



# The Piedmont View

A MEMBERSHIP NEWSLETTER OF THE PIEDMONT ENVIRONMENTAL COUNCIL

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## IN THIS ISSUE

PAGE 2 Water, It's Complicated



PAGE 3 Greenway Effort



PAGE 4 \$1 Million in Solar Installed



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Thank you for helping to protect the Piedmont!



## Free Flow: Restoring Rivers & Connecting Habitat

By Claire Catlett

Rivers naturally flow from the mountains to the sea. Dams and other barriers like culverts can disrupt natural stream flow, disconnect fish and wildlife habitat and impair water quality. Removing unnatural barriers and disruptions is particularly important for conserving our waterways.

"I have seen hundreds of miles of streams disconnected by these barriers throughout the Rappahannock River watershed. The big picture, ecologically speaking, is to reconnect as many miles of stream as we can, so that fish can spawn and swim upstream to find new habitat," says Celia Vuocolo, our wildlife habitat specialist.

Celia's work on a PEC survey conducted in 2014 of aquatic passage and barriers has directed recent efforts to restore rivers

and streams throughout Virginia's Piedmont. This survey, directed by our former habitat manager, James Barnes, identified over 133 sites where barriers exist on public and private roads and driveways.

PEC has taken on the work of restoring local rivers by removing culverts and low-water crossings that can be roadblocks to stream health. By replacing these barriers on roads and driveways with fish-friendly designs, we are improving habitat and water quality.

Many aquatic species, including Virginia's state fish, the Eastern brook trout, benefit from these restoration projects. Ideally, we hope these projects will influence government agencies to incorporate fish-friendly designs as they update roads and stream crossings.

"Most of these culverts were put in during the early



The removal of culverts at Sprucepine Branch in Rappahannock. Photo by Claire Catlett

1900s," says Peter Hujik, our Orange and Madison County field representative and project lead on the stream restoration efforts in Madison. "Many are beginning to fail and will need to be replaced within the next five or ten years, so our initiative is timely."

While everyone loves seeing native trout thriving in our headwater streams, the

downstream effects on water quality are impressive, too. At Robinson River, 350 linear feet of stream were restored to its natural channel, stabilizing banks from erosion, and ultimately removing sediment from going downstream to the Chesapeake Bay. In all, 5.3 miles of aquatic habitat were restored.

Continued on page 5

## Eight Reasons

By Gem Bingol

As their name implies, "zombie projects" have a way of coming back every few years. Proponents of these projects keep spending money. They gin up public relations campaigns and eventually convince policy-makers that the project deserves another look. In the transportation world, these zombie projects

usually share an unfortunate set of characteristics: they benefit few, siphon off limited transportation funding from real solutions, and worse yet, they often lead to increased congestion by contributing to sprawl.

The proposed Potomac River crossing between Loudoun County, Virginia and Montgomery

County, Maryland is one such zombie project. During the summer of 2017, the Loudoun County Board of Supervisors brought the project back into focus by voting unanimously to add the project into the Countywide Transportation Plan.

The bridge, a long sought-after component of the Outer Beltway, is a bad idea. Here are just some of the reasons:

### 1. Limited dollars means we can't build everything. We have to pick.

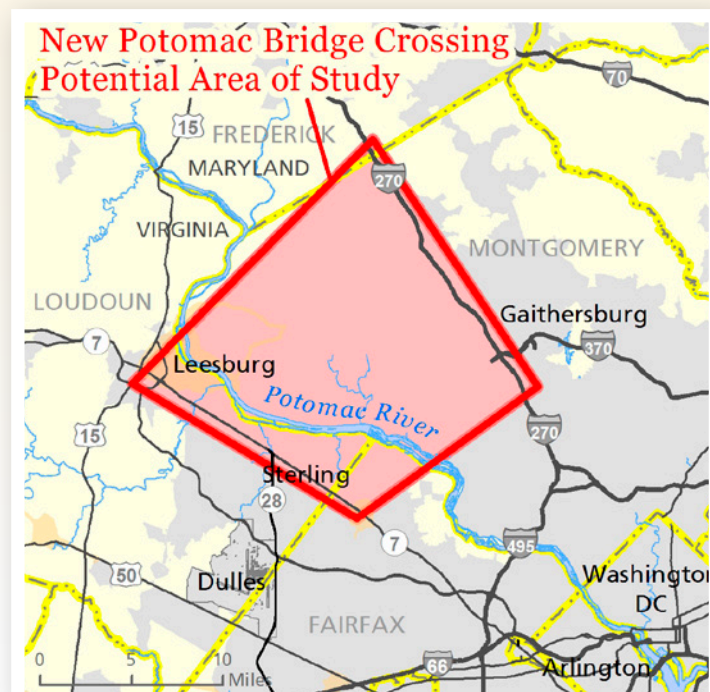
There are limited transportation funds and an endless stream of traffic problems that need to be addressed. To best serve the region's residents and employers, projects should be scored and prioritized based on congestion relief, mobility improvement and community impacts.

