

# RIVERWATCH

The Official Newsletter of Potomac & Shenandoah **RIVERKEEPER®**



## INSIDE THIS ISSUE

### P.2

Intern Highlight!

### P.3

Mixing Zones  
Why we shouldn't  
have them

### P.4

MD Department of  
Environment fails to  
care for our water

### P.5

THE FIGHT  
AGAINST ALGAE  
Continued...

POLLUTION REPORT:  
'Squeaky Clean'  
FISH KILL

EarthShare/CFC #87828



WATERKEEPER ALLIANCE

## THE FIGHT AGAINST ALGAE

### Shenandoah Riverkeeper takes step to sue EPA

You see it, you smell it, and you hate it. "Rock snot", as many of our members call it, is among the

### TOP 3 COMPLAINTS WE RECEIVE.

Trying to understand this issue? Picture this: it's finally the weekend, the weather is perfect, and you head down to the beach to kick back and relax for the day. Just when you thought you were finally catching a break you show up at the beach to see those long piles of seaweed (marine algae) piled up in multiple rows at the high tide line. The piles are unsightly and don't smell very refreshing as they're baking in the sun. Where are you going to set up your towel now?

Down to the water to swim you go, but the seaweed (algae) is dense. You try to swim but the water is cloudy and the algae feels gross on your skin. Out you go.

You pull out your surf rod, hook a fresh hunk of bait, adjust your weight, and let it fly. Three casts later you sigh with frustration as you reel in another heavy pile of seaweed stuck to the hook. You give up, not knowing whether your failed attempts are due to a lack of fish or if it's really the seaweed that is fouling your bait.

We find most of our members and supporters have had that kind of beach experience, and most understand the algae in the river in that same context. Folks who have come to love the Shenandoah River as their main recreational destination have been experiencing the frustration of algae blooms which are dominating the native grasses for many years. Even worse, fishermen are absolutely fed up and have just decided not to visit the river to fish when the algae is heavy because it's nearly impossible to wet a line without your hook getting fouled every cast.

Every year we experience extreme algae. Every year we receive complaints. Yet Shenandoah Riverkeeper struggles to get recognition of this issue after more than four years of pushing the Virginia Department of Environmental Quality (DEQ) and the Environmental Protection Agency (EPA) to take action. We want official recognition of the Shenandoah River's algae issues and its effect on recreation.

While many other organizations stop at their initial push, we have taken the most difficult step... we took legal action. On August 4th, Shenandoah Riverkeeper, represented by Earth Justice, filed a notice of intent to sue the EPA for its failure to recognize this problem. The official action we are seeking is the listing of the Shenandoah River as impaired due to algae under the Clean Water Act.

Listing the river as "impaired" would trigger specific government plans to combat algae pollution on the Shenandoah, a growing problem of too great a size for us to tackle alone.

Unfortunately these blooms, most common during peak recreational season in the heat of summer, are pushing visitors away from the river or to other rivers in the Commonwealth.

The law states that we as people have a right to swimmable, fishable, drinkable water, but it's up to us as the public to protect that right.

What about health risks? Are we the next Toledo? The media has been swarming around water issues as of late, great news for our cause, but concerns of citizens are mounting. Our Algae Research Project, founded in 2013, has on several occasions detected algae strains of the same family as the toxic algae in Toledo's water supply.

On three occasions this past spring our lab results identified known toxin producing Blue-Green Algae. Blue Green Algae, also known as Cyanobacteria, produce a variety of toxins that can result in some health risks with high exposure levels. Algae on the Shenandoah is mainly caused by the over nutrification of water by intense manure use in the Valley's agricultural land, as well as fertilizers carried in runoff. Warmer months allow the algae to multiply at alarming rates, depleting oxygen needed to sustain other plants and aquatic wildlife.

We don't want to suggest there are currently issues with high toxicity. But a deep and growing weight of evidence suggests that as algae blooms grow in their ferocity, they produce toxins at levels that can become a concern for human health. We hope to continue to advance this research but our immediate concerns surround recreational issues. Will you help us?

