

Washington County **Conservation District** Newsletter

PUBLISHED BY THE WASHINGTON COUNTY CONSERVATION DISTRICT **MAY 2014** VOLUME 44 ISSUE 2



L to R: Back Row: Travis Smith, Tyler Fraysier, Ryan Comfort, Zachery Kagle, Dist. Chairman, Bill Iams Front Row: Teacher: Evy Breitigan, Maria Villotti

$T_{he} 2014$

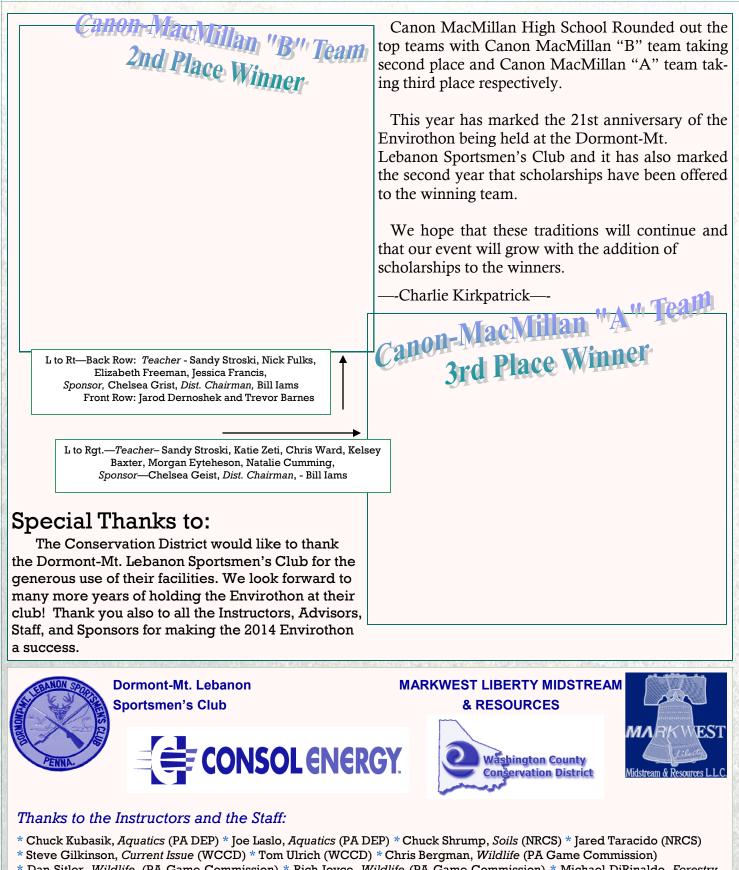
Washington County Envirothon was held on Thursday, May 1st at the Dormont-Mt. Lebanon Sportsman's Club. The day started off with periods of rain, but soon warmed up throughout the morning as thirteen teams from seven schools competed for scholarships. The students competed in the categories of Aquatics, Forestry, Soils, Wildlife, and a Current

Issue; this year's current issue was Sustainable Agriculture.

This year's winner was the team from Avella High School; this win marks the second time that a team from Avella has won the Washington County Envirothon!

The five students who competed on the winning team from Avella each received a \$500 scholarship. These scholarships were made possible from a generous donation by CONSOL Energy, Inc. The winning students have been granted the opportunity to represent Washington County at the Pennsylvania State Competition. The state competition is being held at Susquehanna University on May 20th and 21st.

The competition was tough, but Avella pulled ahead on the last testing station by 20 points.



* Dan Sitler, Wildlife, (PA Game Commission) * Rich Joyce, Wildlife (PA Game Commission) * Michael DiRinaldo, Forestry

(DCNR Bureau of Forestry) * Brandon Hosselrode, *Forestry* (DCNR Bureau of Forestry) * Matt Golden (WCCD) * Charlie Kirkpatrick (WCCD) * Jennifer Dann (WCCD) * Clarice Munk (WCCD) * Beth Kahkonen (WCCD) * Bill Wentzel Forestry)

* William Iams (WCCD Director Chairman) * Gary Stokum (District Manager) * John Hewitt (AG Administrator)

Erosion and Sedimentation Control Technicians

-Matt Golden, E&S Technician -Charlie Kirkpatrick, E&S Technician



Erosion & Sedimentation Controls Program

M. Golden

Washington County Conservation District is delegated to administer the Chapter 102 Erosion and Sediment (E&S) Control program. The purpose of E&S program is to control the amount of sediment entering waterways caused by accelerated erosion.

