

West Virginia Highlands Conservancy  
PO. Box 306  
Charleston, WV 25321

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# *The Highlands Voice*

Since 1967, The Monthly Publication of the West Virginia Highlands Conservancy

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And when the dust had lifted and they saw what had occurred

## The 2018 West Virginia Legislature: What Happened?

The Big Kahuna of the 2018 Legislative Session was, of course, the teachers' strike. Teachers stuffed the Capitol, chanted, sang, waved signs, etc. until they finally got the pay raise they wanted as well as a commitment to progress on improving the Public Employees Insurance Agency.

While the teachers occupied center stage and will be the thing this Legislature will be remembered for, several things were happening (or not happening) off in the wings.

The conservation issue that got the most attention was the proposal to log the State Parks. The original proposal would have allowed timbering in all State Parks. Faced with substantial opposition, leaders proposed a "pilot project" that would allow timbering in only Watoga State Park. This got people in Pocahontas County even more riled up without appreciably reducing the opposition elsewhere.

With all the opposition, the bill just stopped advancing. Legislative leaders are more than capable of sniffing the wind,

counting votes, and figuring out what bills have support. This proposal started falling off committee agendas, etc. and died a quiet death.

While those who support State Parks did not stuff the Capitol, sing, chant, and wave as many signs as the teachers, their efforts were not too shabby. According to The West Virginia Rivers Coalition, people stuffed the mailboxes of legislators and the governor with at least 16,866 letters to legislators and the governor. These were only the letters that came about as a result of Parks supporters' organized efforts. Many other West Virginians sent letters without being a part of any organized effort. One senator shared that he had received more citizen opposition to this proposal than any other bill this session.

The proposal had originally been advanced as a way to finance maintenance and improvements in the Parks. The Department of Natural Resources would sell timber and use the money to fix up the Parks. The Legislature decided to skin the maintenance cat by dedicating a part of lottery revenue to Park maintenance.

**(More on p. 3)**

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## Thoughts from our President

By Larry Thomas

March proved to be another month a lot of activity. Mother Nature provided the greatest amount of snow of the winter for much of the highlands and has ended the month with an abundance of rain. There was also a flurry of activity with issues about which we are most concerned. Activities included:

### Mountain Top Removal Mining

It was announced that the study by the National Academies of Sciences, Engineering and Medicine concerning the health effects of mountain top removal mining has ended. The study, called "Potential Human Health Effects of Surface Coal Mining Operations in Central Appalachia" was initiated by a formal written request from the state of West Virginia in 2015. The research was much-needed, Study Chairman Paul Locke stated. "I know leadership changes, but the facts and the science don't change, so we're now in a position where we don't know what we could have known. I hope you hear the frustration in my voice. I'm very frustrated and disappointed." WVHC is also very disappointed.

### Natural Gas Pipeline Construction

A request by Dominion Transportation, Inc. (DETI) and Atlantic Coast Pipeline, LLC to extend the deadline for tree felling from March 31, until May 15 has been denied by the Federal Energy Regulatory Commission.

The first incident of a suspected compliance violation has been reported and is being brought to the attention of the Virginia Department of Environmental Quality and the Federal Energy Regulatory Commission. The occurrence is an apparent unauthorized access road and equipment staging area for construction. It is in Augusta County, VA in conjunction with the area where horizontal directional drilling is to occur under the Blue Ridge Parkway and Appalachian Trail. The report results from a flyover by the Allegheny Blue-Ridge Alliance/Compliance Surveillance Initiative Pipeline Airforce.

### Logging in West Virginia State Parks

Senate Bill 438 authorizes additional bonds for state park projects requiring certain deposits from the State Excess Lottery Fund providing for certain funds not needed for debt service to park improvements. This was one of the recommendations on the suggestions list of alternatives to logging provided by the SOS Parks initiative.

The Appalachian Regional Commission (ARP) has announced a grant to pay for a study of the timber within West Virginia's state forests. The West Virginia Division of Forestry will receive a \$92,820 grant for a timber and forestry products inventory of the state-owned forests. Along with the \$92,820 from ARP the inventory will receive an additional \$89,180 from the West Virginia Department of Commerce. We are trying to learn more about this study.

### Corridor H Highway Construction

The West Virginia Department of Transportation has filed for the modification of authorization for the Corridor H, Kerens to Parsons proposed 8-mile-long new four-lane highway construction in Tucker County, West Virginia. According to the description,

construction will result in the permanent discharge of dredged and/or fill material into 111 streams and twelve jurisdictional wetlands at 38 single and complete project locations. Mitigation proposed are through the purchase of stream credits. Comment period ends 4/30/2018.

### West Virginia 2018 State Legislature

This is covered by other articles in the Voice.

During the 50<sup>th</sup> Anniversary celebration activities, the Board requested that members provide ideas for the WVHC for the future. Many great suggestions were received and after a presentation and review of the suggestions at the January meeting, the Board decided that the April Review should be devoted to a facilitated discussion of the suggestions. Suggestions received:

1. Do We Need an Administrator/Executive Director
  - a. Establish a Search Committee if Decided We Have the Need
  - b. Establish Responsibilities if Decided
    - (1) Outreach, Advocacy and Growth
    - (2) Communication with Board and Membership
2. Should We Provide Board of Directors Training
3. Review of Current WVHC Programs and Activities and Possible Establishment of Other Programs and Activities
  - a. Discuss and Focus on Current WVHC Programs and Activities
  - b. Environmental Issues
  - c. Education Programs
  - d. Conservation Issues
  - e. Public Lands (Mon, GW and WV)
  - f. Annual Fall Review
    - (1) Provide Scholarships for College Students to Attend
4. Research
  - a. Grant Applications for Research of Interest
  - b. Energy Policies (Coal, Gas, Solar and Wind)
5. Evaluate and Establish Relationships with and Support for Other Environmental Organizations
  - a. Partner with Other Environmental Groups
    - (1) Strict Rules and Procedures to be Established
      - (a) ABRA/DCMP
      - (b) Are There Other Organizations We Should Evaluate and Consider
        - (1) Appalachian Mountain Advocates
        - (2) West Virginia Environmental Council
        - (3) West Virginia Wilderness Coalition
        - (4) Allegheny-Blue Ridge Alliance
- 6.. Support of Specific Activities as They are Determined
  - a. Example "Save Our State Parks" SOSPARKS

## Legislative Wrap-up (Continued from p. 1)

Another poorly thought out idea that didn't become law was a proposal that the utility companies be allowed to negotiate discounts with large industrial users. The result would have been that residential users would end up paying higher rates to subsidize the discounts to industrial users. Nobody especially stuffed the Capitol or anybody's mailbox, but AARP, the West Virginia Environmental Council, West Virginia Citizen Action Group, and the Public Service Commission's Consumer Advocate all opposed it. That opposition (and the unsoundness of the idea) were enough to defeat it. It made it to the Senate floor and was defeated when the Senate tied, 17-17. Since it takes a majority to pass, it was defeated.

Bills to establish or abolish "advocates" at the Department of Environmental Protection were introduced and then quickly disappeared. We currently have an office of Environmental Advocate. The Environmental Advocate is the link between the people and the agency. It is supposed to help citizens understand

what the Department of Environmental Protection is doing, answer questions, and help citizens interact with the Department of Environmental Protection. There was a bill to abolish that position. It didn't make any progress.

We do not have an Industry Advocate at the Department of Environmental Protection, unless we count the Secretary of the Department and many of the people who work there. To correct this imbalance, one legislator introduced a bill to create an office of Industry Advocate. It didn't make any progress either.

The Legislature did approve a pilot project to allow all-terrain vehicles in Cabwaylingo State Forest. All-terrain vehicles on public lands have always been controversial. They can cause damage to trails and plant life and risk bringing, noise pollution, air pollution, and litter. There is also the very real danger of ATV riders leaving established trails. Every time they leave a trail, they create a new one, creating a spreading web of damage to the forest floor and increasing erosion. Now

we will have a pilot program to allow them in Cabwaylingo State Forest.