Learn how to take action on page 5

# A LETTER FROM JEFF

## BOARD OF DIRECTORS

SALLY DAVIDSON, *Chair*

G. CABELL WILLIAMS, *Vice Chair*

STANLEY OAKS, JR., *Treasurer*

PAT MUNOZ, *Secretary*

BRENT BLACKWELDER

PETER BROSS

JOHN GIBSON

JOHN HOLMES

NICK KUTTNER

ANGUS MACBETH

CHRISTINA NICHOLS

DAN RUSSELL

MIKE SENATORE

ROY SEWALL

MAC THORNTON

ANDREA YOUNG

Dear friends and members,

After pouring my heart into my Rivekeeper work in the Shenandoah Valley for almost nine years I answered a strong calling this summer to step up and play a bigger role in protecting the greater Potomac Watershed by seeking out and accepting the position of President. (In case you hadn't heard.) In many ways I sought this position for the same reasons I started the Shenandoah Riverkeeper branch back in 2006. Nine years ago I laid down the oars I used to row my fishing guide boat in order to start Shenandoah Riverkeeper and give back to the river I made a living on for close to a decade. Now, I'm laying down my Riverkeeper duties and am giving back to the organization that cleared the path for me to protect my favorite river.

During my time as Shenandoah Riverkeeper, my team and I worked to perfect the art of stopping pollution. We did this through extensively assessing pollution threats, working with those responsible for the threat, and in some cases taking the necessary legal action to eliminate the threat. Please know that I did not hang up my Riverkeeper hat without great hesitation. I love the work, so I want our members and partners to know that I'm deeply committed to remaining involved in the work happening in all of our Riverkeeper Branches.

In fact, I will be drawing upon my years as a Riverkeeper to guide the organization in a way that most effectively meets our mission. My #1 job as President will be to manage and grow our organization and its impact throughout the Potomac watershed and clear the way for our Riverkeepers to do their best work. In essence, my number #1 job is to play an even bigger role in protecting your right to clean water and your right to use and enjoy the river.

When I connect our members to the river and to our important work, I will know that I have done my job.

See you on the river!



Jeff Kelble  
President

P.S. Hope to see you on October 25th for our 1st Annual Shenandoah Harvest Hoedown!



## STAFF

JEFF KELBLE

*President & Shenandoah Riverkeeper*

ALAN LEHMAN

*Agricultural Project Manager*

MADELAINE PIERCE

*Communications &  
Membership Coordinator*

SARAH RISPIN

*General Counsel &  
Potomac Riverkeeper*

J. SARAH SORENSON

*Development Director*

BREDY TROMBINO

*Office Administrator*

BRENT WALLS

*Upper Potomac Riverkeeper*

BRENDAN YOUNG

*Algae Research Specialist*

## Intern Highlight

Congratulations to Taylor Cox, our Summer Development & Membership Intern! It was a pleasure having this outstanding American University student on board in our DC office.

Taylor assisted our Communications and Development Staff throughout the busy summer months and successfully completed an independent study on Combined Sewage Overflows in Washington, D.C. Her study involved an in-depth research analysis of past and current CSO legal battles and possible solutions to this devastating water quality issue. Bon voyage and good luck Taylor!



Taylor with Development Director Sarah Sorenson at a tour of DC Water.



# MIXING ZONES

## and why we shouldn't have them

After sharing the issue of mixing zones on social media, the topic went **viral**.

Mixing zones present a great visual example of how discharges directly impact the look, feel, and biological integrity of rivers. Many fisherman, fishing guides, and recreational boaters who have come in contact with the Upper Potomac River Commission's Westernport Wastewater Treatment Plant's mixing zone have concerns over the impact it has on their use and enjoyment of the river.

Mixing zones are discharge zones where pollution is legally allowed to enter directly into the river at concentrations higher than normally allowed. However, questions remain over the effects these zones have on

brown stained discharge of bubbling water with an average temperature of 100 degrees. This discharge is occurring in one of the premier cold-water trout fisheries of the East Coast of the United.

Fishermen travel hundreds of miles to fish this legendary tail-water fishery. After this discharge zone the river is aqua blue-green, clear, and cold, but downstream of the discharge, the river is tainted a murky brown color and it is unacceptably warmed. It is our professional opinion that the warm water reduces the viability of this trout fishery by tens of miles by causing the water to remain above the trout's threshold survival temperature.

After years of foot dragging, Maryland Department of the Environment (MDE) finally renewed the discharge permit and made some incremental improvements to the discharge. However, recent observations reveal

**"MIXING ZONES ARE ALLOCATED IMPACT ZONES WHERE WATER QUALITY CRITERIA CAN BE EXCEEDED AS LONG AS ACUTELY TOXIC CONDITIONS ARE PREVENTED."**

**- ENVIRONMENTAL PROTECTION AGENCY**



local ecosystems and recreation. According to the EPA, mixing zones are "allocated impact zones where water quality criteria can be exceeded as long as acutely toxic conditions are prevented". These zones of concentrated pollution, which can span the width of as much as a one third of the river, flow all the way downstream and irreversibly change the river.