There are many Best Management Practices (BMP) that can be implemented to reduce sediment pollution. WCCD conducts earth disturbance inspections, investigates complaints, reviews E&S control plans and issues various permits. Erosion control plans are reviewed based on DEP guidelines to determine if they meet the requirements of the PA Code Chapter 102 and the Clean Streams Law.

Earth disturbance activities that disturb 5,000 Sq. Ft. or more are required to have a written E&S plan that is always available on site. Activities that will disturb one acre or more are required to obtain an NPDES permit. This permit includes E&S control as well as Stormwater Management at the site.

Oil and Gas transmission activities that will disturb more than five acres are required to obtain an ESCGP-2 permit. This permit also includes E&S control plans as well as Stormwater Management for any permanent facilities.

Agricultural Activities are not exempt from the requirements of Chapter 102. Ag tilling, plowing, and animal heavy use areas are not required to obtain an NPDES permit, but appropriate Best Management Practices must be implemented to reduce erosion and sedimentation from these activities.

Before starting a project please contact the Conservation District for more information on what will be required. The field staff is available to meet with you or to visit your site to provide guidance on what may be required to meet the regulations.









Washington/Greene County FSA 2800 North Main Street, Suite 1, Washington, PA 15301 Phone: 724-222-3060 Ext. 2 Fax: 724-222-6211

USDA PREPARES TO ACCEPT MAL AND LDP REQUESTS; SETS 2014 MAL LOAN RATES

The USDA Farm Service Agency (FSA) will begin accepting requests for marketing assistance loans (MALs) and loan deficiency payments (LDPs) for eligible 2014 commodities.

MALs and LDPs for the 2014 crop year become available to eligible producers beginning with harvest/shearing season and extending through a specific commodity's final loan availability date.

MALs and LDPs provide financing and marketing assistance for wheat, feed grains, soybeans, and other oilseeds, pulse crops, rice, peanuts, cotton, wool, mohair and honey. MALs provide producers interim financing after harvest to help them meet cash flow needs without having to sell their commodities when market prices are typically at harvest-time lows. A producer who is eligible to obtain a loan, but agrees to forgo the loan, may obtain an LDP if such a payment is available.

The 2014 Farm Bill also establishes payment limitations per individual or entity not to exceed \$125,000 annually on certain commodities for the following program benefits: price loss coverage payments, agriculture risk coverage payments, marketing loan gains (MLGs) and LDPs. These payment limitations do not apply to MAL loan disbursements.

Adjusted Gross Income (AGI) provisions were modified by the 2014 Farm Bill, which states that a producer whose total applicable three-year average AGI exceeds \$900,000 is not eligible to receive an MLG or LDP.

National and county loans rates for 2014 crops are posted on the FSA website at: <u>www.fsa.usda.gov/pricesupport</u>.

For more information, please visit a nearby USDA Service Center or FSA's website <u>www.fsa.usda.gov</u>.

SAVE TIME – MAKE AN APPOINTMENT WITH FSA

As we roll out the Farm Bill programs administered by FSA, there will be related signups and in some cases multiple management decisions that need to be made by you, the producer, in consult with FSA staff. To insure maximum use of your time and to insure that you are afforded our full attention to your important business needs, please call our office ahead of your visit to set an appointment and to discuss any records or documentation that you may need to have with you when you arrive for your appointment. For local FSA Service Center contact information, please visit: <u>http://offices.sc.egov.usda.gov/locator/app</u>.

This is extremely important at the Washington/Greene County FSA Office, due to a recent retirement. Evelyn Mull retired in March of 2014 after many years of dedicated service to the farmers of both, Washington and Greene counties. She will be missed. This leaves the office staff to just one staff person, so please be sure to call ahead to make sure staff is available to work with you.

For additional information about FSA programs please contact the county office at 724-222-3060.

Soil Health

Healthy Soil for Life

Soil health, also referred to as soil quality, is defined as the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans. This definition speaks to the importance of managing soils so they are sustainable for future generations. To do this, we need to remember that soil contains living organisms that when provided the basic necessities of life - food, shelter, and water - perform functions required to produce food and fiber.

