April, May and June 2018



MEWSILETTNER

Serving the Residents of Culpeper, Orange, Spotsylvania, Stafford, Fredericksburg, Caroline, King George



MEMO FROM THE CHAIR, LINDA C. MULLER

"We are like tenant farmers chopping down the fence around our house for fuel when we should be using nature's inexhaustible sources of energy - sun, wind and tide."

"I'd put my money on the sun and solar energy. What a source of power! I hope we don't have to wait until oil and coal run out before we tackle that." Thomas Edison (1931)

Nearing the end of his life, Edison shared his profound insights into the future of power generation with auto industry giants Henry Ford and Harvey Firestone. Edison was keen on the development of energy from wind and solar. Nearly eighty years later, major technological breakthroughs have made large scale solar and wind energy possible. Costs and storage have always been a major impediment to going "full" solar & wind, but now those barriers are breaking down. From a Wall Street Journal article "**Global Investment in Wind and Solar Energy Is Outshining Fossil Fuels"** (6/11/18), "Renewable costs have fallen so far in the past few years that "wind and solar now represent the lowest-cost option for generating electricity," said Francis O'Sullivan, research director of the Massachusetts Institute of Technology's Energy Initiative."

Global investment in wind and solar was \$297 billion compared to fossil fuel and nuclear energy investment \$143 billion.

article here (paywall): http://www.wsj.com/articles/ global-investment-in-wind-and-solar-energy -is-outshining-fossil-fuels-1528718400

PROPOSED SOLAR FARMS IN THE RGSC REGION

Virginia has ramped up it solar power activity and several projects are proposed in the Rappahannock Group SC region. Pleinmont Solar, LLC has proposed 500 Mega Watts (MW) solar farm on 3,500 acres in Western Spotsylvania (Pleinmont I and II). Touting it as the largest corporate solar agreement in the United States, Microsoft has agreed to purchase 315 (MW) from the Pleinmont solar site. Pleinmont Solar, LLC must complete a formal permitting and public hearing process, which include addressing environmental impacts at the state and county level. In Culpeper a proposed 1,900 acre utility-scale solar farm in Culpeper is currently under review. The Culpeper Planning Commission has defered any action on the solar farm until August 8, 2018 subject to a conditional use permit. In King George County, two solar farms have been approved totaling around 40 MW of electricity.

Each solar project is unique in its acreage, components and impacts to the local communities. Some of the issues raised by citizens include loss of farmable acreage, view shed, infrastructure impacts, demand on water resources, chemical components in solar panels, clean-up/decommissioning costs. These issues are addressed during the permitting and the public hearing process. On the positive side of the equation, solar farms provide counties with tax benefits, provide job opportunities, provide significant carbon off-sets, does not require the treatment and disposal of millions of gallons of hazardous waste water, does not release methane, toxic gases or particulate matter into the air, does not require the disposal and treatment of fly ash or radioactive waste, and are not known to contribute to earthquakes. For future considerations, there will be a need to develop robust solar panel recycling systems to recover re-usable materials and reduce landfill waste. The Solar Energy Industries Association is developing photovoltaic (PV) cell recycling processes that

MEMO FROM THE CHAIR, LINDA C. MULLER CONT.

that will reduce PV waste.

Virginia is finally stepping up on solar and bringing many benefits to the RGSC region.

Yours in Exploring, Enjoying, and Protecting the Planet,

Linda C. Muller

Chair

Resources

Pleinmont Solar, LLC (Spotsylvania solar farm)

