Memo From the Chair

By Linda C. Muller

“Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts. ... There is something infinitely healing in the repeated refrains of nature — the assurance that dawn comes after night, and spring after winter.”

—Rachel Carson, Silent Spring

There is something very comforting in the repeating rhythms of our natural world: the ebb and flow of tides, migrations of birds, the changing of seasons. It can have a profound grounding effect especially in times of chaotic change or upset. Those who claim that taking a walk in the woods “clears their head and soothes their soul” can now site scientific studies that support their intuitive claim. ([http://www.americanscientist.org/issues/pub/a-walk-in-the-woods](http://www.americanscientist.org/issues/pub/a-walk-in-the-woods)).

Preserving and protecting our wild and natural resources, enjoying clean, clean water, and encouraging clean renewable energy is more important now than ever. We recognize that President-elect Trump has signaled he wants to “roll back” or completely eliminate environmental protections. But we also understand there is overwhelming support across the political spectrum to protect and preserve our public and national parks, to have clean air, clean water, and use clean renewal energy. While most of the focus is at a national level, it is our local and state environmental regulations that have the greatest immediate impact to our communities, and it is at this level that citizens can have the most influence.

2017 Virginia General Assembly & Conservation Lobby Day
January 23, 2017 No Fracking Way Rally! Richmond

The Virginia General Assembly session will convene January 11, 2017. We all ready know that a carry-over bill from 2016 (HB1389) would exclude from mandatory disclosure, any
fracking chemical "trade secrets" submitted to Department of Mines Mineral & Energy (DMME)-and be exempt from Virginia Freedom of Information Requests. For more on HB1389 see https://www.richmondsunlight.com/bill/2017/hb1389/.

This "keep the public in the dark" anti-transparency bill can significantly impact a localities right to know which toxic chemicals may end up in local water resources due to drilling or fracking activities. The Taylorville Basin which includes Caroline, King George, & Westmoreland Counties, is targeted for future fracking. The Taylorsville Basin rests within the Chesapeake Bay Watershed and the coastal plain Potomac Aquifer, which serves over half the population of Virginia.

Fracking requires millions of gallons of water and the fracking fluid mixture can include solvents and other toxic chemicals. Not only is water quality at risk, but there is also the question of water quantity and impacts to fresh water supplies. In 2014, the Virginia Department of Environmental Quality's annual "Water Quality Report" raised the issue of heavy demand of fresh water supplies in the Coastal Plain region:

“Groundwater levels along the fall line have, in some locations, fallen below the elevation of the top of the confined aquifers. (The fall line is described as the boundary between the Piedmont and Coastal Plain physiographic provinces. It loosely mirrors Interstate 95 in the Commonwealth.) Groundwater levels in portions of southeastern Virginia continue to fall below critical surface elevations in several locations, current local demands for groundwater to support desired growth in established Groundwater Management Areas can no longer be sustained by the coastal plain aquifer system at total permitted amounts.”(pgs58&59) [http://www.deq.virginia.gov/Portals/0/DEQ/LawsAndRegulations/GeneralAssemblyReports/AWRP_090814FINAL.pdf]

Protecting water resources is one of many environmental issues raised by the prospects of fracking. It is a heavy industrial activity that will disrupt the local and rural nature of the counties, increase noise levels, impact local property values, require long term monitoring of abandoned wells, require disposal of toxic fracking fluid (injection, retention ponds, and land application). More info see [http://nofrackingfracking.com](http://nofrackingfracking.com)

We’re Bringing it to Richmond - Sign Up, Show Up!


Keep track of the latest Bills in the General Assembly, search by topic, sponsor: [https://www.richmondsunlight.com](https://www.richmondsunlight.com) or sign up with the free "Lobbyist in a Box" thru the Virginia Legislative Information System: [https://lis.virginia.gov/h015.htm](https://lis.virginia.gov/h015.htm)

Flex your "civic muscle" by calling and contacting your Virginia elected officials and let them know you want to protect Virginia water resources, preserve our unique wild places, keep toxins out of our food, air, and water. Find your elected official by address [http://whosmy.virginiageneralassembly.gov](http://whosmy.virginiageneralassembly.gov)

Now is the time to stand up, be active, be heard. WE cannot wait.

Yours in Exploring, Enjoying and Protecting the Planet

Linda C. Muller,
Chair, Rappahannock Group Sierra Club

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**Rappahannock Group of the Sierra Club (RGSC) Conservation Chair December 2016 Update**

**By Bill Johnson**

**RGSC Tabling at local events:**

RGSC participated in the 7th Annual Community Partnership Fair on November 17th. This tabling event allowed RGSC to reach out to students, teachers, and counselors from Stafford County Public Schools. This allowed RGSC to share Sierra Club information, upcoming events, projects that they could support, and how to get involved. It was very successful.

