough and near Templeton and worked on a project at the Crooked Creek Environmental Learning Center. The District based on an excellent experience with Raven V is applying for a crew in 2013.

Watershed Specialist Beale continued to serve on WPCAMR as the ACD representative; similarly on the Crooked Creek Environmental Learning Center Steering Committee and Penns Corner RC & D Council.

<u>Agricultural Conservation Technician / Nutrient Management</u> <u>Specialist</u>

Jessica Schaub – jjschaub@co.armtrong.pa.us

In 2012, I coordinated the Armstrong County Agricultural Land Preservation Program, reviewed Nutrient Management Plans, educated the public on the benefits of Biosolids, and performed fieldwork as an ACT Technician. I also coordinated the Armstrong County Envirothon, Annual Tree Sale, and acted as the Administrative Coordinator for the Armstrong County Animal Response Team. I can be contacted by phone at 724-545-3628 or email me at jischaub@co.armstrong.pa.us

Nutrient Management

To date, Armstrong County has 22 agricultural operations that have approved Nutrient Management Plans. All of the nutrient management plans are voluntary, for a total of 7,470.90 managed acres.

Pennsylvania's Nutrient Management Act went into effect in 1997 as Act 6. Act 6 was replaced with the new Act 38 as part of the Agriculture, Communities, and Rural Environment (ACRE) initiative. All the language included in Act 6 was transposed in Act 38 with some additional language concerning the following items – Odor management, additional manure application setback criteria and conflicting issues between local ordinances and farmers. Under Act 38, the Attorney General may bring an action against the local government unit to invalidate the unauthorized local ordinance. The new regulations, now falling under the new Act 38, went into effect October 2006.

A significant change in the regulations requires horse and other non-production animal operations to now comply with the law if they are a concentrated animal operation (CAO). 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 nutrient management plan regardless of the animal density on the farm.

As directed by Pennsylvania's Facility Odor Management Regulations in Act 38 of 2005, beginning Feb. 27, 2009, any concentrated animal operation or concentrated animal feeding operation that builds or expands an animal barn or manure storage facility is required to develop an odor management plan. CAOs and CAFOs are agricultural facilities that house and feed a large number of animals in a confined area.

Each plan should list best odor management practices if the on-site evaluation or the odor site index indicates there is a medium or high potential for affecting the facility's neighbors. The odor site index takes into account issues such as the scope and type of operation, as well as the number and location of farm neighbors. The on-site evaluation is conducted using the odor site assessment tool developed by the State Conservation Commission and Penn State University.

The regulations do not affect existing animal housing or manure storage facilities, nor are there any requirements relating to land applications of manure. However, any agricultural operation may volunteer to address new or existing facilities in an odor management plan developed under this program. For more information on the Pennsylvania Nutrient Management Program, please visit http://panutrientmgmt.cas.psu.edu/.

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.

Farms defined as CAFOs or CAOs are required to develop more detailed written plans, called Nutrient Management Plans. These plans must be developed by a Certified Nutrient Management Specialist and submitted to the local county conservation district for review and approval. If you are not sure whether your operation is a CAO or CAFO, you should contact your local county conservation district for more information or access the Act 38-Who is affected worksheet at http://pubs.cas.psu.edu/FreePubs/pdfs/uc149.pdf.

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 and can be found at http://panutrientmgmt.cas.psu.edu/manure management program.htm.

The Armstrong Conservation District hosted a Manure Management Workshop on March 20, 2012. Twenty farmers from Armstrong County participated in the event. Another Manure Management Workshop is planned for January 31, 2013.

Biosolids

What are biosolids? They are nutrient rich organic materials that are produced from the treatment of sewage sludge and residential septage. Biosolids to be land applied only when they meet strict quality standards specified by the DEP. Farmers can save money on commercial fertilizers when they use the rich organic biosolid material as a supplemental fertilizer. The organic matter and nutrients in biosolids can improve crop growth and the quality and structure of the soil. There are a couple of farmers in Armstrong County that land apply Biosolids on their farm operation.

If you are interested in learning more about Biosolids, please call the District Office or visit http://www.depweb.state.pa.us/portal/server.pt/community/biosolids/10588.

