



P.O. Box 1071
Mt. Pleasant, PA 15666

From the Ridge to the River



Spring 2012

JCWA's Storm Water Project Helps Local Business

JCWA project sages just love to help solve problems – especially when it involves water! So when JCWA President Mike Barrick and Project Manager Andrew Dzurko found out that storm water was causing flooding problems at a local business, they were eager to lend a hand. They already knew that the large, impervious parking lot at the Southwest Regional Tax Bureau (SRTB) was allowing large amounts of storm water runoff to rush into Jacobs Creek, carrying urban pollutants into the stream and causing erosion. But it surprised them that not all of that water was finding its way to Jacobs Creek – it was entering the SRTB building causing property and equipment damage! JCWA decided to tackle these two problems together and received funding from a 319 Nonpoint Source Management Grant to address the issue. The grant funded the design and construction of storm water Best Management Practices at the SRTB, as well as the construction of a rain garden at the Scottdale Library. The beautiful reading/rain gardens at the Library were completed last year and capture rain from roof drains and porous pavement, while providing a beautiful area to read and relax.



Row of trees in trench that absorbs parking lot storm water

JCWA once again enlisted the help of Westmoreland Conservation District's Landscape Architect, Kathy Hamilton, to design the Library's rain garden. Kathy's design work adds attractive yet functional Best Management Practices to the existing problematic parking lot. JCWA selected contractor Roger Suter & Sons for the project, who constructed three lengthwise trenches of porous concrete and soil in the parking lot. These trenches collect storm water for the use of 10 large Linden and Tulip trees planted there. Water not used by the trees will gradually be conveyed through the trenches to the storm sewer system for eventual slow release to the stream. Storm water in the lower reaches of the parking lot will flow to a low lying rain garden placed next to the SRTB office building. This rain garden will collect the runoff that previously caused the office building to flood and use this water for plant growth. Planting beds along the side of the office also help to retain and utilize storm water flows for shrub and flower growth.

Urban storm water Best Management Practices like these will help control storm water and prevent further stream erosion while preventing up to 98% of oils, sediment and metals from entering local streams. JCWA will be completing similar projects in the next two years in the two largest urban communities within our watershed, Scottdale Borough and Mt. Pleasant Borough. JCWA's goal is to continue to complete environmental projects that will keep our streams flowing cleaner and healthier for future generations. If you would like to support JCWA's efforts, please consider becoming a JCWA member. There is a membership application form on page three of this newsletter, or you can call at 724-887-8220, ext. 3 or send us an email at jcwatershed@gmail.com. Your support is needed to help complete projects like this one to improve our community.

Happy 90th Birthday!

JCWA wishes member Jim Smith a Happy 90th birthday this month! Jim is one of the most active people we know, fishing, canoeing and hunting with his brown Lab and good friend, Trooper. Jim is quite a craftsman who makes his own turkey calls out of native wood – and has donated several for JCWA's Riffle Run Golf Scrambles! The photo above is from last year's Scramble, showing Jim getting ready to sink a putt for an eagle! Best wishes for a wonderful year, Jim!



JCWA thanks its new/renewing members:

Audrey and Kathe Crislip
Veronica Coptis
Tim and Sue Dreier
Stuart J. Horner
Marilee McFadden
Mary and Dan Mitchell
Don and Cheryl Sechrist
Georgia Shalek
Westmoreland Bird & Nature Club

JCWA Upcoming Events

April 28: Creek Road Tire Cleanup. 9:00 am at Creek Road. For more information, call 724-887-8220, ext. 3, visit JCWA's facebook page or email jcwatershed@gmail.com.

May 22: JCWA Board meeting. 6:30 pm at the Scottdale Borough Building.

May 24: Fayette County Conservation District's Annual Children's Water Festival. For more information call 724-438-4497 or visit www.fayetteccd.org.

May 26: Native Plant Sale. Noon to 5:00pm at the Main Falls area of Ohioyle State Park. For more information, call 724-329-0986.

June 16: JCWA's Annual River Sweep Cleanup. 8:30 am at Greenlick Dam at Jacobs Creek Park. Gloves, bags and refreshments provided and participants get free t-shirt. Contact JCWA for more information.

June 20: Storm Water Design Webinar – Stream Restoration. Webinar runs from 12:00 to 2:00pm at the Westmoreland Conservation District. For more information call 724-837-5271 or visit www.wcdpa.com

Save the date: JCWA's Riffle Run Golf Scramble is Friday, September 14, 2012



Spend a great day golfing, socializing and enjoying libations in the scenic Laurel Highlands, all while supporting the efforts of the Jacobs Creek Watershed Association! Our annual Riffle Run Golf Scramble is a fun-filled way to help JCWA raise funds for our important watershed improvement projects. For a mere \$80 you get 18 holes of golf at the beautiful Donegal Highlands Golf Course, a golf cart, lunch at the turn, pop, beer and a dinner of mouth-watering barbecued chicken and ribs, corn, coleslaw and garlic bread sticks. Goodie bags, JCWA water bottles, door prizes, special raffles and a 50/50 raffle are available. This year, JCWA will level the playing field by including a free mulligan for every golfer, so all golfers can cheat equally! Come have some fun with us – it's a Silverman approved event! To register or receive additional information, call 724-887-8220, ext. 3 or email us at jcwatershed@gmail.com. Hope to see you there!