Only "living" things can have health, so viewing soil as a living ecosystem reflects a fundamental shift in the way we care for our nation's soils. Soil isn't an inert growing medium, but rather is teaming with billions of bacteria, fungi, and other microbes that are the foundation of an elegant symbiotic ecosystem. Soil is an ecosystem that can be managed to provide nutrients for plant growth, absorb and hold rainwater for use during dryer periods, filter and buffer potential pollutants from leaving our fields, serve as a firm foundation for agricultural activities, and provide habitat for soil microbes to flourish and diversify to keep the ecosystem running smoothly.

Learn more about how **Soil Biology** plays a major role in soil health.

What Soil Does

Healthy soil gives us clean air and water, bountiful crops and forests, productive grazing lands, diverse wildlife, and beautiful landscapes. Soil does all this by performing five essential functions:

- Regulating water Soil helps control where rain, snowmelt, and irrigation water goes. Water and dissolved solutes flow over the land or into and through the soil.
- Sustaining plant and animal life The diversity and productivity of living things depends on soil.
- Filtering and buffering potential pollutants The minerals and microbes in soil are responsible for filtering, buffering, degrading, immobilizing, and detoxifying organic and inorganic materials, including industrial and municipal by-products and atmospheric deposits.
- Cycling nutrients Carbon, nitrogen, phosphorus, and many other nutrients are stored, transformed, and cycled in the soil.
- Physical stability and support Soil structure provides a medium for plant roots. Soils also provide support for human structures and protection for archeological treasures.

Inherent and Dynamic Properties of Soil

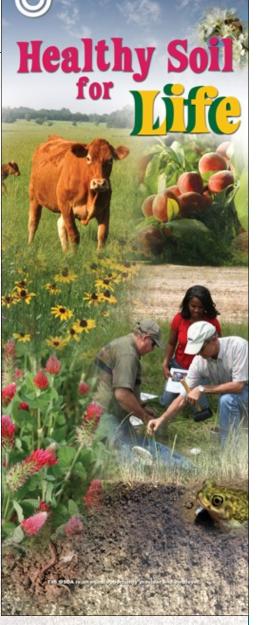
Soil has both inherent and dynamic properties, or qualities. Inherent soil quality is a soil's natural ability to function. For example, sandy soil drains faster than clayey soil. Deep soil has more room for roots than soils with bedrock near the surface. These characteristics do not change easily.

Dynamic soil quality is how soil changes depending on how it is managed. Man-

agement choices affect the amount of soil organic matter, soil structure, soil depth, and water and nutrient holding capacity. One goal of soil health research is to learn how to manage soil in a way that improves soil function. Soils respond differently to management depending on the inherent properties of the soil and the surrounding landscape.

Understanding soil health means assessing and managing soil so that it functions optimally now and is not degraded for future use. By monitoring changes in soil health, a land manager can determine if a set of practices is sustainable. See <u>Soil Health Assessment</u> and <u>Soil Health Management</u> principles for soil health for more information.





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FROM THE WASHINGTON COUNTY

WATERSHED ALLIANCE - Spring, 2014

Washington County Watershed Alliance

Meetings: The meetings are held the first Tuesday of the month in January, March,

May, July, September, and November. They are held at the Washington County Conservation District office - 2800 North Main Street, Suite 105, Washington, PA 15301. The meetings are open to the public and begin at 7:00 pm.

WCWA Annual Banquet: The second annual Alliance banquet this past March was a success. Thank you to all who attended and all who helped make it possible! A special thank you to our guest speaker, Dr. Candy DeBerry, who provided a very informative lecture on pollinators and planting native plants to attract and provide for them.

<u>Groundwater Monitoring Project</u>: For the past year, 60 residents of Washington County have been monitoring their private well and spring water daily with the use of the



CATTFish device, designed by Carnegie Mellon University's CREATE Lab. The project has revealed unexpected variability in the groundwater of our county and has also made us aware of a need to distribute information about groundwater quality and monitoring to the residents who rely on it as their drinking water source. A summary of this project will be available on the WCCD/WCWA website and the data will be available to view on a website designed by CMU, both by fall 2014. If you have private well or spring water and are interested in monitoring your water for the second round of this project, please contact Beth Kahkonen at bethk@pawccd.org or 724-503-4785 to see if you qualify. We are especially interested in water sources in the following townships: Hanover, Jefferson, Independence, East Finley, West Finely, Nottingham, Somerset, and North Bethlehem.