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 2012, the Armstrong Conservation District continued to help farmers install best management practices (BMPs) in the Patterson Run and Carnahan Run Watershed (DEP Growing Greener Grant). The Armstrong Conservation District also applied for 5 DEP Growing Greener Grants to install BMPs on designated farms in Campbell Run, Un-Named Tributary to Redbank Creek, Buffalo Creek, Hill Run/Watson Run, and Carnahan Run Watersheds.

The Armstrong Conservation District also applied for a grant through the 2013 Environmental Education Grants Program to conduct a series of 3 workshops focusing on the educational and research materials about the general water resource issue associated with Marcellous Shale gas drilling and how it may affect the Commonwealth of Armstrong County.

The Armstrong Conservation District helped 4 farmers fill out REAP applications in 2012. 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. The amount of tax credit available is dependent on the type of BMP implemented. In order to be eligible for REAP, agricultural operation must have a current conservation plan and a manure management plan if manure is applied or generated on the farm. A nutrient management plan is required for CAO or CAFO. Information on the program can be found at <a href="http://www.agriculture.state.pa.us/portal/server.pt/gateway/PTARGS_0_2_24476_10297_0_43/AgWebsite/ProgramDetail.aspx?name=Resource-Enhancement-and-Protection-(REAP)-&navid=12&parentnavid=0&palid=22&.

Armstrong County Agricultural Land Preservation Program

The Armstrong County Agricultural Land Preservation (ACALP) Board consists of seven board members that reside in Armstrong County; Jeff Miller, Bill Kronen, Ed Dilick, Paul Stubrick, Spurgeon Shilling, Terry Bowser, and Troy Goldstrohm. The ACALP Board Meetings will be held quarterly starting in January on the second Thursday of the month at the Commissioner's Conference Room at 450 Market Street.

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. In order to apply, the landowner must be located in an agricultural security area consisting of 500 acres or more and have at least 50 acres that are continuous. The farm property must be part of a farm operation with a minimum of one year of ownership and must demonstrate an ability to generate equal or greater to \$10,000.

The ACALP Board and the County Commissioners purchased 3 agricultural easements from the following landowners; Suzanne and Edgar Bruce (Burrell Township), Meredith Patterson (Kiskiminetas Township), and Scott Morrison (South Buffalo Township) for a total of 260.5 preserved acres.

The ACALP Board is working on purchasing an easement for 109.7 acres from George and Marsha Kepple in Sugarcreek 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.

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 jischaub@co.armstrong.pa.us. For more information on PA SART, 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 7th Armstrong County Envirothon was held at the Crooked Creek Environmental Learning Center on May 2, 2012. Fourteen teams of high school students from Apollo-Ridge High School, Elderton High School, Ford City High School, Freeport Senior High School, Kittanning Senior High School, Lenape Tech School, and West Shamokin Jr. Sr. High School competed against each other in this year's 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 2012 current environmental issue was "Nonpoint source pollution and low impact development."

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 2012 Envirothon are Cowanshannock Creek Watershed, Crooked Creek Watershed, Arrowhead Chapter of Trout Unlimited, Senate Engineering, Bankson Engineers Inc., Armstrong County Sportsmen & Conservation League, Armstrong County Farm Bureau, and BLX Inc. Ford City Subway donated lunches to the students and volunteers.

The Freeport Senior High School winning team represented Armstrong County at the Pennsylvania State Envirothon at University of Pittsburgh Johnstown (UPJ) on May 22nd and 23rd.



1st Place-Freeport Sr. High School ("Team Cobra") Left to Right: Collin Seagriff, Tyler Laux, Robert Gorog, Devin Christy, and Collin Stone



2nd Place- Kittanning Sr. High School ("Acid Rain") Left to Right: Ashley Hockenberry, Maggie Long, Carly Hoffman, Brad Edgington, and Jessa Goldner.



3rd Place Team- Lenape Tech School ("Lenape Warriors")

The next Armstrong County Envirothon will be held on May 1, 2013 at the 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 year's 2013 current issue is "Grazing livestock for Improved Herd Health and Land Management." 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 2012, over 251 fruit trees varying from apple, pear, cherry, nectarine, peach, and plum were sold. In addition, approximately 2,625 evergreen seedlings were sold. The species sold included Eastern White Pine, Colorado Blue Spruce, Norway Spruce, Fraser Fir, Canadian Hemlock, White Flowing Dogwood, Sargent Crabapple, American Elderberry, and American Redbud. 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 Roads Specialist