State Corporation Commision CASE SUMMARY FOR CASE NUMBER : PUR-2017-00162

http://www.scc.virginia.gov/docketsearch#caseDocs/

Microsoft Announces Purchase of 315 megawatts

http://news.microsoft.com/2018/03/21/

microsoft-adds-315-megawatts-of-new-solar-power-in-virginia

-in-largest-corporate-solar-agreement-in-the-united-states/

"Culpeper planners defer action on solar farm application" Free Lance Star

http://www.fredericksburg.com/news/local/culpeper/_ culpeper-planners-defer-action-on-solar-farm-application/

article_9fc037ff-2b48-5749-80b9-1f6529215ef7.html

"With massive expansion under way, Virginia becoming a leader in solar energy field"

http://pilotonline.com/news/local/environment/

article_79220bb0-3377-11e8-83ce-174096a33eb2.html

Solar Energy Industries Association's Recycling Program <u>http://www.seia.org/initiatives/pv-recycling</u>

Fossil-Free Fredericksburg (facebook page)

https://www.facebook.com/groups/120555028767669/

TIPS COLUMN, PAULA CHOW

The discussion for this summer column falls in line with the theme RGSC has been promoting – "Reduce, Reuse, Repurpose." Grand scale action can be accomplished by individuals spreading the word about a specific action. In this case, RGSC would like to draw attention to individuals assessing their individual daily actions specifically on reducing and reusing. Reducing means finding alternative ways (of which there are many) to be a consumer in today's world. The products available to help you accomplish this are not new, perhaps only new in its look but not function. For example, reusable fabric bags that serve as sandwich bags, metal straws, silicone bowl covers instead of flimsy plastic wrap, and other types of containers in place of zipper locked plastic bags. The notion that each vote counts rings true with each plastic bag counts, especially since plastic is a petroleum/natural gas product. Commitment to making a change is difficult, but not as difficult as watching the destruction of our environment. Do read the related article in this newsletter "Update on the Recycling Market."

VOLUNTEERS NEEDED

Earth Day – RGSC is one of the several organizations (or individuals) volunteering with the City of Fredericksburg Dept. of Parks & Recreation to plan the annual Earth Day on the Rappahannock every April. The planning meetings are chaired by Linda Bailey who coordinates the ever growing Earth Day event. Meetings are held once a month on a Friday at 9:00am beginning in October through April at Eileen's Cafe and Bakery on Caroline Street in Fredericksburg. Volunteers need not commit to major amounts of time, rather, whatever capacity a volunteer can serve will be helpful. If you are interested in helping out for even a few hours, contact Paula Chow at <u>paulachow132@gmail.com</u> and enter "Earth Day" on the subject line.

Fracking - Anyone interested in helping to educate residents of Caroline County about FRACKING, contact Paula Chow -<u>paulachow132@gmail.com</u>.

Fracking:

- Three of our University of Mary Washington (UMW) student-interns, in conjunction with a UMW Geology Professor (Dr. Whipkey), developed a paper on the Taylorsville Basin geology. There are over 86,000 acres under lease for fracking there, and we want to have a science-based analysis completed before any drilling occurs. We should be getting a copy soon.
- We have been included in the Virginia Conservation Network (VCN) effort to draft their fracking briefing book, although we have not seen a first draft yet.
- We have been discussing and editing a Choose Clean Water Coalition petition to keep fracking chemicals from being exempted from the Freedom of Information Act (FOIA). We hope to stop the 2019 Virginia legislature from again trying to pass legislation that would exempt those toxic chemicals from FOIA release, as they have tried to do in each of the past 3 legislative sessions. Ben Weiner has developed an Action Alert that should go out in early June about this. (Thanks Ben!)

Earth Day Events at Fredericksburg and Fort A.P. Hill

- Our focus at both events was "Reduce, Reuse, and Repurpose", to try and help people understand that waste is a problem we have to deal with. We had a spinning wheel with questions for kids to answer, and posters and handouts for people who wanted more information.
- We awarded our 9th annual "Living Green Award", at the Fredericksburg Earth Day, to the Agora Coffee Shop. They focus on environmentally-friendly business practices, including organic coffees, recycling coffee grounds, and minimizing all types of waste, including plastics and Styrofoam.
- Linda Bailey, Nature Education Coordinator, was our second Living Green Award recipient. She coordinated the Earth Day festival and was one of the original creators with RGSC to establish a festival that draws over 5,000 people.
- Three awards were given to University of Mary Washington (UMW) students who submitted artwork to our Earth Day Art Contest.