One of the biggest legislative disappointments for water quality advocates is the failure of the legislature to even consider the recommendations of the West Virginia Public Water System Supply Study Commission (PWSSSC). The Commission was established by the legislature following the Charleston area water contamination crisis in 2014. The Commission had been charged by SB373 (in 2014) with making recommendations related to five specific tasks. Recommendations were submitted to the Legislature in 2014, 2015, 2016 and 2017. The 58 page 2017 report- assembled by the 5 PWSSSC working groups- is designed to avoid a repeat of the 2014 Charleston water contamination crisis. But, as it did with the 3 previous PWSSSC reports to the legislature, the legislature has ignored this most recent report and recommendations. Some observers are afraid that it will take another similar water crisis to get the legislature's attention.

### A Straw in the Wind? Or a Big Nothingburger?

During the most recent session of the West Virginia Legislature, one of the major issues was whether there would be logging in State Parks. Thanks to substantial public outcry, that proposal lost.

At the end of the session, after the proposal to log in State Parks was dead, the Senate Committee on Natural Resources passed a resolution calling for a study of the management of public lands. While the Committee passed the resolution, it never passed the full Senate.

What are we to make of this?

On the one hand, a study resolution can be a sign that something is likely to happen next year. If the Legislature is serious about an issue, it often studies it over the summer and fall so that when the next session comes it is all ready to go. A study resolution can be the Legislature's way of signaling that the train is on the fast track and building up steam.

A study resolution can also be a legislative consolation prize. If someone doesn't have the power to push their issue across the finish line, they get a study resolution. Even if the law they proposed didn't pass, they can go home happy that the Legislature took them seriously. Sometimes these consolation prizes don't amount to anything. There is no study, and nothing ever happens.

From the fact that some Senators proposed a study and a Committee passed it we know that somebody wants to pursue this idea next year. The resolution suggested that there be "input shall be sought from appropriate state, local, and private agencies and organizations, including the Division of Natural Resources and the Division of Forestry." It doesn't say anything about participation from the general public.

But what are we to make of the fact that it did not pass the Senate? Does this mean that the idea of logging in State Parks has so little support that its advocates don't even get a consolation prize?

Or did the proposed resolution just get lost in the hurly burly that is the last days of the Legislature? Lots of things do. Maybe there is still substantial support for the idea but the resolution which would have expressed that support just got overlooked. In that case the failure of the resolution to pass means nothing.

We shall see. And don't throw away your picket signs just yet.

Up in Smoke?

## Environmental Analysis as the Budget Burns

By Hugh Rogers

Last month, representatives from the Highlands Conservancy, Sierra Club, Trout Unlimited, Friends of Blackwater, and Rivers Coalition met with Clyde Thompson, Monongahela National Forest Supervisor, and some of his staff at a “roundtable” in Elkins. Our organizations have been concerned about a recent push to streamline the process that examines environmental impacts of forest use.

Meetings were taking place across the country. After video conferencing brought us national and regional perspectives, we had a lively, local discussion.

The Forest Service’s Washington office put the issue in the context of four priorities:

- (1) safer working area (i.e., free from harassment)
- (2) reduce costs and risks of fire suppression
- (3) environmental analysis and decision-making
- (4) contracting

Proposed rule-making on #3 had drawn 35,000 comments. Most were said to describe the current process as cumbersome, time-consuming, and expensive. That, of course, would have been the opinion that prompted the rule-making to begin with.

Recall that the National Environmental Policy Act (NEPA) calls for three levels of scrutiny of government action: full Environmental Impact Statement (EIS); simpler Environmental Assessment (EA); and Categorical Exclusion (CE), for actions that do not, “individually or cumulatively, have a significant effect on the human environment.”

Environmental Assessments, declared the national speaker, should be 15-20 pages; in practice, they are running to 100-150 pages. The process has gone from “strategic” to “encyclopedic.” A graph displayed the steady rise in average days-to-decision: now, for a full Environmental Impact Statement, 3-4 years; for Environmental Assessments, 2-3 years; for Categorical Exclusions, 6 months. Other agencies, it was said, spend only weeks on an Environmental Assessment. (The federal agency with the most similar mission, the

Bureau of Land Management, is notorious for giving short shrift to environmental concerns.)

It’s undisputable that many other jobs aren’t getting done. Maintenance and restoration of everything from roads to campgrounds to watersheds. Special use permitting. Dealing with risks of fire . . .

Fire! That was the elephant in the room.

Tucked into the power point



presentation, “Improving Environmental Analysis and Decision Making,” was a peek at the overwhelming impact of fire. We know that the agency’s budget has been flat for more than ten years. It has somewhat fewer employees now than it did in 1998. The big difference is the shift in those employees’ roles. In 1998, over 18,000 of them worked on the core mission of land management, while just over 5,000 were dedicated to fire-fighting. By 2015, barely more than 10,000 were working on the core mission; close to 12,000 were directly involved with fire. Each year has topped the last as the “worst fire season.” The share of the budget dedicated to fire has risen from 20% to 60%. Call it the U.S. Fire Service.

Are we surprised that 10,000 people take longer to do as much as 18,000 used to do?

Briefly, we turned to Priority #2: the Forest Service has asked Congress to

change how fire-fighting is funded. If fires were treated as disasters, the expense would not eat up the regular budget. We’ll see how that goes.

The Forest Service has always been a decentralized organization; the way EIS’s, EA’s, and CE’s are written differs somewhat from forest to forest. The Washington office is encouraging the regions and individual forests to improve efficiency. One way and another, through training, technology, and new templates for analysis, it intends to decrease the cost overall by 20% by 2019, the 50th anniversary of NEPA.

On the Monongahela, some changes underway include:

- (1) templates to encourage consistency in documentation
- (2) “small project NEPA day” – interdisciplinary team meetings to review small-scale, routine, non-controversial projects eligible for CE’s
- (3) improvements in GIS mapping – and better public access to the data, so we can be involved in collaboratively defining projects and determining the level of NEPA analysis

On that, Sierra’s Mary Wimmer, whose experience goes back to the Mon’s 1986 Land Management Plan, said, “That’s the way we used to do it.” Dustin Wichterman shared a more recent example, Trout Unlimited’s role

in the Big Mountain project.

Mary asked how recreation will fit into this emphasis on efficiency. Clyde Thompson said the Forest wants to integrate its efforts with surrounding communities, a holistic approach to the recreation economy. They hope to add a couple of staff for recreation. Meanwhile, they are planning to hire local contractors to work on trails.

Matt Kearns, West Virginians for Public Lands Coordinator, was worried about national rules to encourage CE’s that would lump together the big forests out west and our smaller acreage in the east. He suggested that proposals should be reconciled with their areas’ Management Plan (MP) prescriptions; if they’re consistent, an EA should not be a complicated matter.

**(More on the next page)**

# United States Department of the Interior No Longer Wants to Know the Connection between Surface Mining and Public Health

The National Academies of Sciences, Engineering and Medicine has ended its study of the effects of mountaintop removal mining on public health. The committee working on the project has been released and the project terminated. Its mission would have been to review the evidence and determine what effect large surface mining operations have upon the health of those living nearby. The study had been requested, and funded, by the Department of the Interior. While the Academies were eager to continue, the Department of the Interior ended all funding, making completing the study impossible.

The problem of large strip mines making people sick is not new to the West Virginia Highlands Conservancy. *The Highlands Voice* had had articles about it since at least 2009. In November, 2012, we published a listing of the then-existing studies on the correlation between large strip mines and illness. (*The Highlands Voice*, November, 2012, [www.wvhighlands.org/2012/](http://www.wvhighlands.org/2012/)).

In March, 2015, Cindy Rank did a story for *The Highlands Voice* headlined *Human Health Impacts of MTR: What Will It Take?* [www.wvhighlands.org/2015/](http://www.wvhighlands.org/2015/). In it she detailed efforts that had been made, with mixed success, to address this problem. We have also contended in court cases that regulators had a duty to consider the health impacts of mining in deciding whether to issue permits.