At the UPRC plant, the mixing zone acts as a final step in the water treatment process as it is diluted within the body of the river. Residential fish in the area of the underwater discharge are assaulted with orange-

that the same issues remain.

As use and recreation continue to be damaged, we are pushing for better regulations or the total elimination of mixing zones in order to maintain the biological, chemical, and physical integrity of the Upper Potomac River. ■

# TOXIC COAL ASH BRINGS POTENTIAL SUIT

## Dominion Power Plant illegally discharging for decades

Following two high-profile coal ash pond spills, one in Tennessee in 2008 and recently on the Dan River of North Carolina, water advocates are alarmed at the imminent harm these coal ash disposal facilities pose to our rivers and streams.

Coal ash ponds are unlined or clay-lined man-made ponds used to store ashes from burning coal in coal-fired power plants. These open ponds collect rainwater, creating a toxic sludge of water, coal ash, and heavy metals such as arsenic, barium, nickel, selenium and cadmium that eventually makes its way into ground and surface water. These contaminants harm aquatic life, and, when taken in at high quantities, can cause myriad health problems in humans, and especially children.

The Tennessee and North Carolina spills occurred when the berms holding in the coal ash and water in the ponds gave way, releasing tons of toxic sludge into adjacent water bodies. But it doesn't take a spectacular collapse to endanger our rivers: When not properly maintained or remediated, coal ash ponds can release their contaminants into ground and surface water through leaks and over-topping of berms.

This is the situation we face at Dominion Energy's Possum Point Power Plant just south of D.C. on a peninsula between Quantico Creek and the Potomac River. Although the plant no longer burns coal, 48 years of coal ash are stored on-site in five different coal ash ponds. Of these five, only one is reported to have a liner, and none have been remediated or capped.

The Virginia Department of Environmental Quality has documented at least four points of discharge from three of the ponds. Due to the ponds' state of disrepair, contaminated water is released not only through a pipe, but also through overflows and breaches in containment walls. Dominion's own testing reveals a wide variety of metals in the water coming out of this pipe, leading us to believe that the water seeping out

elsewhere is similarly contaminated. Groundwater monitoring of the two other ponds has revealed the presence of metals at levels that far exceed Virginia groundwater standards.

Point source discharges, such as these, into a body of water are illegal unless permitted under the Clean Water Act's (CWA) National Pollutant Discharge Elimination System. But Dominion currently only has a CWA permit for one discharge at one of the five ponds. This means that all of the other releases of contaminated water at the facility violate the CWA.