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

Roads Program within the County. After serving the District as an AmeriCorps volunteer for a year, I accepted a part time position as the Dirt & Gravel Roads Specialist. I have a degree in Civil Engineering Technologies and have been certified as a Dirt & Gravel Roads Specialist through multiple training 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 Dirt & Gravel annual funding is required to be used for training and education purposes. The District uses this money to perform demonstration projects on municipality roads. This allows us to meet the requirements of the funding and get the maximum amount of materials into road maintenance projects. In 2012 I accepted a full time position with the District to begin training as an E & S Technician. I am also responsible for overseeing an acid mine discharge reclamation which will take approximately two years to complete

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 of 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 District hosts these ESM trainings every two years so participants have the opportunity to remain eligible. The 2012 funds enabled the District to perform ESM on 5.4 miles of roadway. To date, the program has assisted local municipalities apply the ESM practices on 62 miles of roadway by installing:

- 607 cross pipes
- 19 stream culverts
- 28,000 feet of piping
- 149,000 feet of under drains
- 225,000 sq. ft. of ditch stabilization
- 339,000 sq. ft. of bank stabilization
- 1,000,000 sq. ft. of vegetative management

Additional information about this program can be found under the "Dirt & Gravel Roads" section on the main page of this website.

The McCandless Project

This project involves placement of a passive treatment system for an abandoned mine drainage discharge and reclaiming approximately eleven acres of abandoned mine lands. The endeavor will improve the water quality on unnamed tributaries to the Allegheny River. The reclaimed site will also be used for educational purposes to monitor water quality and provide hiking and nature trails along with other outdoor recreation opportunities. The project area adjoins the Armstrong Trail which is a segment of Erie to Pittsburgh corridor allowing the completed McCandless Project to become a respite for tourists and trail users.

AmeriCorps Member

Chlelsea Walker Phone: 724.545.3658

Hello my name is Chelsea Walker and I am the 2012-2013 AmeriCorps Member for the Armstrong Conservation District. I began my term of service in August 2012 through the Pennsylvania Mountain Service Corps (PMSC). AmeriCorps is a program through the Corporation for National and Community Service, where thousands of Americans of all ages and backgrounds in a domestic Peace Corps are investing their time, energy and talent in improving

the lives of others and strengthening their communities. In the process, they are building a more engaged society and becoming leaders in civic life. AmeriCorps engages more than 75,000 men and women in intensive service each year at more than 15,000 locations including nonprofits, schools, public agencies, and community and faith-based groups across the country.

The Pennsylvania Mountain Service Corps, PMSC, is a local initiative of AmeriCorps. Located in Southwest and South Central Pennsylvania, PMSC provides service opportunities through non-profit or government organizations across a 12,000 square mile region serving 16 counties in Pennsylvania including Armstrong County.

As an AmeriCorps Member I provide support to all District staff, but I primarily work closely with the Watershed Specialist and Agricultural Technician/ Nutrient Management Specialist. I have also taken an initiative to become involved in local conservation organizations in Armstrong County.

Water Quality Monitoring Joint Venture

ACD has joined the Conemaugh Valley Conservancy (CVC) to expand their program initiated in Somerset County to monitor streams in the Kiski - Conemaugh River Basin. The project installs data loggers on streams with small watershed areas to collect measurement of water temperature, water level and conductivity every 15 minutes.

The devices collect information on 15 minute intervals, but the information must be downloaded physically from the devices by removing them from the streams and connecting them to a laptop computer. I download the data every 2 to 3 weeks. Each time data is collected water chemistry is done on site during the download to test the accuracy of the data logger, and to collect additional information on the stream.

I have used these regular data collections as an opportunity to interact with members of local watershed associations and students from Lenape Tech's Natural Resources Program.

Armstrong Conservation District Support

2013 is the Conservation Districts 50th Anniversary. For this coming year I created a PowerPoint presentation of photographs highlighting the past 50 years. I also researched numerous historical documents that pertained to the history of the conservation district. To promote the 50th Anniversary I ordered several promotional items and ordered a new ACD banner.

Fall Conservation Tour

This year for the Conservation Districts Fall tour I developed documents to highlight projects being showcased. I also took photographs and produced a DVD to hand out at our Legislative Breakfast.