Finally, in August 2016, the federal Office of Surface Mining (a part of the Department of Interior) announced that it was going to have The National Academies of Sciences, Engineering, and Medicine conduct a study of the connection between surface mining and public health. The Academies were founded to provide objective, nonpartisan advice to lawmakers. While the Office of Surface Mining would fund the study, neither the agency nor the coal industry would be represented on the study panel. This was supposed to ensure that the study would produce an objective assessment of the impacts of large surface mining upon public health.



## Health Effects? What Health Effects?

At the time the study was announced a news release from the OSM cited a “growing amount of academic research” that suggests “possible correlations” between increased public health risks and living near mountaintop removal sites. The agency said there was a need to examine existing studies, identify research gaps and look for “new approaches to safeguard the health of residents living near these types of coal-mining operations.”

The study really got going in early 2017. It was having public hearings, listening to experts, etc.

Things changed in August, 2017. The Office of Surface Mining told the National Academies of Sciences, Engineering, and Medicine to stop work on the study. At the time the Academies announced that the Department of Interior had “begun an agency-wide review of its grants and cooperative agreements in excess of \$100,000, largely as a result of the Department’s changing budget situation.”

Now the National Academies have announced that it has disbanded the study. It had become clear that that the Office of Surface Mining of the Department of the Interior will not provide any more money. The National Academies sought private funding without success.

Then nothing happened for a while. In October a spokeswoman for the Department of Interior said that “The Trump Administration is dedicated to responsibly using taxpayer dollars.” She said that the study was put “on hold” as part of a department wide review of grants and cooperative partnerships exceeding \$100,000 that began in April.

The Department of Interior did not identify any other grant or cooperative partnership impacted by the review. The Department of Interior has declined to explain how or whether the money saved by not doing the study was spent.

The Ohio Valley Environmental Coalition keeps a list of studies examining the effects of strip mining on public health. To look at its list, go to <http://ohvec.org/mountaintop-removal-articles/health/>.

## Meeting with the Forest Service (Continued from previous page)

A cautionary note from Beth Little: the 2009 extension of the Cranberry Wilderness included former 3.0 MP’s (would have allowed logging) on Rough Run and Little Fork. MP’s shouldn’t always control. As the Supervisor put it, “The Plan develops projects, but we can use projects to review the Plan.”

Toward the end of a wide-ranging discussion, Kent Karriker, recently retired from the Mon, brought us back to a crucial question: “What is it that we’re *not* going to do?” If we continue the same workload and same number of people to do it, “efficiency” can only nibble at the edges. The question was left hanging in the air.

I’ll conclude with a comment on the distortion of NEPA’s original purpose. In spite of the title of this national exercise, “Improving Environmental Analysis and Decision Making,” the latter

subject was not addressed at any level, national, regional, or local. NEPA was supposed to bring environmental factors into decision making. A “hard look” at impacts would lead to better decisions. But politics turns the process on its head: the decision comes first, then a nearly-pointless look at its impacts.

This is not so much the case when the local administration is allowed to carry out its mission, but it has always been the case for large-scale “special” uses, projects not begun in-house but dumped on the Forest to deal with as well as it can. Highways and pipelines, for example.

Saving a certain percentage of time on small projects seems almost trivial when compared to those abuses.

## Celebrating Old Growth Forests

The Old Growth Forest Network has identified two sites in West Virginia and added them to its list of old growth forests.

The first is Giant Tree Trail/Hollow at North Bend State Park. North Bend State Park comprises 2500 acres. Within the state park is the Giant Tree Trail/Hollow forest which is about 25 acres in size. Fifteen of those acres exhibit all the characteristics of an old-growth forest. Four tree species in the stand reach height records for West Virginia. The largest known White Pine is present there. The Old Growth Forest Network formally added it to its list of old growth forests on March 18.

The second is the Ann Bailey and Burnside Trails of Watoga State Park. Surrounding the Ann Bailey and Burnside Trails at Watoga State Park are nearly 1000 acres of old-growth forest. It is populated with oaks whose age range has been estimated to be 300-350 years old. This beautiful forest has been fortunate to have been overlooked by logging – much to the benefit of Watoga State Park. The Old Growth Forest Network formally added it to its list of old growth forests on March 19.

This forest will be the second Pocahontas County forest to be included in the Network. The first one was Gaudineer Scenic Area in Monongahela National Forest.

The Old-Growth Forest Network began in 2007. It hopes to identify and help protect one forest in each county of the U.S.



where forests could grow and let people know where they were located. In this way it could help stop the destruction of what old-growth remained, help some forests recover, and enable more Americans to experience an old forest. For more information, see [www.oldgrowthforest.net](http://www.oldgrowthforest.net).

Old growth forests are important for the ecological role they play. The old-growth stage of a forest's life is especially important because of its unique structure. Various canopy layers and berry-producing plants are beneficial for many bird species. In a forest that has not been disturbed for hundreds of years some trees will develop hollow cavities, these cavities become important nesting places for animals. In an undisturbed forest some large trees will die and fall, creating yet more habitat: numerous insects, fungi, reptiles and amphibians benefit from the fallen trees. The moisture retained within an old-growth forests benefits lichen and mosses, and the species that live among the mosses and lichens. Old-growth forests are one of the few land uses where topsoil is created instead of destroyed. More carbon and nitrogen are retained in an old-growth forest than in forests of other age classes. For improving water

quality and air quality there is nothing better than an old-growth forest.

The West Virginia Highlands Conservancy is a non-profit corporation which has been recognized as a tax exempt organization by the Internal Revenue Service. Its bylaws describe its purpose:

The purposes of the Conservancy shall be to promote, encourage, and work for the conservation—including both preservation and wise use—and appreciation of the natural resources of West Virginia and the Nation, and especially of the Highlands Region of West Virginia, for the cultural, social, educational, physical, health, spiritual, and economic benefit of present and future generations of West Virginians and Americans.

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*The Highlands Voice* is always printed on recycled paper. Our printer uses 100% post consumer recycled paper when available.

The West Virginia Highlands Conservancy web page is [www.wvhighlands.org](http://www.wvhighlands.org).

### Join Now !!!

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<b>Membership categories</b> (circle one)		Individual	Family	Org.
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Patron		\$250	\$500	\$500
Mountaineer		\$500	\$750	\$1000

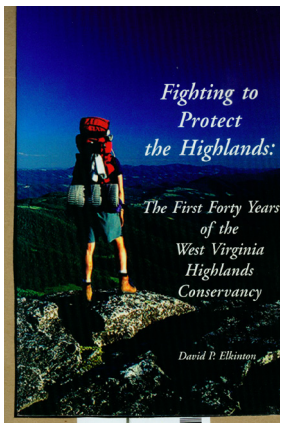
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You may also join on-line at [www.wvhighlands.org](http://www.wvhighlands.org)

### GET A GREAT HISTORY BOOK

For the first time, a comprehensive history of West Virginia's most influential activist environmental organization. Author Dave Elkinton, the Conservancy's third president, and a twenty-year board member, not only traces the major issues that have occupied the Conservancy's energy, but profiles more than twenty of its volunteer leaders.



From the cover by photographer Jonathan Jessup to the 48-page index, this book will appeal both to Conservancy members and friends and to anyone interested in the story of how West Virginia's mountains have been protected against the forces of over-development, mismanagement by government, and even greed.

518 pages, 6x9, color cover, published by Pocahontas Press

To order your copy for \$15.95, plus \$3.00 shipping, visit the Conservancy's website, [wvhighlands.org](http://wvhighlands.org), where payment is accepted by credit card and PayPal. Or write: WVHC, PO Box 306, Charleston, WV 25321. Proceeds support the Conservancy's ongoing environmental projects.

### Tell a Friend!

If you have a friend you would like to invite to join the West Virginia Highlands Conservancy just fill out this form and send it to West Virginia Highlands Conservancy, Box 306, Charleston, WV 25321.

Person you wish to refer: \_\_\_\_\_

Address: \_\_\_\_\_  
 \_\_\_\_\_

Email \_\_\_\_\_

Your name: \_\_\_\_\_

Filling out the form, etc. is, of course, the old school way of doing things. If you prefer, just email the information to Beth Little at [blittle@citynet.net](mailto:blittle@citynet.net).