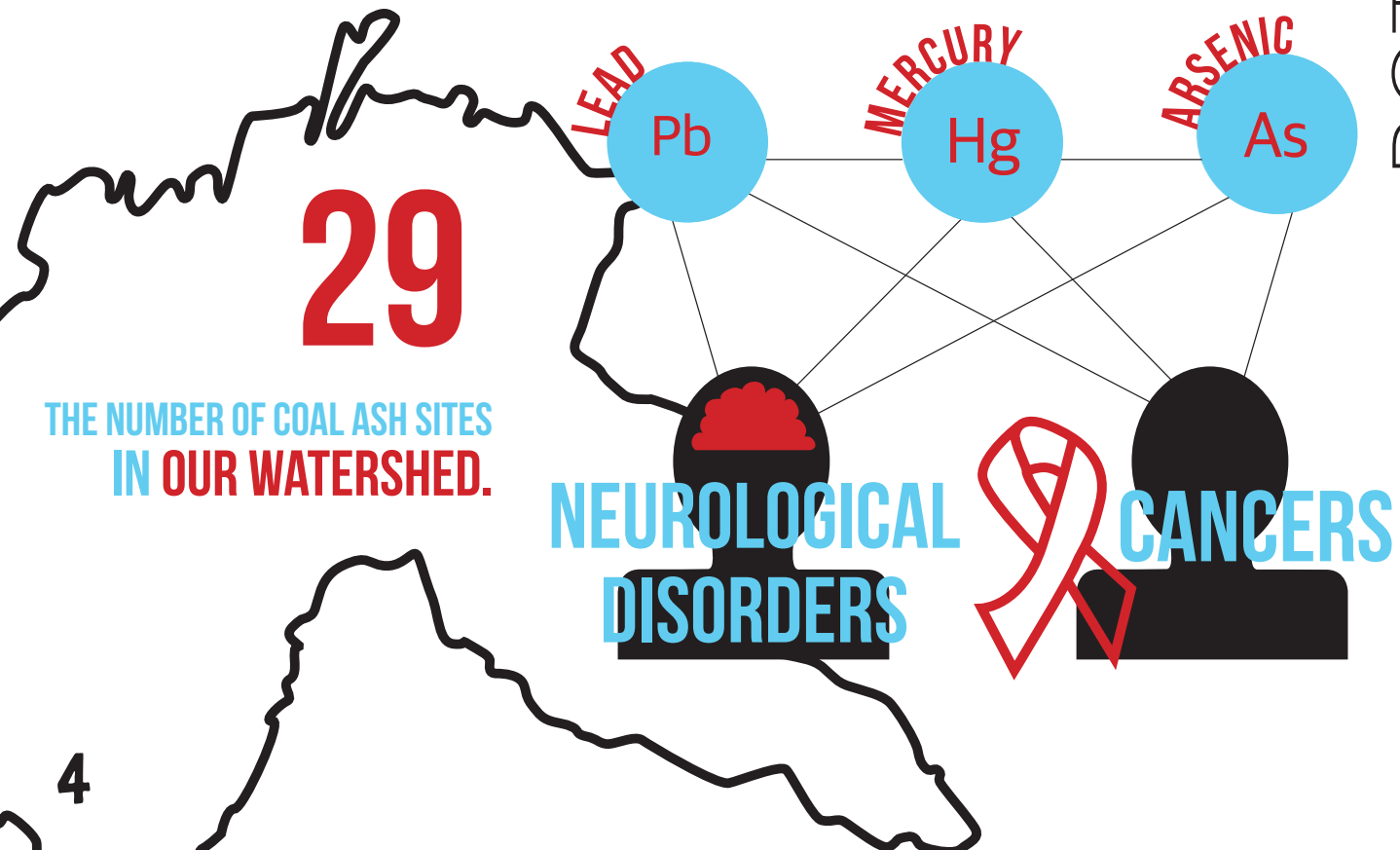
This is why, on September 11, 2014, Potomac Riverkeeper and the Virginia chapter of the Sierra Club, represented by the Southern Environmental Law Center (SELC), filed a Notice of Intent to sue Dominion Resources for ongoing violations of the Clean Water Act at Possum Point. The NOI carefully lays out our evidence that the five coal ash ponds are discharging water contaminated with heavy metals into both groundwater that flows to Quantico Creek, as well as directly into the creek.

This is the second such action against coal ash storage facilities Potomac Riverkeeper has brought—a Notice of Intent we filed in 2008 against the Faulkner coal fly ash disposal facility in Charles County, Maryland resulted in a 2013 consent decree.

The problem does not end there. Potomac Riverkeeper has identified at least 29 coal ash storage sites in the Potomac watershed. Since the power plants that create the coal ash are often located near bodies of water, many of these sites are dangerously close to the Potomac River and its tributaries. Limited federal and state oversight of coal ash means that they are prone to leaks and failures.

Potomac Riverkeeper is eager to continue with this vital work. We will be sure to keep our members up to date on all further developments as we push forward. ■

POTOMAC RIVERKEEPER



## THE FIGHT AGAINST ALGAE continued...



Please send us your complaint letter to the EPA, being sure to include the following information:

- 1) Name & Address
- 2) Description of your river usage (i.e when, how often, purpose)
- 3) Locations & Times you have experienced algae on the Shenandoah
- 4) Personal impacts from algae on the river
- 5) Are you less likely to use the Shenandoah River for recreation?
- 6) Additional information
- 7) Request that VA DEQ include the North Fork, South Fork, and/or Main Stem on its impaired waters 305(b)/303(d) list
- 8) Tell DEQ if you believe the algae is worse in the Shenandoah than other rivers

Address the top of your letter to:

John M. Kennedy  
 DEQ Office of Water Monitoring and Assessment  
 P.O. Box 1105, Richmond, VA 23218-1105  
 RE: Draft 2014 305(b)/303(d) Water Quality Assessment Integrated Report

Send your letter to me:

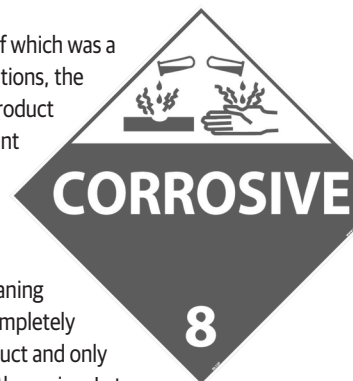
Jeff Kelble - Shenandoah Riverkeeper  
 P.O Box 405  
 Boyce, VA 22620

## POLLUTION REPORT: 'Squeaky Clean' Fish Kill

Shenandoah Riverkeeper received a citizen's report of a fish kill and a strong chemical odor in Blacks Run in the city of Harrisonburg, Virginia, late Friday night August 1, 2014. Alan Lehman, our field project manager, responded early the next morning to investigate the report. He patrolled the stream as it winds through the city, into tunnels, under streets and buildings, to document the fish kill. He counted 27 dead fish, ranging in size from five to 12 inches long, and one dead rat in the creek. One block upstream of the dead fish, Lehman found a cleaning company pressure-washing the exterior of the local jail building. The foamy runoff from the project was flowing directly off the building and into a storm drain nearby, which sent the toxic slurry into Blacks Run.

Two cleaning product containers were found sitting on the street next to the company trucks, each with labels, one of which was a 12.5% Sodium Hypochlorite solution with Federal labels warning of its corrosive properties. Along with other precautions, the label clearly stated: "This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit...Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority." The label also stated in all capitals: "IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING".

The hose operator and owner of Squeaky Clean, of Dayton, Va., spoke with Lehman about the fish kill and their cleaning project. The operator stated he was unaware there was a stream under the street at the downtown site, as it was completely hidden from view. Lehman informed him he could be in violation of Federal law and he agreed to stop using the product and only spray water on the site in the future. The operator also stated that he regularly uses that chemical to clean buildings in the region. Later that same day, Lehman noticed that fish were beginning to reenter the area where all fish had been wiped out. Looks like we were just in time! In our assessment the fish kill was not a major incident due to the quick response of Shenandoah Riverkeeper. Virginia Department of Environmental Quality (DEQ) is reviewing our photographs from the scene and is considering possible penalties for Squeaky Clean. Blacks Run is a tributary of Cooks Creek, which flows into North River before joining South River to form the South Fork Shenandoah River. ■





# EVENT RECAP: Shenandoah Riverfest 2014



## THANK YOU FOR SUPPORT

With gratitude we recognize our latest supporters

James Abernathy  
R C & Gail Allen  
Valerie L. Amerkhail  
Larry E Angrimson Jr  
Janet Augustine  
Barbara & Nathaniel Baldwin  
Barry Ballow  
Helen Bear  
H. Birkett & Pamela Becker  
Judith Bell & Dick Goodwin  
Brent & Terry Blackwelder  
Les Bland  
Frederick E Blott  
Diane & Juergen Bodnaruk-Kuenne  
Brent Bolin

Willem Brakel  
Franca Brilliant  
Robin and Mike Broder  
Kenneth Brooks  
Peter Bross  
Chris Brown & Mary Rollefson  
Marney Bruce  
William & Helga Butler  
David & Nancy Cartier  
Carole Cavanaugh-Fettig  
& Ron Fettig  
Julie Chapman & David Cushing  
Jennifer Chavez  
Linda & Stan Collyer  
Ruth M. Connolly  
William Cromwell IV

Jo Ann Cruz  
& Fernando Cruz-Villalba  
David & Janet Curtis  
Sally Davidson  
Nick M Davis  
Douglass T Delano  
Kirsten Denney  
Janet C. Dewar  
Lawrence DiJoseph Jr  
Dennis Dineen  
James J Donahue Jr  
Merrit Drucker & Cathy Sloss  
C Mark Eakin  
Jay Eiche & Tanya Harvey  
Sarah Epstein & Donald Collins  
John Ermerins

Joseph & Dorothy Feinberg  
Frank & Lisa Filipy  
Herschel Finch  
Farley Fisher  
Pat & Peggy Fleming  
Robert & Laurie Forbes  
Dave & Anna-Marie Foulis  
John Frehn  
Paul D Frey & Maria E Freire  
Larry Gladieux  
Brian & Charlotte Graves  
Susan & Richard Green  
Chesapeake Legal Alliance  
Richard & Carolyn Harding  
Michael Harmon  
Kevin Harper