<u>*Grant Awarded:*</u> The WCWA has been generously awarded another year's support from the Colcom Foundation. This grant will be used to continue our surface water and groundwater monitoring projects, expand these projects into Greene County through a collaborative project with the Greene County Conservation District, and to develop education and outreach programs in public schools and for residents of Washington County.

Washington County Fair: Please stop by the Watershed Alliance and Association booths at the 2014 Washington County Agricultural Fair from Saturday, August 9 through Saturday, August 16.

Buffalo Creek Watershed Association

(www.buffalocreekwatershed.org; email: buffalocreekwa@gmail)

<u>Upcoming Meetings</u>: The BCWA meetings are held on the second Thursday of each month at 7:00 pm at the Buffalo Twp Municipal Bldg.

Outreach and Education: The BCWA anticipates another busy year as we continue our Education outreach, stream bank restoration, and water monitoring initiatives.

Designated an Important Bird Area (IBA-80) we kick-started spring with our first public outreach program, "The Basics of Backyard Birding," conducted by Oglebay Institute Naturalist Erica McGrath. This was followed by a bird walk conducted in the watershed by local birder Lauren Conkle.

The Association will be working collaboratively with the Western Pennsylvania Conservancy on a tree planting project this May and another stream bank stabilization project on Dutch Fork Creek targeted for June.

In addition to these, road side clean-up and other physical activities, we continue to add our voice at public hearings and through letters to our protection agencies and local legislators regarding issues threatening the quality of air, water, and critical wildlife and aquatic habitat within our watershed – most recently HB 1576, the Endangered Species Coordination Act Legislation.

Grants Awarded: The Association is grateful for a \$1000 Dominion grant award and a \$1000 award from Pennsylvania American Water in their continued support of our Mission.

Peters Creek Watershed Association

Watershed Conservation Plan: PCWA has completed their Assessment and Management Plan and are already putting it to use by helping to identify a stream restoration project along Peters Creek for mitigation. They are also in the process of having a Wildlife Management Plan developed by the PA Game Commission for a 14 acre parcel that was recently donated to their association.

Chartiers Creek Watershed Association

(www.upperchartierscreek.org; email: chartierscreekwa@pawccd.org; facebook.com/upperchartierscreek)

Meetings - The ChCWA meets at 7:00 pm on the second Wednesday of each month at the WCCD Office- 2800 North Main Street, Room 105, Washington, PA.

<u>Outreach and Education</u>: On June 28 the Association will host a training workshop for riparian buffer/stream bank restoration, to be presented by the Consortium for Scientific Assistance to Watersheds (C-SAW). The event will take place in Cecil Township Park and is open to the public with advance registration. To register, please contact Beth Kahkonen at bethk@pawccd.org or 724-503-4785.

Stream Monitoring: Spring stream monitoring in the Chartiers Creek Watershed is complete. Both chemical analysis and macro invertebrate sampling have been done at the usual four locations.

In addition, volunteers of the association sampled macro invertebrates in 5 locations in Chartiers Creek in response to the spill of industrial waste and diesel fuel that occurred along Route 18 on April 21. Though official reports indicate the spill was contained and very little material entered the stream, the Association chose to practice their emergency response protocol by collecting macros up- and downstream of the spill site. Results of the sampling will be confirmed by the Consortium for Scientific Assistance to Watersheds.

Save Canonsburg Lake: Planning for construction of the weir at the upper end of the lake is progressing under the direction of the Washington County Redevelopment Authority. Once the weir is built, dredging can begin.



The committee thanks Carole Milas for arranging a cleanup day at the lake on May 15. Thanks also to the Environmental Club of Peters Twp High School for their efforts, to the PA Fish & Boat Commission for providing kayaks, and to WCO Sean Sauserman for his participation and help.

Raccoon Creek Watershed Association

Watershed Conservation Plan: The 20D Raccoon Creek Watershed Conservation Plan is nearing completion after two years of research, public meetings and interviews. One common theme emerged loud and clear - people love the Raccoon Creek Watershed because it's green and quiet. And they want it to stay that way. As one lady put it so well, "My favorite thing to do in the Raccoon Creek Watershed is to breathe fresh air and see the stars at night."