The way it works: Anyone you refer gets *The Highlands Voice* for six months. At the end of the six months, they get a letter asking if they want to join. If they join, we're happy. If not, then maybe next time.

### SUCH A DEAL!

#### Book Premium With Membership

Although *Fighting to Protect the Highlands, the First 40 Years of the West Virginia Highlands Conservancy* normally sells for \$15.95 plus \$3.00 postage. We are offering it as a premium to new members. New members receive it free with membership.

Existing members may have one for \$10.00. Anyone who adds \$10 to the membership dues listed on the How to Join membership or on the renewal form will receive the history book. Just note on the membership form that you wish to take advantage of this offer.

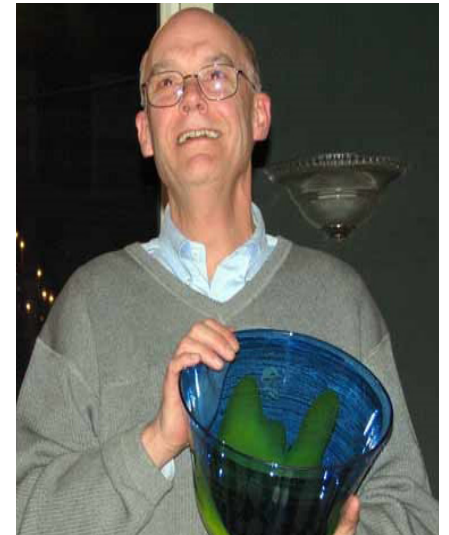
## Loss of a Friend and a Champion

The West Virginia Highlands Conservancy is grieved to note the death of our friend and board member, Don Garvin. He represented WV Trout Unlimited within our group and worked for many years on environmental concerns with the WV legislature.

Known more recently for his lobbying efforts with ECouncil, Don was active with the West Virginia Highlands Conservancy for nearly 40 years.

When a long time Board member/officer/friend passes it is our practice to crowd source a tribute. Different members offer their thoughts which the editor can then cobble together into something for *The Highlands Voice*.

We're not going to do that for Don. Angie Rosser of the West Virginia Rivers Coalition has done such a splendid job with her tribute to Don that we are going to make it our own. Well done, Angie, And to Don, Godspeed on a life well lived.



## Don Garvin, A Friend of Rivers, A Friend of Mine

By Angie Rosser, West Virginia Rivers Executive Director

West Virginia Rivers Coalition lost a leader March 29; and I lost a mentor and special friend. I met Don Garvin when I first started lobbying at the statehouse in the early 2000s; and then got to know him better when I served on the board of directors of WV Rivers. When I took on the executive director position, I spent my first day on the job with Don. He schooled me on the Clean Water Act.

From our first encounters, it was clear that Don was force. Whenever he was in a room, you

could usually count on a lively debate punctuated with laughter. He got everyone thinking; he challenged everyone to see the heart of the matter. On the WV Rivers board, however debate unfolded, there was a sense that, indeed, he was our heart and soul.

I thought about this when I saw him on his last day. He lay sleeping, unaware of me in his final moments on earth. But I was aware of all he had given to our movement, and to me. It felt like he deserved to rest, he had earned it. Hours later, he was gone, and everyone who knew him feels the loss of someone whose commitment to truth and justice never wavered.

Don's contributions spanned many years, through many circles, but at the center seemed to be his love for water, and people. He was a founding board member of WV Rivers. He also served decades on the board of WV Highlands Conservancy. Beginning in 2001 until his retirement in 2015, Don was the legislative coordinator and lead lobbyist for the West Virginia Environmental Council. He also served three years as a member of the WVEC lobby team and two terms as president. He was a long-time member of Trout Unlimited, having served as secretary and newsletter editor of the Mountaineer Chapter from 1983 until 1998, and as chapter president from 1998 to 2003.

In 1999, he was retained by Trout Unlimited to edit and write major portions of the national organization's "Advocacy Manual," which continues to be used as TU's primary guidebook on interacting with federal and state regulatory agencies.

As a river advocate, Don knew what we were up against. For 16 years, he was vice president and field manager of Braxton Oil and Gas Corp., in West Virginia. Don knew all sides. He knew rivers and he knew the struggle to keep them clean and safe.

He remained deeply convicted about WV Rivers sticking to our core mission. When things got overwhelming for me, he would bring me back to why we were formed. He would talk about the headwaters; he knew how fragile and important they are. He would say, and his life demonstrated, that the headwaters were worth devoting your life to protect. He did.

In the spirit of humor that marked our friendship, I acknowledge that Don could sometimes get under people's skin. To say it bluntly, Don sometimes annoyed friend and foe alike. He could be unforgiving in his tenacity. And yet, these same people wanted to be around him. Because you knew, his heart was true. And he was as quick to laughter and story-telling as he was to getting worked up about policies and the undeniable fact that the deck is usually stacked against us, against justice and fairness, against truth.

Don knew better than anyone that this work, the work we do, is difficult. Very difficult. It's not for the faint of heart. And by any measure, Don was not faint of heart. That beautiful character was sometimes too much for others — sometimes even me!

On my last visit with him, the last in which he was alert and himself, however frail, I was with Evan Hansen of Downstream Strategies. We had come from a meeting with DEP. We were discouraged. We had no idea how we were going to deal with the prospect of compromise. We said, "We need to see Don!" We told him what had been presented to handle streams impaired by coal mining; it wasn't a good idea. I was so weary, feeling like we always have to compromise, because the coal industry, with all its money, was always pulling the strings.

**(More on the next page)**



## More about Don Garvin (Continued from previous page)

Don said, “No. Sometimes you just have to say no. You just have to say it. Say no!”

“But what if we know we aren’t going to win,” I asked. And he just said, “You have to say no if you know it’s wrong. Period.” He was just really clear on it. It was exactly what I needed.

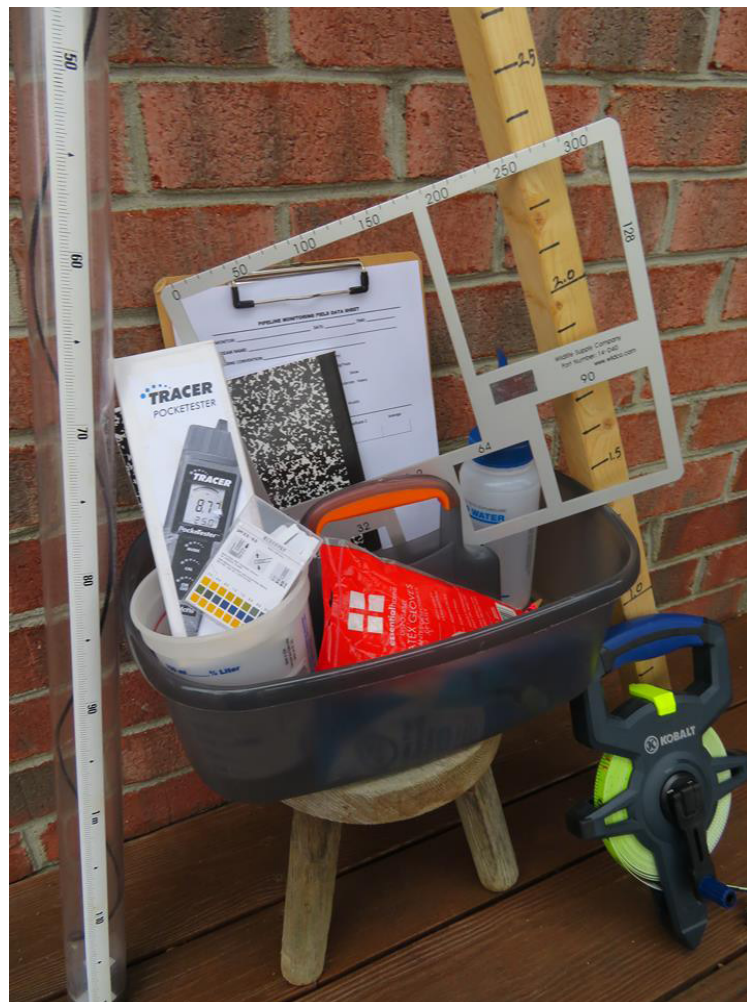
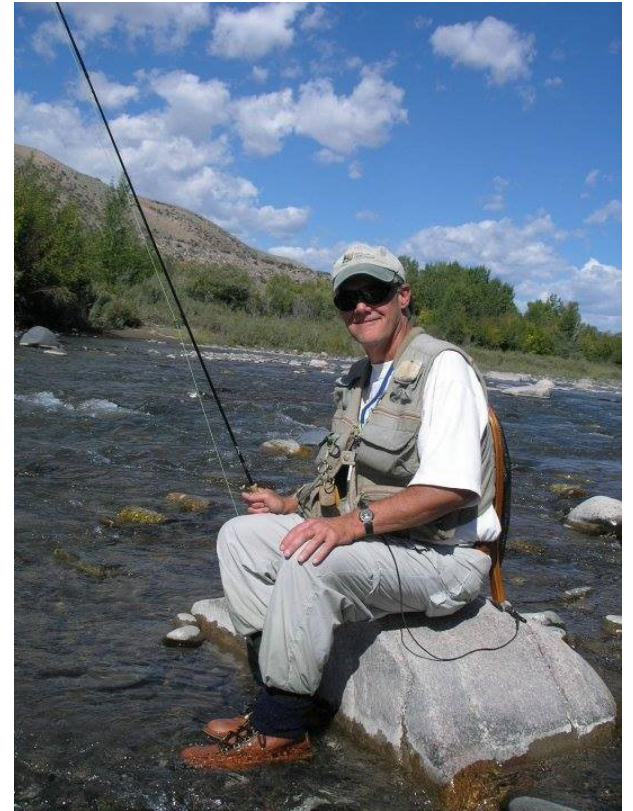
Don believed in WV Rivers. He poured a lot of his life into it. He really wanted to see it succeed. And was happy to see how we grew from an idea so many years ago, to what we are today. To Don the realist, it wasn’t about the idea that we would *win* every battle, but that we were *in* every battle. Every battle. Show up. Be bold. Speak truth to power.