We will host our annual winter Open House on December 4th, 2016, with Ms. Desiree De Haven, a former intern with RGSC, who recently returned from working in Gabon, Africa, where she spent a year working in conservation with Organisation Écotouristique du Lac Oguemoué (OELO). Before sharing some of the insight she gained from her experiences in ecotourism and environmental education, she will give a brief overview of Gabon’s culture, political system, and economy.
**Student Interns:**

RGSC has been working with four University of Mary Washington (UMW) Ecology Club members and one the Germanna Community College Green Club member on local issues in the RGSC. The interns have been actively supporting our efforts to thwart fracking in the Taylorsville Basin. The interns had 4 Letters to the Editor published on fracking and pipelines. They planned and coordinated the October 19th Pipelines presentation from Kirk Bowers. The circulated and had over 100 signatures on an anti-fracking and anti-pipeline petition, tabled an event at UMW, attended RGSC ExCom meetings, acting as Group Secretary, and performed research and developed position papers on fracking issues, including methods used for transporting fracked gas, eminent domain for seizing private lands within the Commonwealth, flaring, and normally occurring radioactive materials (NORM).

**Fracking:**

We attended a League of Women Voters (LWV) information session on October 27th in Richmond. Linda Burchfiel and DMME Director Skiffington addressed the LWV members and the general public in an hour-long session on fracking regulations and the impact of fracking. As a result of that meeting, the LWV requested that we attend another session, on November 12th, where they would address some outstanding questions they have on fracking, then go into closed session and vote on their position for or against fracking. We received a list of 12 questions that they would address, time permitting, at the next session. We coordinated a response to the questions, and provided it to their members a few days before the session. Unfortunately, that meeting was cancelled because of the Richmond marathon that same day. It has not been rescheduled.

We have had 4 interns submit Letters to the Editor on fracking and pipelines, and they have all been printed. Our interns are also doing some research on 4 topics. Here are their preliminary findings:

Chris Meoli: I am researching radioactivity issues that are associated with fracking and pipelines. Natural gas pockets also contain Naturally Occurring Radioactive Materials (NORMs) such as Uranium, Thorium, Radium, and Lead. During the drilling process, these materials are mobilized and become a health issue. As these materials move towards the surface, they become a part of the industry waste. Subsequent spills or negligent behavior during clean up can cause widespread contamination of these radioactive materials into the environment and local water supply. Even worse, these materials persist in the environment and it is unlikely that proper clean up measures will be taken. Due to the recent boom in natural gas

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production and the utilization of new intensive drilling techniques, regulators have been overwhelmed and struggle with the volume of cases and budget cuts that limit their number of inspectors. Additionally, specific regulations for storage of by-products of the industry vary from state to state, making it tricky to develop clear guidelines to protect safety. The major issue with this is that radioactive gas waste does not fall under any clear or extensive national regulatory processes, so states attempt to use regulation that does not effectively check industry and protect public health. We are formulating a position paper on this subject for review throughout the Chapter.

Our interns, along with a Sierra Club member who teaches Chemistry at Germanna Community College, are also looking into FracFocus database, to point out how inadequate and error-prone it is, hoping to use that research to persuade DMME not to rely on it for monitoring purposes.

Armchair Activism

by Paula Chow

For those folks who like the idea of activism but say it’s not for them, they’re in plenty of company. It’s a lot of hard work being an activist and activists could use a lot of support from like-minded folks who support an issue. If you’re reading this article, you are probably concerned about climate change and the change in our political climate.

We’ve all signed petitions, made calls to legislators, written checks or used our credit card to make donations and some of us have even written letters to the editor. But wait, there’s more.

Vote with your dollars. Easy armchair activism is putting your money where your mouth is. We all spend money until we die. Unfortunately, there are countless corporations whose practices and policies work against the environment and sustainability. The best message you can send them is not buying their products and services and to divest. You can search online for a list of these offenders. A good start for reading is: https://www.google.cl/amp/s/progressivenetwork.wordpress.com/2013/03/23/companies-owned-by-koch-brothers-and-the-products-they-sell/amp

Also look under projectcensored.org; reuters.com; care2.com; polluterwatch.com; and publiceye.org.

Opportunities abound with the arrival of the holidays. People shop, socialize, party, and attend festive holiday events. So no, this is not from an armchair, but these are activities in which one might ordinarily engage throughout a week during the holiday season.
Relatives, friends, co-workers and fellow parishioners are the people you’ll probably see. What if you shared your concerns about your issue with these folks in a conversation? Good, you already do that; then take it one step further. Make a plan to do something. That something can be letter writing that is specifically targeted, educating more folks in your outer circle about the issue, writing an article or figuring out how to help in ways that fit in with your schedule.

Are your children or grandchildren old enough to understand the environmental issues facing our country that will affect their future? You have a ready audience.

Giving a gift membership to an environmental organization that supports your issue educates the receiver of the gift. It’s good to include something about your cause. Even a school teacher could appreciate receiving a gift membership (no more cookies - too many calories). Memberships often include monthly, bi-monthly, or quarterly magazines or newsletters, packed with updated information. Ever give random gifts? An environmental organization gift membership to those who provide services to you reaches out to a different demographic.