There are still some opportunities to tell us what you think about your watershed and what its future should look like. Please join us at either one or both of the public meetings listed below. We'll have lots of interesting maps on display showing what the watershed looked like before highways, dams, factories and airports were built; maps of energy features like abandoned mine lands, underground coal mines, old and new gas wells; wetlands; prime farmlands; terrain; land use, etc. We'll also have copies of the draft Plan to look over while you are at the meeting. Please join us to learn about the Raccoon Creek Watershed and help shape its future!

Wednesday, June 11, 7:00 PM - Cross Creek Twp. Municipal Bldg., 28 Clark Ave., Avella PA 15312 Monday, June 16, 7:00 PM - Raccoon Twp. Municipal Bldg., 1234 State Route 18, Aliquippa PA 15001

Ten Mile Creek Watershed Association

Upcoming Meetings: The meetings of the TMCWA are held on the first Monday of the month in January, April, July,

and October, 9:00 am at the Log Cabin Fence Company meeting room. Next meeting will be held on Monday July 7th at 9:00 am.

Events: On April 19, 2014, a group of students and residents of the area met at Ten Mile Creek to participate in a cleanup with Paddle Without Pollution, a non-profit group working to clean up rivers and streams. The three hour trip down the creek resulted in the removal of 1100 lbs. of trash, debris, and tires from the creek.





Upper Wheeling Creek Watershed Association

Upcoming Meetings: The UWCWA meetings are held on the first Wednesday of January, April, July, and October, 10:00 am at the East Finley Township Building. The next meeting will be held on Wednesday July 2nd at 10:00 am.

The Washington County Conservation District has just bought a new John Deere 1590 No-till Drill This drill will be available to rent by farmers in Washington County to encourage and promote no-till planting. This practice helps to reduces soil erosion and benefits water quality.

The JD No-Till Drill is a pull type with a working width of 10 feet. It is equipped with a grain box with agitator, a grass seed box, a tongue caster wheel hitch,



front rank lock-up and 16 single disk opener units. The drill <u>does not have</u> a fertilizer box or markers. <u>No fertilizer can be</u> <u>used in the drill</u>. The minimum tractor horsepower requirement is 80hp, with enough ballast to handle the heavy drill on hills. If you are interested in renting the drill contact the Conservation District

office at <u>724-705-7098</u>.



News from the Ag Office

What is your tillage system costing you?



It has finally happened, spring is here, and not just March 20th. It was starting to seem like we were never going to see the snow stop flying or the temperature top 30 degrees. As we all breathe a sigh of relief to see green coming back into the landscape all the farmers know it's

the sign of a busy season to come. This year as it comes time to plant, here is some food for thought that could help make this spring a little easier on the pocket book, better for the land, and maybe even give you a little extra time off the tractor. Let's talk about No-Till planting.

No-till has many different advantages to both the farmer and the environment which make it a practice that should be given some serious consideration. First, let's talk about the bottom line, can no-till save me money? The answer, absolutely! With the cost of fuel continually on the rise the fewer trips that can be taken across the field the more money you can keep in your pocket. One of the more comprehensive studies done on the economics of different tillage systems was conducted by the Pennsylvania Five acre Corn Club. Over a four year period, the study looked at input costs: soil amendments, pesticides and herbicides, equipment costs, yield and labor. They then used these numbers to compared conventional tillage (defined as plowing, disking two times, harrowing, spraying and planting) to no till (spraying two times then no till planting). Even before we start to compare numbers it is easy to see the savings in equipment cost between the two. In conventional tillage six trips are being made over the field with heavy equipment, compared to three passes in no till. The study found that it costs 40% more to plant an acre with a conventional tillage system than with no–till.

The input costs of no-till do differ from conventional tillage with slightly more money being spent on seed and herbicides. The difference in seed cost however, is very small with only about \$1 more an acre. The higher seeding rate was used by the farmers in the study to compensate for variable seed germination rates. The study found that for each year of the four year period the no till fields had the highest density plant populations of the different tillage scenarios. Herbicide costs can be higher if they are being used to burn down a cover crop before planting. However, when this is done the nutrients and organic matter are returned to the soil which can lower fertilization needs. Despite the fact that more money is being spent on these items, the money that is being saved in other production costs and inputs still makes no-till more economical.