Above all, Don was a dear friend. He was one of the few people on the planet I didn’t have to explain things to. I didn’t have to outline the minutia of an entire policy. He understood everything about it, and the politics all around it. Don knew right from wrong. And he always encouraged the fight for what was right. He wasn’t naive about the challenges. He just always knew what was the right thing to do.

Don was generous, too. He donated more than anyone to the WV Rivers’ Science Fund. After his retirement, there were battles we fought that Don funded almost single handedly.

A mutual friend reminded me of another thing that Don taught us, and taught me: People make mistakes. People are not perfect. They can let you down sometimes. People, though, are not judged by their mistakes, or their foibles. But by what they give, what they believe, what they share, what they fight for. How much they laugh. How much they are devoted to what they love.

West Virginia is a better place because of Don Garvin. Our rivers and streams stand a better chance because of him. And I’m so grateful to call him a friend. I’ll miss him.



**Our organization is pleased to support efforts to establish base data for the streams that are slated to be affected by a number of large gas pipeline projects. One expression of our support is through funding for training sessions and test kits so that stream surveys may be established. Recently several citizens in Cabell County sent special thanks for the purchase of the test kit that they now use. They are very grateful to be able to practice their citizen science system on the waterways in their neighborhood.**

The price of our energy

## Study Documents Consequences for Babies Born to Mothers Living Close to Fracking

The United States is in the midst of a fracking boom. Short for “hydraulic fracturing,” the technique for exploiting deep deposits of natural gas and oil was virtually unknown before 2000. Now it accounts for more than two-thirds of all oil and natural gas production in the U.S., upward of 6 million barrels of oil and 50 billion cubic feet of natural gas per day. For rural communities, where most of the fracking takes place, a potential source of pollution has arrived in their backyards.

The effects of fracking must be examined, says Princeton University economics and public affairs professor Janet Currie, because “most sources of pollution have been around for decades. [With fracking], you have these rural areas with no heavy industry that suddenly have heavy industry.” Currie, who is the director of Princeton’s Center for Health and Wellbeing and co-director of the Program on Families and Children at the National Bureau of Economic Research, has spearheaded a new study on the health effects introduced by fracking. Published in *Science Advances* in December, the paper by Currie and two colleagues sounds an alarm for those living close to the wells.

Environmentalists have long raised concerns over the toxic fracking fluid, which is injected deep into the ground to crack open gas and oil deposits. “If everything is functioning as it should, there shouldn’t be any way for it to leak into the groundwater,” says Currie. “Of course, things don’t always work as they should.” Less attention has been placed on the air pollution fracking might cause. In addition to the fumes from truck traffic, the volatile chemicals used in the process could potentially diffuse into the air to be inhaled by nearby residents, according to Currie.

To gauge the consequences of air and water pollution, Currie and colleagues from the University of Chicago and UCLA examined data on newborns across Pennsylvania, a state that has seen a particularly large fracking boom. The researchers obtained a dataset with more than 1.1 million births in the state between 2004 and 2013. With the help of Princeton University Library’s Global Information Systems team, they were able to code each birth to find its distance from the nearest fracking well.

They then compared birth weight and other factors — both for babies born near and far from fracking wells and also for babies born to the same mother before and after a nearby well came on line. Low birth weight can be both a cause and an indication of

a range of health problems, including asthma and cognitive and behavioral issues. Birth weight is “the best summary measure we have for large population health,” Currie says.

The researchers found a stark difference for mothers living within about a half mile of a well. Babies born to those mothers were 25 percent more at risk of having a low birth weight — from a 6.5 percent likelihood to an 8.1 percent chance. Additionally, they found babies were slightly more likely to exhibit other problems, such as premature birth and congenital abnormalities.

The researchers, however, also found that the effects diminished sharply as distance from fracking wells increased, with no effects found after 1.9 miles. That suggests that much of the pollution from fracking sites could be mitigated by situating them away from residential areas. “It’s not likely that we are going to shut down all fracking in the U.S.,” Currie says. “If you are going to protect people’s health, it’s better to know how close you can be before it becomes a problem.”

The study controlled for factors such as race and marital status, but not income, since birth certificates don’t include that information. If anything, says Currie, the study understates the effects of fracking, since income of families close to wells might increase due to higher wages from an improved economy or payments for mineral rights. In that case, the effects of pollution could be offset by benefits, including better housing, medical care, and less financial stress.

Until fracking chemicals and their effects are better understood, Currie recommends zoning that prohibits new wells within 2 miles of populated areas. In more remote areas, such as North Dakota, she advises building worker housing outside of a 2-mile radius. For those already living near fracking wells, however, there may be little recourse. Rather, states might consider setting up a fund to help them relocate, as has been done with other environmental hazards. “If you can separate out the polluting activities from where people are living,” you would have fewer health effects, Currie says. “Places that have high population density may want to make different decisions about whether they allow fracking at all.”

**This article originally appeared in the *Princeton Alumni Weekly*.**

### Leave a Legacy of Hope for the Future

Remember the Highlands Conservancy in your will. Plan now to provide a wild and wonderful future for your children and future generations. Bequests keep our organization strong and will allow your voice to continue to be heard. Your thoughtful planning now will allow us to continue our work to protect wilderness, wildlife, clean air and water and our way of life.

### Send Us a Post Card, Drop Us a Line, Stating Point Of View

Please email any poems, letters, commentaries, etc. to the VOICE editor at [johnmcferrin@aol.com](mailto:johnmcferrin@aol.com) or by real, honest to goodness, mentioned in the United States Constitution mail to WV Highlands Conservancy, PO Box 306, Charleston, WV 25321.

## Federal Budget Favorable to Public Lands

By Matt Kearns, West Virginians for Public Lands

The 2018 federal budget was more than a “day late,” but it was not a “dollar short” when it came to public lands funding. Overall, most land-management agencies and conservation programs saw an increase in appropriations. The National Park Service gets an additional \$175 million to chip away at their \$12 billion maintenance backlog. The Land and Water Conservation Fund (LWCF) received a 9% bump, up to \$425 million, but is still well short of the \$900 million needed to fully fund the program. With this modest increase, West Virginia should see additional access projects in the Gauley River National Recreation Area. And the Forest Service will soon have their long overdue “fire fix” to help shift the rising costs of firefighting away from their everyday operations budget.