2011 Riffle Run winners celebrate with Silverman



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Fayette County Conservation District

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Westmoreland Conservation District

Mission

Jacobs Creek Watershed Association is a non-profit organization dedicated to the conservation of our natural resources, rehabilitation of the creek and watershed, environmental education and recreation.

For More Information

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Phone (724) 887-8220, ext. 3
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www.jacobscreekwatershed.org

JCWA Tour Bus – Scottdale Gazebo

For a change of pace this spring and summer, why not park your car and take a walk around Scottdale, ending your stroll at the Gazebo in the center of town? It's within a few steps of the quaint shops and eateries of downtown Scottdale so you can browse, buy some treasures and enjoy a sweet treat or lunch in Gazebo Park. Park benches will invite you to relax and enjoy the shade of the sweet gum trees, colorful flowers and shrubbery while you let the Gazebo take you back to simpler times! Bring a book from home to read or check one out from the nearby Scottdale Library and while away the afternoon reading while songbirds serenade you. You can even have a scenic outdoor wedding here, if you'd like!

The Gazebo, erected in 1978, was built for and by the people of Scottdale for everyone's use. It also happens to be the site of Scottdale Borough's storm water Best Management Practices Project; a project that JCWA manages. By next season, the Gazebo should have some new porous pavement, more green areas and will be helping to diminish the effects of storm water on the Jacobs Creek Watershed.

The Gazebo is renowned for hosting musical groups during the Scottdale Fall Festival, but you may not realize that it is the centerpiece for community festivities all year long. The Easter egg hunt on the Saturday before Easter begins the official season of Gazebo activities and from then it's non-stop until December! From May through August on the 2nd Tuesday of every month, there is Lunch in the Park. Scottdale provides music from 11:00 am to 1:00 pm while you lunch in the pleasant park atmosphere. If you can't be in Scottdale during the day, make sure you don't miss the free concerts at the Gazebo every Sunday evening in the summer. What a great way to end the weekend!

Mark your calendars for the annual Fall Festival, which runs from September 21-23rd this year. Free concerts daily, great fair food and vendors selling interesting and unique items, all based around the Gazebo Park. Be there on Friday at 6:00 pm when the Festival's Dog Show contestants promenade around the Gazebo colorfully adorned in an amazing variety of canine costumes. You can't help but smile at their friendly and jubilant antics!

The Gazebo ends its season on Saturday, December 1st, with the annual Winter Light Celebration from 5:00-7:00 pm. The plaque on the Gazebo states that the Scottdale Gazebo is the place where friendly people meet – so visit the Gazebo to make new friends, enjoy the company of old friends or just to enjoy its beauty. For more information, please visit www.scottsdale.com or www.scottdalefallfestival.org.



Borough Manager Angelo Pallone at Scottdale Gazebo

Watershed Words: Riparian Buffer

The word riparian means land adjacent to a stream or river while buffer refers to something that reduces impact or protects against harm. Put them together and you get something essential to the overall health of a stream's ecosystem. Riparian buffers, also called vegetated buffer zones, are swaths of vegetation along the stream banks that include grasses, plants, shrubs and mature trees. But why are these strips of land so important to water quality?

At one time, forests protected the banks of most waterways in Pennsylvania. This forest vegetation provided overhanging branches that gave shade to streams and dropped leaves and debris into the water, providing nutrients for aquatic life. The vegetation along the banks also absorbed water during heavy rains, preventing flooding. Development, mowing and other human activities have degraded or even completely removed many of these riparian buffers leaving only grass or bare ground remaining along the stream banks. Loss of riparian buffers can have severe consequences for our streams. Loss of overhanging vegetation deprives aquatic life of nutrients from leaf drop and the resulting lack of shade increases stream temperature. Elevated water temperatures cause oxygen levels in water

to drop, decreasing fish populations. Loss of riparian buffers also makes streams prone to flooding. Riparian buffers slow down floodwaters, helping to maintain stable stream banks by allowing water to soak into the ground and be absorbed. Without stable stream banks, severe erosion can occur. This erosion releases sediment to the water, clogging the gills of fish and aquatic organisms and coating streambeds where macroinvertebrates live and reproduce.

Because of their importance to stream health, JCWA has created riparian buffers for several of our projects, most recently the Brush Run Agricultural Project. JCWA will also be installing more riparian buffers in future projects, including the Shupe Run Stream Bank Stabilization Project and the Jacobs Creek Stream Bank Stabilization Project.

What can you do to help protect riparian buffers if you have a stream on your property?

- Don't mow up to the edge of the stream bank.
- Don't remove native shrubs, trees or vegetation from the stream bank.
- Establish native plants along the stream bank.
- Don't operate heavy equipment in the riparian buffer zone.