Jessie Harris  
Robert Harvey  
David & Jennifer Hearn  
Marcella Hickey  
Craig Hicks  
Alice Hirschfeld  
Linda Hollenberg  
Agnes Holloway  
John Holmes  
Brian Hopkins  
Robert Hunt  
Marc Imlay  
Robert & Bonnie Jacobs  
Deborah & Stephen Jones  
John Karlík  
Barry Kearney



## Riverfest keeps on growing, and it's all thanks to you!

We enjoy putting on the Shenandoah Riverfest each year almost as much as the community loves to attend it. Thanks to all the dedicated volunteers who helped put together all the entertainment; from paddling, to wild animal displays, to crafts for the kids. This year was one of our most successful, and we look forward to many more years of fun and river education for the whole family.



# PORTING CLEAN WATER

rs who invested in our work from April-July 2014

Carrie & Josh Keene  
Richard Kidwell  
Sigrid & Arthur Kilcullen  
Lynn & Christopher Koch  
Michael Kolian  
Nicholas Kuttner & Mysia Pallas  
Virginia & John Laytham  
James Long  
Angus Macbeth  
Alta Mainer  
Michele Moloney-Kitts & Joe Kitts  
David Manowitz  
Virginia C. Mars  
John & Judy Mathwin  
Everett Mattlin

Eugene W May Jr  
John & Barbara McGraw  
James & Lynn McPheeters  
Ed & Donna Merrifield  
Arthur V. Milholland  
Carole D. Miller  
Eleanor Miller  
Nathaniel Morrison  
Pat Munoz & Dorcas Adkins  
Charlotte L. Murphy  
David & Melanie Mustone  
Christina Nichols  
Lt. Max & Priscilla Noah  
Stanley C. Oaks  
Avis Ogilvy Moore  
Gordon & Kay Patterson

Damon Phillips  
Scott Plein  
Katarina Podlesnaya  
Jane Powers & Richard Colbert  
Robert Ratcliffe  
Blue Ridge Young Marines  
Peter P & Amy S Rispin  
Carl Roeser  
Mama's Caboose LLC  
Roy & Ase Sewall  
Steven Shapiro  
Susan & Dustin Simonson  
Karen Slade  
Kenneth Sloate  
James Speicher  
Samuel N Stokes

Noah Stone  
Britt Stoudenmire  
Ingrid Sunzenauer  
James H. Thompson  
D McCarty Thornton  
& Molly F Carr  
Mercedes & Paul Tibbits  
Harold & Diane Toothman  
Kate & Adam Van Grack  
Steven Van Grack  
Eric Vandernoot  
John Via & Alison Hardwick  
Katherine J Ward  
Robert & Nadja Ward  
Lewis Waters  
Margaret Watkins

Diana Weatherby  
Christian White  
Marcia & Henry N. Woolman  
Chris Wright  
George Wyeth  
& Julie Greenberg  
Nancy Yoshikawa  
Andrea & Dendy Young  
Brian & Rita Zimmerman



POTOMAC & SHENANDOAH RIVERKEEPER  
1615 M Street, NW, 2nd Floor  
Washington, DC 20036

**PIG ROAST**

**LIVE MUSIC**

**DANCING**

**LOCAL FOOD**

**LOCAL**

**BREWS**

**& WINE**

|||||

**CORNHOLE**

**BEST CAMO**

**KING & QUEEN**

**HAY BALE**

**THROWING**

AND MORE...

★ SHENANDOAH RIVERKEEPER ★

**HARVEST**

**HOEDOWN**

**GEORGE'S BARN**

400 SUNNY CANYON LANE. BOYCE, VA

OCTOBER **25<sup>TH</sup>**

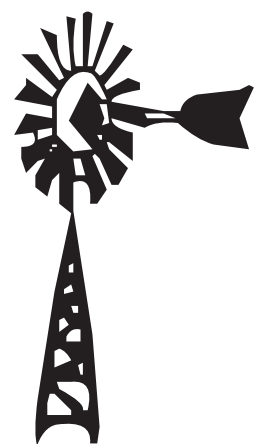


**4:00** until  
**TWILIGHT**

**TICKETS**

**\$60** PER  
PERSON

**\$100** FOR  
**TWO**



**RSVP:** [POTOMACRIVERKEEPER.ORG/HARVESTHOEDOWN](http://POTOMACRIVERKEEPER.ORG/HARVESTHOEDOWN)