Addressing the rising costs of firefighting, currently over 60% of the United States Forest Service budget, with a dedicated appropriation will reduce the need to borrow against non-fire accounts within the Forest Service, ultimately freeing up more money for recreation and other forest management programs. The “fire fix” did come with compromises, as some members of Congress insisted upon reforms as part of the deal. These include NEPA categorical exclusions and a streamlined review process for certain fire prevention activities, including firebreaks and hazardous fuel load management.

The FY18 budget is also a win for public lands in terms of what was *left out*. The omnibus agreement avoided controversial “riders” or amendments that would have weakened important conservation mechanisms like the Endangered Species Act or the Forest Service’s Roadless Area Conservation Rule. Senator Murkowski’s attempt to exempt Alaska’s national forests from the Roadless Rule would have set a bad precedent for other states to seek exemptions, ultimately threatening renowned backcountry like Seneca Creek, North Mountain, and Roaring Plains here in West Virginia. Our roadless areas remain protected, for now. Harmful riders can accompany nearly any bill and we must remain alert.

Because the 2018 budget was passed so late in the fiscal year, it will only be a few short months before Congress is back at negotiations for FY19. The Administration’s proposed budget suggests deep reductions to public lands and conservation. The Department of the Interior and the Park Service would see a 17% cut. The Land and Water Conservation Fund takes a 98% cut.

The decisions made in Washington matter to West Virginians. Our state’s outdoor economy and the quality of life for all Mountaineers is dependent upon access to public land. We thank Senators Manchin and Capito and Representatives Jenkins and McKinley for supporting increased public lands funding in the 2018 budget. We ask them for their continued support for robust funding for our land management agencies, conservation, and access programs in 2019.

## Compliance Surveillance Finds Pipeline Problems

The March, 2018, issue of The Highlands Voice described the Pipeline Compliance Surveillance Initiative (CSI), developed by the Allegheny-Blue Ridge Alliance and member organizations. The idea is to monitor the construction of the proposed Atlantic Coast Pipeline (ACP).

Now the Compliance Surveillance Initiative (CSI) has begun its work. On surveillance flights on March 5 and March 11 it observed and photographed what it believes to be a violation. Dominion proposes to drill through the Blue Ridge Mountains. The CSI has taken aerial photographs of apparent unauthorized construction work where Dominion Energy proposes to drill.

Dominion is operating under a Notice to Proceed issued by the Federal Energy Regulatory Commission (FERC). It authorized was tree cutting by non-mechanized means. It did not authorize earth disturbance and construction. Now it appears road construction and equipment staging area construction have been done, which was not described in the project descriptions in the permit applications to those agencies.

Dominion says that it was not doing earth disturbance and construction. Rather, it says, it was doing a geotechnical survey. This is difficult to square with previous interactions. Over a year ago pipeline opponents had objected to pipeline approval because inadequate geotechnical study of the proposed drilling. At that time, Dominion responded that geotechnical investigation had been “fully accomplished.”

Requests for investigation and clarification were submitted to Federal Energy Regulatory Commission and the Virginia Department of Environmental Quality.

### A little background

Dominion intends to drill 4,639 feet through the Blue Ridge under the George Washington National Forest, Appalachian National Scenic Trail, and Blue Ridge Parkway. Dominion’s plans call for use of horizontal directional drilling (HDD) and contingency use of direct pipe installation (DPI) if the HDD operation fails. Given the topographic and geophysical challenges at the site, the Forest Service initially conditioned any authorization for ACP construction on prior successful completion of the proposed HDD or DPI operations. This condition would have avoided a situation in which significant investment associated with premature ACP construction would be put at risk and in direct conflict with established legal protection of highly valued public resources. Should the HDD and DPI prove impracticable after ACP construction is underway, there will be a strong incentive for allowing an open-cut crossing of the Appalachian Trail and the Blue Ridge Parkway.

The Dominion Pipeline Monitoring Coalition published a report in early 2017 describing both the risk of failure and the unavoidable environmental damage associated with the plans for drilling through the Blue Ridge. This report described the risk factors confronting both the HDD and contingency DPI operations. Although detailed geophysical investigation of the drill path is standard practice for assessing the feasibility of prospective HDD and DPI operations, the information considered during environmental review was limited in both scope and reliability. No subsurface borings were completed at or near the HDD endpoints and geophysical survey data were obtained for less than 25% of the drill path. To see the report, go to <http://pipelineupdate.org/environmental-review/> and click on A High Risk Proposal.

## Virginia Board Confirms: Dominion's Atlantic Coast Pipeline Could Cost Virginians up to \$2.3 billion

Virginia's top economic watchdog has validated expert analysis showing that Dominion Energy's proposed Atlantic Coast Pipeline could cost Virginia ratepayers up to \$2.3 billion, refuting Dominion's faulty claims that the pipeline would save customers on their electric bills.

The Virginia State Corporation Commission issued its final order approving Dominion's 2017 Integrated Resource Plan, its long-term plan that included the utility's plan to build the Atlantic Coast Pipeline, a proposed pipeline that would run 600 miles between West Virginia to the North Carolina/South Carolina border.

In its order, the commission accepted—over Dominion's objection—analysis from Gregory M. Lander, a natural gas industry analyst. Lander's analysis relied on Dominion's data to find that building the pipeline would increase costs for Dominion ratepayers between \$1.61 billion and \$2.36 billion.

Dominion had contended, based on a more than three-year-old study, that building the pipeline would cut customers' energy bills by several hundred million dollars annually and create many jobs.

"It's now clear as a bell that the Atlantic Coast pipeline is not a good deal for Virginians. This is a speculative pipeline in search of a market, and that market is not Virginia," said Walton Shepherd, Virginia policy director for the Natural Resources Defense Council. "Not only is this pipeline unneeded, it would burden Virginia ratepayers and therefore the state's economy. Virginia ratepayers shouldn't have to pony up as much \$2.3 billion to underwrite Dominion's pipeline venture.

"That's not right. That's not fair. And we call on Gov. Northam to step in and protect Virginia's consumers and economy by conducting a full economic review of the merits of this project, through his Secretary of Commerce and Department of Mines, Minerals, and Energy."

Rather than contest Lander's cost analysis, Dominion had filed a motion at the doorstep of the August hearing asking that Lander's testimony be stricken from the record as irrelevant. But the corporation commission today rejected that request, leaving Lander's cost analysis uncontested by Dominion and part of the record in its final order.

Furthermore, the corporation commission ordered Dominion to address the impact of a bill the Virginia General Assembly just approved calling for Dominion to ramp up investment in clean energy and energy efficiency in its next Integrated Resource Plan due in May.

National Resources Defense Council and other groups, as well as a number of landowners, have raised other concerns about the controversial pipeline, showing that it would stifle investment in Virginia's clean energy economy, threaten water quality, and impose an especially steep financial burden on low-income Virginians who already struggle to meet their energy costs.

Even without the added potential costs from the Atlantic Coast project, Virginians already pay some of the highest energy costs in the nation, documented [here](#).