Visit JCWA at www.jacobscreekwatershed.org

JCWA Receives Green Streets Grant

JCWA is excited to announce that we have received a grant from the U.S. Environmental Protection Agency (EPA) to design a Green Streets project for downtown Scottdale. This grant will enable JCWA to design green infrastructure measures that are not only functional but also beautiful, to address storm water runoff negatively impacting Jacobs Creek and its tributary streams. Uncontrolled storm water can carry pollutants such as oils, metals and sediment into streams, making the water unhealthy for aquatic life. These uncontrolled flows can also cause stream bank erosion when rapidly moving water rushes into streams during heavy rains, washing away stream banks.

EPA believes that green infrastructure is a very important approach communities can choose to maintain the health of our nation's waters. Green infrastructure uses vegetation and soil to manage rain water where it falls. By adding natural measures into already constructed urban areas, green infrastructure provides for cleaner water and creates healthier urban environments.

JCWA's Green Streets project will design green infrastructure measures in the areas along Spring Street, Mulberry Street, Centennial Way and Pioneer Way. Examples of some green infrastructure measures include:

- **Rain Gardens**, which are shallow, vegetative areas that collect and absorb runoff from roof tops, sidewalks and streets. See JCWA's Winter 2010 newsletter for an article on raingardens@www.jacobscreekwatershed.org.
- **Planter Boxes**, which are small urban rain gardens with walls that collect and absorb rain that falls on sidewalks, parking lots and streets. Planter boxes are ideal for space-limited sites in urban areas.
- **Bio Swales**, which are vegetated or mulched channels that slow, infiltrate and filter storm water as it flows from one place to another.
- **Permeable (porous) Pavements**, which are surfaces that absorb, treat or store rain water where it falls. Examples include pervious concrete, porous asphalt and permeable interlocking pavers.

JCWA has selected Civil & Environmental Consultants, Inc. to complete the design work for this project. In the fall of 2012, JCWA will apply for funding to construct the Green Streets Project in 2013. So when you walk along Spring Street during future Scottdale Fall Festivals, you will see the appealing green infrastructure measures that you are reading about today. For more information on Green Streets and green infrastructure, visit EPA's website at www.epa.gov.

JCWA History Corner: Beehive Coke Ovens



Abandoned and overgrown beehive coke oven

Scattered throughout the hillsides of the Jacobs Creek watershed, beehive coke ovens were once a smoky indicator of the burgeoning need to turn coal into coke for the thriving steel industry. In the late 1800's and early 1900's, banks of these domed-shaped coke ovens could be seen spewing flames and smoke along Jacobs Creek, Shupe Run and other streams in Mt. Pleasant, Alverton, Bridgeport and other nearby areas. These ovens sprang up because of two factors: the presence of a nine foot thick seam of Pittsburgh coal well suited for coking and stretching through our area and the completion of area railroads needed to transport coke to the steel mills. Many of these ovens were built by the largest coke company in the area, the McClure Coke Company, but were later acquired by a familiar business owner, West Overton's Henry Clay Frick Coke Company.

Beehive coke ovens were named such because the dome shape resembled old fashioned bee hives. They were constructed of bricks and measured approximately 11.5 feet by 6 feet. They were built into the hillsides in rows, called batteries, stabilized with stone walls and covered with soil to retain heat. Workers dumped coal into the top of the ovens through an access hole called a trunnel and then sealed the oven. The heat from the previous charge would ignite the coal, which would burn for 48 to 72 hours before the coal's impurities were driven off and it was converted into coke. At the end of the coking process, workers would douse the

red-hot coke with water and draw the finished product out of the front opening. Thick smoke containing tars, phenols and ammonia would escape the ovens and form harmful clouds around the ovens. It was a hard and unhealthy life for the beehive coke oven laborers.

The demise of the beehive ovens began in the early 1900's when by-product coke ovens were first used. These new ovens recovered ammonia, gasses and coal tars from the coking process for use in the synthetic chemicals industry and were built along major rivers, close to the steel mills they supplied. The beehive ovens close to the coal seams were eventually phased out and many were abandoned. In 1910, beehive coke ovens had supplied the nation with 80% of its coke, but within 20 short years, this number diminished to only 6%.

You can still see the remains of some beehive ovens in our area if you look closely into the brush-covered hillsides. To view a preserved bank of beehive ovens, visit Mammoth County Park in Westmoreland County. To view a single restored coke oven, stop by West Overton Village where a beehive oven sits close to Rt. 819. You can walk up and peer into the front of the stone covered oven to see the beehive-shaped brick structure on the inside and imagine how workers once toiled in its fiery presence to make coke for the steel industry.



Be The Change You Want To See In The World -- Gandhi

Members and volunteer efforts help the JCWA to continue our mission. Without them the strength of our voice and the power of our actions is diminished.

Please become a MEMBER today.
You'll be glad you did!

Yes! I want to help preserve and protect the Jacobs Creek Watershed

Date _____

Name _____

Address _____

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Annual Memberships

- ___ \$ 5 Student
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Make checks payable to:

Jacobs Creek Watershed Association

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