Even though you like your armchair, you might enjoy entertaining. Consider hosting a fund raising cocktail or dinner party for your cause. You can donate the extra baked goods you will make during the holidays for a raffle or silent auction at an environmental event.

Lastly, be an environmental role model. Think up ways that you can participate; that’s what the armchair is for. Then get active. Note that RGSC continues to need volunteers for its campaigns. Contact Paula Chow - paulachow132@gmail.com.

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**Dominion’s gas pipeline poses threat to the Blue Ridge Mountains**

*by Chase Mullins, Stafford*


Climbing a mountain is an achievement, yet it is not a facile task. Reaching the summit requires endurance and patience. Pristine, unparalleled beauty awaits you at the top. Mesmerized, you stare bewildered at how beautiful the world is from this height and how distant all your worries are.

The Blue Ridge mountains not only offer a home to thousands of species, they serve as a tranquil getaway to nature-lovers, adventure-seekers and trailblazers. People escape to the mysterious rolling hills of Virginia to find themselves or seek inspiration.
Unfortunately, these beautiful mountains and the memories made on them have a foreseeable and unacceptable end.

Dominion Power has also climbed the mountain. In place of mountaintops and farmland, the power company sees bulldozers ripping trees from the ground to clear land for the Atlantic Coast Pipeline.

Dominion sees eminent domain and reduced property values where you saw quaint country homes and families enjoying their private property.

Dominion sees contamination and erosion in place of the charming and healthy streams you saw.

Dominion tarnished the pristine summit with a sign that says “Blast Zone,” a warning that, if a leak occurs, anyone within the general vicinity is in range of a devastating explosion.

Natural gas pipelines have seemingly endless negative impacts and few positives. Eroding mountains, contaminated waterways, homeless creatures and forced evictions are Virginia's grim future if we allow unnecessary pipeline construction to continue.

Virginians must climb this mountain faster than Dominion or we could lose everything. It will take tremendous amounts of endurance and patience, but we can do it. We must work together to protect our land, property and water for future generations.

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**A pipeline runs through it**

by Courtney Fano, Fredericksburg


Depicted in the 1992 film, “A River Runs Through It,” the great outdoors can provide a sanctuary for people where they can find peace and recreation within its confines. What the 1920’s Brad Pitt didn’t know was that almost one hundred years later, on land similar to Montana’s, the integrity of the forest would be sacrificed for the sake of the industrial monstrosity, the Atlantic Coast Pipeline.

The ACP, set to begin construction in 2017, would carry hydraulically fractured gas 550 miles across three state lines, West Virginia, Virginia and North Carolina. Its 42 inch girth would require a football field sized clearcut of trees through protected national forest and leave a permanent scar on the Blue Ridge Parkway and the Appalachian Trail.

So, how are we to reconcile these two opposing views on the utility of our wilderness? The answer is we can’t. There is no
perfect universe where pipelines and unspoiled nature coexist. Maybe this is a daunting choice in light of global climate change and exorbitant fossil fuel consumption, but will it be so in the coming years when it is no longer a voluntary choice?

It is our duty to entrust future generations with the necessity of protecting our land and bearing witness to its value. Generations before our own have accepted this onerous burden, which is why we can all empathize with a movie based in 1920’s America. I don’t wish to see the day when that universal understanding of nature is merely confined to a movie screen.

Help stop the Atlantic Coast Pipeline by writing in to Virginia governor, Terry McAullife, stating your opposition to the destruction of our wilderness.

UMW student concerned about fracking

by Christian Meoli, Fredericksburg

When I chose to go to the University of Mary Washington, I chose to be a part of the Fredericksburg community and to care about the well-being of my neighbors.

I am deeply concerned with fracking for natural gas or oil in the Taylorsville Basin, the threat of water contamination, air pollution and the possibility of a pipeline. I am saddened that families have to worry that a decision to frack in their county could put their family, water and property at risk.

At least 10 percent of chemicals used in fracking are known to be toxic to humans and these could end up in your water. That’s not all, the industry is allowed to keep secret a proprietary blend of chemicals, making the true impact risky and unknown. No matter which methods a petroleum drilling company uses, the polluted water created as a by-product will always pose a risk to the health and safety of residents.

Natural gas companies will always weigh their profits higher than our safety. And even if construction is flawless, sites still run the risk of leaks, explosions, and contamination. Would you risk it?

Virginia has vast natural beauty and it would be devastating if it disappeared or was no longer safe to enjoy. I think about what
would happen if I could no longer head down to the Rappahannock River and float in the water and bask in the summer air. It is horrifying to me that all of it could be ruined. We do not have to sacrifice clean air, water and land for the sake of energy; there are renewable sources that can be used. We need to do so. I may not have been born in this area, but I still consider it home and want to keep it safe and beautiful.