RGSC Open Houses & Tabling Events

- On June 19th, 2018, at our next Open House, one of our UMW interns will discuss her environmentally-oriented UMW trip to the Galapagos Islands.
- On September 16th, 2018, our Open House will feature *Union of Concerned Scientists* scientist, Marcia DeLonge talking about the intersection of the environment and agriculture, from industrialized to family farms.
- We have been working with a UMW Professor, Eric Bonds, on trying to get the City of Fredericksburg to join the Ready for 100% campaign. He has been talking to several other activist groups to make this happen (Indivisible and We are for America). We will be co-sponsor a film event, "Reinventing Power", on June 13th, 2018, at the Salem Library in Fredericksburg.
- We participated in the May 5th, 2018 Stafford County Yard Sale of May 5th. Good turnout and lots of participation by children. Our focus was on Virginia song birds.
- On June 12th, 2018 we will table at a D.A.R.E. event and in August we will table at National Night Out in Stafford.
- We are tentatively scheduling two outings (dates TBD) a visit to a local recycling center (possibly the landfill in Stafford) and a lake clean-up in Stafford.

RGSC Members

- We have voted on new RGSC ExCom members. At our next ExCom meeting, we will elect Group Chairs.
- We are continuing to grow, up to over 575 members in our Group.

EMAIL NEWS GROUP SIGN UP

rappsierragroup@gmail.com

OTHER LINKS

Virginia Conservation Network

Virginia League of Conservation Voters

www.valcv.org

Southern Environmental Law

Center

www.southernenvironment.org

Friends of the Rappahannock www.riverfriends.org

Tree Fredericksburg www.treefredericksburg.org

Earth Day Events at Fredericksburg and Fort A.P. Hill

RGSC's theme at both April events was "Reduce, Reuse, Re-purpose", to try and help people understand that waste is a problem with which we have to face as the recycling market is problematic. We wanted to stress that recycling is the last option after we earnestly reduce and reuse and repurpose. The popular spinning wheel with questions for kids to answer always draws interest. Posters displayed information from littered areas of the world to alternatives to using plastic products (silicone covers, metal drinking straws, reusable cups).

We awarded our 8th annual "Living Green Award", at the Fredericksburg Earth Day festival to the Agora Downtown Coffee Shop at 520 Caroline St., Fredericksburg. Their environmentally-friendly business practice is the focus, using organic coffees, recycling coffee grounds, and minimizing all types of waste, including plastics and polystyrene.

Linda Bailey, Nature Education Coordinator with Fredericksburg's Dept. of Parks & Recreation and Coordinator of the Earth Day festival, was also a recipient of this year's Living Green Award. The quality and popularity of the Earth Day festival can be attributed to her dedication and enthusiasm. Unfortunately for us, Linda, with her husband Carry, will be moving to Southern Oregon where they once lived.

To read details of these Living Green Award recipients and the past recipients, click on RGSC's website "Living Green Award." Anyone can nominate a business or organization and we hope to expand the list of recipients to all of our membership catchment area.

Our Earth Day Art Contest awards were given to University of Mary Washington students who submitted artwork.

RGSC Open Houses & Tabling Events

<u>Tuesday, June 12th, D.A.R.E., Pratt Park, Falmouth, 9:30 – 12:30:</u> RGSC participates at this annual 5th grade D.A.R.E. graduation celebration for the Stafford Schools. Our table is very kid friendly and one of our volunteers, Ruth Carlone, has an interactive bird display, including identifying local bird calls.

<u>Wednesday, June 13th Film Screening "Reinventing Power: America's Renewable Energy Boom", Salem Church Library, Room B.</u> <u>Spotsylvania 7pm:</u> Sierra Club's renewable energy campaign starts with learning about how the people across the country make this achievable.<u>Free</u>.