Lander's analysis is here: <http://www.scc.virginia.gov/docketsearch/DOCS/3gy601!.PDF>

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Jackie Burns jackie.burns@frontier.com. 304 866 4093

Bill McNeel, 1234 Jericho Road, Marlinton, WV 24954, (304) 799-4369, wpmcneel@gmail.com

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Adam Casseday, 212 Davis and Elkins St, Elkins, WV 26241, 304-636-4944, dr\_casseday@yahoo.com

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LeJay Graffious, P.O. Box 69, Bruceton Mills, WV 26525, lejay@oldhemlock.org

Rick Webb, 481 Ravens Run Road, Monterey, VA 24465, (540) 468-2881, rwebb@virginia.edu

Hugh Rogers, Moon Run, Kerens, WV 26276, (304)636-2662, hugh.rogers@gmail.com

### ORGANIZATIONAL DIRECTORS

WEST VIRGINIA CAVE CONSERVANCY: Randy Rumer; 295 Caraway Lane Renick, WV 24966; (304) 497-2657; rrumer@frontiernet.net

PITTSBURGH CLIMBERS: Buff Rodman, 32 Crystal Drive, Oakmont, PA 15139, (412) 828-8983, buffrodman@hotmail.com

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WEST VIRGINIA RIVERS COALITION: Taylor Sharp

FRIENDS OF THE LITTLE KANAWHA: Cindy Rank, 4401 Eden Road, Rock Cave, WV 26234, (304) 924-5802, clrank2@gmail.com

TEAM (Taylor Environmental Advocacy Membership): Beth Baldwin, 222 Westwood Ave Bridgeport, WV 26330; elbrn6e21@msn.com

ALLEGHENY HIGHLANDS ALLIANCE: Dr. Wayne C. Spiggle, 3987 Knobley Road, Keyser, WV 26762, 304-726-4868, wspiggle@mac.com

SHAVERS FORK COALITION: Jim Van Gundy, 210 Buffalo Street, Elkins, WV 26241, (304) 636-4736, jvvg01@gmail.com

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EXTRACTIVE INDUSTRIES COMMITTEE: Cindy Rank, 4401 Eden Road, Rock Cave, WV 26234, (304) 924-5802, clrank2@gmail.com

PUBLIC LANDS MANAGEMENT COMMITTEE: Marilyn Shoenfeld, 167 Balsam Way, Davis, WV 26260, (304) 866-3484, marilyn.shoenfeld@gmail.com

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LEGISLATIVE COMMITTEE: Frank Young, 33 Carnian Ford Road, Ripley, WV 25271, (304) 372-3945, fyoung@mountain.net

ENDOWMENT FUND COMMITTEE: Larry Thomas, P.O. Box 194, Circleville, WV 26804, (304) 567-2602, larryvthomas@aol.com

RIVERS COMMITTEE: Vacant

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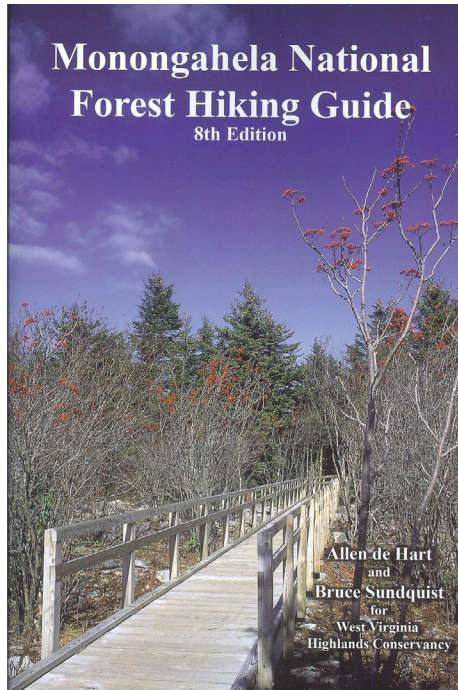
### MISCELLANEOUS OFFICES

WEB PAGE – DIGITAL PUBLISHING: Dan Radmacher, (540) 798-6683, dan.radmacher@writingleft.com

### ADMINISTRATIVE OFFICES

MEMBERSHIP SECRETARY: Beth Little, 214 Black Gum Lane, Hillsboro, WV 24946, (304) 653-4277, bliittle@citynet.net

HIGHLANDS VOICE EDITOR: John McFerrin, 202 Van Tassel Court, Morgantown, WV 26508, (304) 291-8305, johnmcferrin@aol.com



## The Monongahela National Forest Hiking Guide

By Allen de Hart and Bruce Sundquist

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### VOICE AVAILABLE ELECTRONICALLY

The Highlands Voice is now available for electronic delivery. You may, of course, continue to receive the paper copy. Unless you request otherwise, you will continue to receive it in paper form. If, however, you would prefer to receive it electronically instead of the paper copy please contact Beth Little at [blittle@citynet.net](mailto:blittle@citynet.net). With electronic delivery, you will receive a link to a pdf of the Voice several days before the paper copy would have arrived. The electronic Voice is in color rather than in black and white as the paper version is.

### BUMPER STICKERS

To get free *I ♥ Mountains* bumper sticker(s), send a SASE to Julian Martin, 1525 Hampton Road, Charleston, WV 25314. Slip a dollar donation (or more) in with the SASE and get 2 bumper stickers. Businesses or organizations wishing to provide bumper stickers to their customers/members may have them free. (Of course if they can afford a donation that will be gratefully accepted.)

Also available are the new green-on-white oval *Friends of the Mountains* stickers. Let Julian know which (or both) you want.



### Tri-State Water Defense Holds a Citizens Summit

Various groups and individuals in the West Virginia, Ohio, and Kentucky tri-state area have been meeting lately to share concerns and information regarding natural gas activity--- not only of drilling, pipelines, and compressor stations, but also of proposals for an "Appalachian Storage Hub" with its attendant plastics productions. The West Virginia Highlands Conservancy cosponsored a Tri-State Water Defense Citizens Summit at the Drinko Library of Marshall University on March 6; attendees included the university's president, Jerome A. Gilbert. Primary presenters were members of the Ohio Valley Environmental Coalition and Marshall's Native American Student Organization. In addition to power points and fact sheets, the session included three powerful films. One of those featured visible parallels to a possible storage hub in our state and the already notorious petrochemical "Cancer Alley" in Louisiana.

The gatherine was cohosted by Marshall Native American Student Organization, Four-Pole Creek Watershed Association, Tri-State Indivisible, OVEC, WV Highlands Conservancy, and Huntington Citizens Climate Lobby .

# Curbing our Appetite for Plastics

By Jackie Burns

## Earth Day theme and campaign

The 48<sup>th</sup> annual earth day is fast approaching. The theme this year is “ending plastic pollution.” Why are these seemingly stable polymers a problem? And what can we do about them?

Plastics are used to make many things: beverage bottles, clothing, porch decks, carpeting, electronics, etc. Plastics are used because they are long lasting. With additives they can be rigid or flexible, depending on the need. In hospitals they keep things sterile. In fast food places they make things convenient. They make some electronics lighter in weight. They make some decks more weather resistant.

Plastic is wonderful for many uses because it is durable. But in the waste stream, plastic is horrible because it is durable. Think about this. We have been making plastic for 100+ years, and nearly all of the plastic we have ever made still exists as plastic. If we go on like this for another 100 years will we smother the planet?

Carelessly discarded plastics wash down rivers. They may be filtered out in wetlands. But much makes its way into our oceans. United Nations Oceans Chief Lisa Svensson told the BBC (British Broadcasting Corporation) “we are ruining the ecosystem of the ocean.” The ocean is where we have most studied the effects of plastic pollution.

## How much plastic waste is out there?

Studies have estimated that as of 2015, 6.3 billion tons of plastic waste has been generated. Only 9% of that has been recycled and 12% has been incinerated, leaving 79% to fill our landfills or get washed into the oceans. Plastics in the oceans come from every continent and many nations. The trick to keeping it out of the ocean seems to be managing the waste stream. Asian countries seem to contribute the most plastic to the ocean, but the US is in the top 20 contributors, and contributes more per capita than other countries.

An estimated 10 million tons of plastic waste per year wash into the oceans. This trash is not evenly distributed across the ocean; it is moved about by ocean currents. These currents tend to spiral around the oceans forming gyres. There are five main gyres worldwide: the North Pacific Gyre, the South Pacific Gyre, the North Atlantic Gyre, the South Atlantic Gyre, and the Indian Ocean Gyre. Plastic trash concentrations occur at the center of each of these. The one that has been studied the most is the North Pacific Gyre. The trash collection there is called the Great Pacific Garbage Patch. Here is a bit of what we have learned.