Another cost that is sometimes not considered on a family operation is labor. If you have to write a check to a hired hand for planting, the cost can be more noticeable. However, if you are working your operation, your time can sometimes be seen as something that is just necessary to get the job done, and not considered as dollars per hour. The PA corn club study found that on average conventional tillage systems take 1.6 hours to seed, where as a no-till system takes .7 hours. So to do a 10 acre field in no till would take about 7 hours. In a conventional tillage system that same 10 acre field would take 15 hours. To see the cost in this consider what else could have been done in that eight hour difference. The weather in recent years has been making it difficult to get into the fields putting a lot of people in a bind to get crops planted. With No -Till you can get twice the acreage done in the same period of time, allowing you to take full advantage of the nice days when they come.

One of the main advantages of no-till is the effects it has on the soil. In no-till, the soil structure remains intact. This structure gives the soil the ability to hold more water and have a higher infiltration rate. This makes no-till crops more resilient in late summer or during times of drought. The improved structure also promotes the growth of beneficial organisms, which helps to create a healthy productive soil. The minimal disturbance also helps to prevent erosion by preserving soil aggregates. The large amount of crop residue that remains intact helps absorb the impact of rain drops, and prevents soil particles from dislodging and washing away.

Overall no-till has a long list of advantages for both the farmer and the land. Crop yields in no-till can meet or exceed those of conventional tillage. These yields combined with the lower input costs associated with no-till provide higher profit margins for the producer. Along with higher profits on a year to year basis, there are also long term advantages. There is less wear and tear on equipment in a no-till system because there are fewer trips made on the field, which keeps maintenance costs down. There are also less pieces of equipment needed in a no-till system. This means there are fewer pieces to buy or maintain. Rather than having to run up to four pieces of tillage equipment over the field, the entire planting operation can be done in one trip. The fewer trips that are made across the field, the less soil compaction that will occur, and the better your soil structure will stay. Your soils will also benefit from the increased amount of organic matter, and keep plants healthy with higher water holding capacity and infiltration rates.

If you are interested in no till we here at the Conservation District have a No-Till seeder that is available to rent. For information about the drill or any other agricultural questions feel free to give us a call here in the Ag office at 724-206-9446. -Stephen Gilkinson



sincharc@co.washington.pa.us. The Washington County Agricultural Land Preservation Policies and Bylaws may be viewed at www.washington.pa.us under the Planning Commission tab.

June is National Rivers Month!

In our region of Western Pennsylvania we are blessed to be surrounded by rivers! We have the Monongahela coming up from West Virginia and the Allegheny beginning in Northern PA. These two great rivers come together at the Point in Pittsburgh to create the Ohio River.



traveltips.usatoday.com

The Monongahela River was voted the 2013 Pennsylvania River of the Year! It supplies drinking water to approximately 1 million people!

> Over 50 species of fish can be found in the Three Rivers of Pittsburgh

> > 10

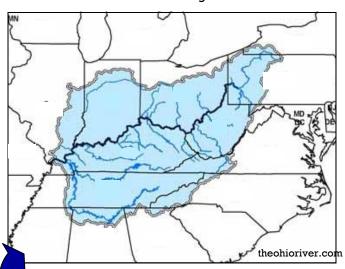
Rivers Quiz

- 1) Which is the longest river in the world?
- 2) What percentage of U.S. drinking water comes from rivers and streams?
- 3) What is the longest river in the U.S.?
- 4) What river's name means "crumbling or falling banks"?
- 5) Where does the

Mississippi River flow to?

Nile River 2) 65% 3) Missouri River
Monongahela 5) The Gulf of Mexico

The Ohio River's Watershed is 203,900 square miles and is the largest tributary of the Mississippi River. The Ohio River is 981 miles long!



CAN YOU NAME ALL OF THE STATES THAT HAVE WATERWAYS DRAINING TO THE OHIO RIVER?!

Image: Crossing Image: Crossing

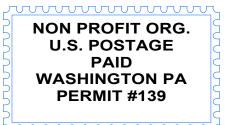
- 10) These are the edges of the river

Down

- 1) Recreational activity using bait
- 4) The flow of the river
- 5) Structures that cross over a river
- 7) This activity can require a Captain

Across 1) Floods, 2) Watershed, 3) Ocean, 6) Cities, 8) Transportation, 9) Water, 10) Banks. Down 1) Fishing, 4) Current, 5) Bridges, 7) Boating





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DEP Dist. Rep. Chuck Kubasik



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Please let us know if you would like our newsletter to come to you via e-mail. Mail this notice back to us if you would like to received the "Tomorrow" by e-mail or regular mail.

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