<u>Tuesday, June 19th Speaker Presentation Open House, Central Library, Fredericksburg, 7 – 9pm:</u> Madison Reid, intern from UMW and Eco Club liaison, will discuss her environmentally-oriented trip to the Galapagos Islands. Free.

<u>Sunday, July 22nd Carbon Conference, Central Library, Fredericksburg 1:30 – 5pm:</u> Climate change and local actions with speaker and demonstrations. RGSC will demonstrate fracking and its impact. Sponsored by We Are For America, Fossil Free Fredericksburg, League of Women Voters of the Fredericksburg Area, RGSC. Free. For more info contact dr.p-j@pineojensen.org

<u>Tuesday. August 7th National Night Out. Various locations. 5 – 8:30pm:</u> RGSC has participated annually at the Stafford event at the Route 17 Target parking lot. RGSC is hoping to expand to other locations such as the Spotsylvania Towne Centre, Fredericksburg Hazel Hill, etc. We would like to educate more folks about the Sierra Club. Volunteers are needed to help us expand this effort.

<u>Sunday, September 16th Speaker Presentation Open House, Central Library, Fredericksburg, 2 – 4pm</u>: Union of Concerned Scientists scientist, Marcia DeLonge, will speak about the intersection of the environment and agriculture, from industrial farms to family farms. Door prizes, light refreshments. Free.

Sunday, December 2nd, <u>Speaker Presentation Open House</u>, <u>Central Library</u>, <u>Fredericksburg</u>, <u>2 – 4pm</u>; Put this on your calendar. Speaker to be announced. Door prizes, light refreshments. Free.

RGSC MEMBERSHIP, MICHAEL JOHNSON

Our membership is continuing to grow with up to over 570 members in our Group. We encourage members to volunteer – it could be an hour or two at an event or helping in a way that is meaningful to you. Have no fear that you would be committed permanently – we appreciate whatever hours you are able to give. The impact RGSC makes locally is dependent upon volunteers. All Executive Committee members are volunteers and they would like your support for the causes we mutually care about.

RGSC MAILING ADDRESS

RGSC

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UPDATE ON THE RECYCLE MARKET, PAULA CHOW

The market for recycling recyclable items continues to be volatile and the local handlers are feeling the effects. Diane Jones of the R-Board reports that the fluctuations and problems in the recycling market is something that she has not seen in the over 20 years of her work in the industry. At this time, there is a very low to nonexistent market for paper recycling. Many of the loads of single stream recycling are determined to be contaminated as it comes in, so there is a charge for the contamination but, more significant to the issue, the contaminated load ends up going to the landfill. (Contamination means that the load of supposed recyclables contains a significant amount of nonrecyclable materials which includes plastic that is not included on the recyclable list.)

This is a cautionary tale for the avid recycler. Many people reason that if it's plastic of some sort, it must be recyclable, after all, there is a sorting of the single stream at the plant, right? No! No! No! Each waste management company has a specific list of what is and is not recyclable. All the customers have been handed the list and if this is lost or not at hand, one can download the list from their specific waste management company. This step of following the rules makes all the difference whether loads become contaminated or not. Tell your neighbors and friends, too. At a recent meeting, this issue of educating the public about correctly recycling is the biggest hurdle. All of your concern and dedication to recycle is undone when your neighbors incorrectly recycle.

RGSC EXECUTIVE COMMITTEE (EXCOM)

Chair: Linda C. Muller, <u>lcmuller@mindspring.com</u> Vice Chair, Bill Johnson, <u>billatthelake@comcast.net</u> Program Chair: Paula Chow, <u>paulachow132@gmail.com</u> Treasurer: Diana Johnson, <u>dianaatthelake@comcast.net</u> Membership & ExCom Member: Michael Johnson, <u>johnson2000m@aol.com</u> Webmaster & ExCom Member: Doug Ferguson, Conservation Chair: Bill Johnson, <u>billatthelake@comcast.net</u> Newsletter Editor: Bill Johnson, <u>billatthelake@comcast.net</u>

Hospitality Chair & ExCom Member: Jody Lochmiller, jody_lochmiller@hotmail.com

Outings Leaders:Suzanne and Richard Eggeling, <u>lizzigo@gmail.com</u>

Interns: Maddie Reid

OUTING LEADERS INTRODUCTION, RICHARD & SUZANNE EGGELING

At our January meeting Richard and Suzanne Eggeling jointly volunteered to be our 'Outing Leaders'.