Growing Greener Grants

I assisted Jessica Schaub and Dave Beale in the Growing Greener Grant applications for the Carnahan Run Stream Improvement Project. ACD was awarded the Carnahan Run Stream Improvement grant, which includes an improvement and replacement of existing culverts along Laurel Road, the removal of a private concrete slab bridge, middle support pier and stabilization

of abutments over Carnahan Run, a severe bank erosion along an unnamed tributary, and a installation of a Heavy Use Area w/manure storage and associated BMPs on the Tim Martin Farm.

Administrative Assistance to the Watershed Specialist

I have provided administrative assistance to Dave Beale on his projects on Plum Creek and North Fork of Pine Creek in Allegheny County. This has included running PNDI Environmental Reviews, obtaining stream improvement permits, writing project reports, contracts, and photographing progress on the projects.

Agriculture Conservation Activities

I have provided assistance to Jessica Schaub on several projects. I helped with the preservation of the George and Marsha Kepple farm by preparing the preservation easement. I developed materials for Armstrong County Animal Response Team (ACART) and organized an awareness event for citizens of Armstrong County. I designed artwork for the 2013 Envirothon T-shirt and dropped off Envirothon packets to all participating schools in Armstrong County. I frequently assist John Bohonak of the NRCS with surveying on farms for the implementation of agricultural Best Management Practices (BMPs).

Erosion and Sediment Activities

I have also assisted Chris Cramer with site inspections and pre-construction meetings.

Outreach Projects

DEP Environmental Education Mini Grant

Jessica Schaub and I applied for a DEP Environmental Education Grant for the Crooked Creek Environmental Learning Center. If we receive the funds for this grant the Armstrong Conservation District and Crooked Creek ELC will provide a three series workshop for homeowners in Armstrong County who are affected by Marcellus Shale Drilling. This workshop will provide information to homeowners about the Marcellus Shale Drilling process, how to protect private groundwater supplies from natural gas drilling, and how to interpret complex water test results.

Crooked Creek Environmental Learning Center

I assisted Dennis Hawley, ELC Director with educational programs for Armstrong County School Districts at the Environmental Learning Center. This spring 2013 I will be spending a large sum of my time educating student's K-12 on a variety of environmental topics.

Roaring Run Watershed Association (RRWA)

I have worked closely with John Linkes, Director of RRWA in creating a display board for the Roaring Run Watershed Association. This display board was set-up at the Apollo-Ridge Winter Fest/ Heart Healthy Expo. The display board showcases trail information, activities and events, and wildlife that can be found along the Roaring Run Trail. I will also be assisting at this year's 5K races. John Linkes has also assisted me in several outings to collect data loggers.

Crooked Creek Watershed Association (CCWA)

I attended the Ohio River Celebration Gateway Clipper Networking Cruise this past September with the Crooked Creek Watershed Association. At this event I registered visitors and provided support to the CCWA by setting up the display board and packing-up at the end of the day.

AVLT, ARTA and RVTA

I prepared a presentation for the Trail Volunteers Appreciation Dinner to celebrate the work of volunteers with the organizations that steward the trails owned by AVLT: the Armstrong Rails to Trails Association (ARTA) and the Redbank Valley Trails Association (RVTA).

Martin Luther King Jr. Day Food Drive

The Corporation for National Service and AmeriCorps emphasize service with the Martin Luther King Jr. Day of Service. AmeriCorps members are encouraged to participate in community service. I worked closely with Kelly Cossey, Crooked Creeks Watershed Association's OSM/Vista member to organize a food drive at three store locations in Armstrong County. Shop N'Save and Foodland in Kittanning, and Shop N'Save in North Apollo. I was able to bring all the AmeriCorps members serving in Armstrong County together in assisting in this year's food drive. Members from Crooked Creek Watershed Association and Roaring Run Watershed Association also participated in this year's MLK food drive. Together we raised \$402.00 and collected over 231 items. The food and money collected went to Armstrong County Community Action Foodbank.

ELC Blood Drive

The Crooked Creek Environmental Learning Center hosted its first ever American Red Cross Blood drive. The AmeriCorps member at the ELC organized the blood drive and asked if I would assist her with set-up and tear-down, and registering volunteers.

Training Events

As an AmeriCorps member I have had the opportunity to attend several training and educational programs. These trainings include: Southwest Regional PA Green Conference, Southwest Regional PA No-Till Conference, Manure Nutrient workshop, Project WET Curriculum Workshop, and CPR and First Aid Training. This April I will be attending a week long Agricultural Conservation Technical Training Basic Boot Camp.

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