Exposed to sunlight (UV rays) and salt water, plastic molecules stay stable, but the plastic becomes brittle and breaks into smaller and smaller pieces, eventually becoming micro-plastics (less than 5mm). These pieces, micro and macro, typically have rough edges. Contaminants in the water attach to these rough places. When these small pieces of plastic are eaten, in the digestive tracts sea animals, the contaminants may be absorbed into the tissues of the animal, and may bio-accumulate as they move through the food web. We humans eat some of the top predators of the sea, like tuna and salmon. So these contaminants may be accumulating in us.

## Impacts to animals

Structurally, plastics pose two problems for wildlife in and out of the ocean. It may be mistaken for food, or an animal may become entangled and trapped in it.

When plastic is eaten, it doesn't break down, so by itself it isn't poisonous. But we have observed instances where plastics lodged in digestive systems create blockages that keep animals from feeding and absorbing nutrients, causing them to starve. In the ocean, whales, seals, dolphins and birds have all been found dead with stomachs full of plastic. Plastic waste kills up to 1 million sea birds, 100,000 sea mammals, marine turtles and countless fish each year.

Ever see a raccoon, or some other animal with its head stuck in a plastic jar? The reach in for a tender food morsel and get stuck. It might be comical for a moment, but it can also be deadly if they can't get out of it. They might asphyxiate, overheat or starve.

## Micro-plastics

Tiny little pieces of plastic, less than 5mm in size, are known as micro plastics.

We were adding micro-plastics to our waterways when plastic micro-beads were added to personal care products as micro-abrasives. This was stopped by law in the US in 2015. Natural micro-abrasives, such as salt or sugar are still permitted and pose no threat.

## Plastic in Our Water

In our world, plastic has become pervasive. It is everywhere; even in our bottled water. Researchers from the State University of New York at Fredonia tested bottled water. They gathered 259 bottles from 27 lots and 11 brands in 19 locations in 9 different countries. They found an average of 10 plastic particles per liter, each thicker than a human hair.

## Impacts to human and animal health

Plastic molecules may be stable, but studies have revealed problems with additives.

BPA (bisphenol A) is added to plastics to make it harder, more stiff. Studies now show BPA leaches into food. In 2003-2004 the Centers for Disease Control (CDC) found traces of BPA in the urine of 93% of people over the age of 6. The Mayo Clinic has found that BPA may be harmful to the brain and may cause increased blood pressure.

Phthalates increase flexibility in plastics. It may be in plastic film used in packaging, children's toys, blood storage containers, etc. Research with animals suggests this may adversely affect our reproductive system. Also there may be a link between phthalates and obesity in children.

## Innovative Solutions:

### Plastic Money?

Plastic Bank, a for-profit company, was started in 2015 in Haiti by David Katz, CEO to help control plastic waste. His company's collection centers accept plastic waste as currency in return for goods and services. Collectors may receive cash, or credit to an on-line account. The company then sells the plastic to manufacturers

## More about Plastics (Continued from previous page)

as a raw material. This idea is spreading quickly. In 2016 it started in the Phillipines. They are now working on expanding into Brazil, Indonesia, Ethiopia, the horn of Africa and India.

### Sweeping the Sea

A group called the Ocean Clean-up is working on a way to take plastics out of the ocean, specifically starting with the Great Pacific Garbage Patch. They are working to start this removal this year (mid-2018). They hope to clean-up ½ of the Great Pacific Garbage patch in five years. More information can be found on their website: [theoceancleanup.com](http://theoceancleanup.com)

### What can you do?

So, what can we do about all that plastic? Earth Day Network breaks it down to the five R's: Reduce, Refuse, Re-use, Recycle and Remove. What does that mean? You'll see as we go through these that there is some overlap. When we refuse a straw at a restaurant we reduce the amount of plastics we use.

We can **reduce** our use of plastics, especially of single use plastics. Think - Do I need it? Can I use something else? A re-usable water bottle filled with good spring water, or filtered water perhaps? A re-usable bag taken to the grocery store or farmer's market? How about waxed paper or waxed bag instead of plastic to carry your lunch sandwich.

Free items of disposable plastic often come with the things we buy. Consider **refusing** them. For take out food, use utensils you have at home or bring with you instead of plastic. Also, is all that plastic packaging necessary? When shopping, choose items with less plastic wrapping. Let manufacturers know you want less plastic packaging. Also, choose clothing made with natural fibers instead of nylon and polyester.

In a restaurant you can ask for your drink with no straw. Restaurants may be certified Ocean Friendly by agreeing to only give straws on request, and giving non-plastic (paper) straws when requested. Certification is given by Plastic Ocean Project. See their website for details.

**Re-using** items helps us reduce our use of plastics. I keep a bag of reusable bags in my car. When I shop, I grab as many as I need. When I empty them at home, they go by the door to go with me the next time I go to the car. I travel with a re-usable water bottle and a traveling tea mug. We may also re-use by donating old clothes, dishes, toys, furniture, electronics, etc. Also, food containers from restaurants can often be re-used.

Do you know your local **recycling** rules? They vary from one community to the next. Must things be sorted, or do they do that? Are items with food debris OK? What plastics do they take, or not? What do they do with what they collect?

Please also consider closing the loop by buying recycled products. Recycled paper and clothing are readily available. If you don't see them in local stores, ask for them, and look on-line.

Finally, when we find trash lying around, we may **remove** it. Pick it up and dispose of it properly so that it doesn't wash downstream causing problems as it goes. Many organizations sponsor Adopt-a-highway clean-ups in the spring. Find one and participate. Clean up in front of your home or business. Or carry a bag on your next hike and pick up any litter that you see.

You may also support organizations, like The Ocean Clean-up, that are working to clean up the ocean's garbage patches.

As you see there is a lot that each of us can do to reduce plastic pollution. I hope that you'll choose to make a difference today. Happy Earth Day.

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# HIGHLANDS CONSERVANCY BOUTIQUE



- ▶ The baby shirts are certified organic cotton and are offered in one infant and several toddler sizes and an infant onesie. Slogan is "I ♥ Mountains Save One for Me!" Onesie [18 mo.]---\$25, Infant tee [18 mo.]---\$20, Toddler tee, 2T,3T,4T, 5/6---\$20
- ▶ Soft pima cotton adult polo shirts are a handsome earthtone light brown and feature the spruce tree logo. Sizes S-XL [Shirts run large for stated size.] \$ 25.00, 2XL \$26.50

To order by mail [WV residents add 6 % sales tax] make check payable to West Virginia Highlands Conservancy and send to West Virginia Highlands Conservancy, Online Store, PO Box 306, Charleston, WV 25321-0306

**The same items are also available at our on-line store: [www.wvhighlands.org](http://www.wvhighlands.org)**

## T- SHIRTS

White, heavy cotton T-shirts with the **I ♥ Mountains** slogan on the front. The lettering is blue and the heart is red. "West Virginia Highlands Conservancy" in smaller blue letters is included below the slogan. Short sleeve in sizes: S, M, L, XL, and XXL. Long sleeve in sizes S, M, L, and XL. **Short sleeve** model is \$18 by mail; **long sleeve** is \$22. West Virginia residents add 6% sales tax. Send sizes wanted and check payable to West Virginia Highlands Conservancy ATTEN: Online Store, WVHC, P.O. Box 306, Charleston, WV 25321-0306.



## HATS FOR SALE

We have West Virginia Highlands Conservancy baseball style caps for sale as well as I ♥ Mountains caps.

The WVHC cap is beige with green woven into the twill and the pre-curved visor is light green. The front of the cap has West Virginia Highlands Conservancy logo and the words West Virginia Highlands Conservancy on the front and I (heart) Mountains on the back. It is soft twill, unstructured, low profile, sewn eyelets, cloth strap with tri-glide buckle closure.

The I ♥ Mountains The colors are stone, black and red.. The front of the cap has ♥ MOUNTAINS. The heart is red. The red and black hats are soft twill, unstructured, low profile, sewn eyelets, cloth strap with tri-glide buckle closure. The stone has a stiff front crown with a velcro strap on the back. All hats have West Virginia Highlands Conservancy printed on the back. Cost is \$20 by mail. West Virginia residents add 6% tax. Make check payable to West Virginia Highlands Conservancy and send to West Virginia Highlands Conservancy, Atten: Online Store, P.O. Box 306, Charleston, WV 25321-0306