Their motivation is driven by a longtime interest and participation in outdoor activities and hobbies. Prior to working and eventually retiring in Fredericksburg (Suzanne, Special Ed. Teacher; Richard, Product Management) the Eggelings raised their two daughters in Roanoke, where for twenty five years they enjoyed hiking sections of the nearby Appalachian Trail, canoeing on the James and New rivers, bicycling on the Blue Ridge Parkway, and competitive and recreational sailing on Smith Mountain Lake.

Now, as we all witness the dismantling of protections to open spaces, rivers and even aquifers, Richard and Suzanne, like so many of us, realize that future generations may not take for granted all that mother nature has provided in the past. It is clear, preservation of the environment demands that as many of us as possible engage in the process; we must be proactive, we must be positive, and we must be balanced.

It is with this mindset (consistent with Sierra Club philosophy) that Richard and Suzanne would like to expose 'Outing' participants to the pleasure of hiking local trails (where appreciation promotes interest) and, equally relevant, touring regional power generation and waste management facilities (where education and understanding promotes commitment). A 'post-outing discussion' (pod) will be held after each event at the nearest 'down home' coffee shop, microbrewery or vineyard, to get immediate feedback from participants, solicit ideas for future outings, and promote participation.

To date, overseas travel to Thailand and Indonesia, followed by Suzanne's hip surgery, have unfortunately interfered with the Outings schedule. Current plans are to arrange two or three outings between mid-June and July-end, these will be advertized in the appropriate format and space. Richard and Suzanne have simple objectives for every outing: exercise, enlighten, and engage!

Our first outing is scheduled for Saturday, June 30th, 4:00pm meet at Old Mill Park, near main picnic shelter at end of gravel parking area, (look for Sierra Club banner) then walk the Canal Path Heritage Trail (1.8 miles). For those willing to do so, garbage bags will be provided for loose trash picked up (especially plastic bags!) during our walk. Please note trash pickup is not mandatory. Following the walk we will retire to the Red Dragon Brewery for our 'post-outing discussion' (pod), and libation.

For those able to participate in a weekday outing, on July 13th we have arranged a one hour, supervised tour of the Waste Management Systems facility at the King George Landfill. Meet-up time for the tour is 12 noon, with the location of POD (yes, 'post-outing discussion') to be confirmed.

DAHLGREN RAIL TRAIL JOINS THE POTOMAC HERITAGE TRAIL, JIM LYNCH

The Potomac Heritage National Scenic Trail now has new routes through Stafford, King George and Fredericksburg. Part of this route is the longest off-road trail in the area, the Dahlgren Railroad Heritage Trail in King George. This trail, the DRHT (affectionately pronounced "dirt"), is the abandoned section of the railroad built to service the Navy base at Dahlgren in 1942. The eastern 15 plus miles was abandoned and is now in private hands.

The trail was cleared by a volunteer group that is now organized as the Friends of DRHT. The group maintains the trail, hosts events, and raises funds for the continued improvement of the trail. Current projects include spreading crushed rock along the trail to cover the old railroad ballast. And as trail maintainers know, there is always regular maintenance of limb trimming, clearing fallen trees, and bush-hogging or weed-whacking tall grasses along the trails.

Our goal has always been to become part of the Caledon State Park. The King George Board of Supervisors has unanimously passed a resolution to that effect. The effort now is to convince the state legislature of that. (hint to the readers: call or write your own state legislators!).

The trail is open to the public, but because it is a private trail for now, the owner asks that users obtain a free permit. See the web site for more information about the trail and how to get a permit, <u>friendsdrht.org</u>.