- In Loudoun, here are several options for projects that would

help commuters by increasing access to transit:

- Improve the Waxpool Rd/Loudoun County Pkwy intersection
- Extend Prentice Dr from Lockridge across to Greenway transit
- Extend Shellhorn Rd
- Provide transit connections to the Metro stations
- Construct Moorefield Blvd
- Construct Greenway loop
- Loudoun Metrorail Station Pedestrian improvements
- Complete planned park and ride lots for commuters
- There are also road improvement projects that would do more to relieve commuter congestion. For example:
  - Complete Riverside Pkwy
  - Construct VA 606 ramp
  - Complete Russell Branch Pkwy

Continued on page 4



Potential area of study for a Potomac Bridge crossing.



# The Insufficient Process for The Atlantic Coast Pipeline

By Dan Holmes

New natural gas pipelines in Virginia would cross steep mountains, national forests, streams and rivers, fertile farm fields, unstable karst geology and public water supplies. They have the potential to severely impact communities and natural and historic resources, while increasing greenhouse gas emissions in the Commonwealth.

Virginia Department of Environmental Quality (VDEQ) closed the comment period for the 401 certification process for the Atlantic Coast Pipeline on August 22. According to the agency, this certification would assure protection of our waters, meaning Virginia would meet Water Quality Standards (WQS) under the Clean Water Act.

VDEQ's preliminary decision is to recommend issuance of a Section 401 Certification to the State Water Control Board (decision maker for the permit) for final decision in November. Numerous organizations and individuals submitted comments to the agency. But

VDEQ isn't likely to consider anything outside of a very narrow scope they have designed. To put it bluntly, the process is not a good one. Below are just a couple of reasons why we believe it is flawed, potentially allowing for violation of WQS:

- The timeline associated with the process fails to provide adequate public review and appears to be designed to meet Dominion's timeline instead of ensuring WQS are met.
- Artificial segmentation of stream crossings and Erosion and Sedimentation (E&S) issues avoids a cumulative impact review. E&S issues will be decided by the agency staff. All stream crossings will be in the hands of the Army Corps of Engineers, not the state.

We are most concerned by the artificial segmentation of E&S issues and the agency's abdication



This map shows the route of the proposed Atlantic Coast Pipeline within Virginia.

of responsibility for stream crossings. In our opinion, there is no way to ensure the plan provided by Dominion will meet Water Quality Standards without a comprehensive approach to the 401 permit. This is not a precedent we wish to set, especially when considering how the agency will evaluate future proposals.

## Water ... It's a Little More Complicated

By Paula Combs

Important questions to ask about local water supply are: how much do we have, how much can we use, and will we have enough to support future growth?

This year, PEC conducted a build-out analysis of the current zoning and land use plans for the service districts in Fauquier County, and water supply is an important aspect to understand. The bottom line is the County doesn't have unlimited funds to drill wells and build infrastructure. Although there may be plenty of raw water, much of the water resources are needed to serve ecological purposes, and there should always be reserve in case of drought. It is dangerous to assume all rainfall is available for human use.

"Our build-out analysis showed that none of the service districts have excess capacity and some need nearly three times the current capacity to meet the needs that are allowed through by-right zoning," Julie explains. "With development picking back up and several areas facing drinking water challenges, now is the time to start thinking about this."

Going forward, planning for water resource infrastructure should be more strategic and less reactive. We all need to better understand the water and sewer resources that the current zoning and future plans would require, and then plan accordingly.

This past summer, we participated in a Water Information Session to discuss the drinking water challenges facing Fauquier County, and Julie presented PEC's



build-out analysis. The event was organized by the Conservation Roundtable, and other guests included the Marshall District Water and Sanitation Authority and the U.S. Geological Survey.

If you would like to review the build-out study presentation, visit [pecva.org/fauquier](http://pecva.org/fauquier). For questions, contact Julie Bolthouse at [jbolthouse@pecva.org](mailto:jbolthouse@pecva.org)

**Our Fauquier County field representative, Julie Bolthouse, gives a water presentation to show how water reacts over different geographic areas, and talks about pollution and water supply.** Photo by Paula Combs

## Chimney Dedicated in Rappahannock

By Paula Combs

The Shenandoah National Park is a wonderful resource for the public, and it's important to remember and honor those who lost their homes when it was created. This is exactly what the Blue Ridge Heritage Project has set out to do.

PEC's historic preservation manager, Kristie Kendall, is on the board of the Heritage Project and the committee that helped dedicate a chimney memorial, located in Rappahannock County, to the former residents of the Blue Ridge Mountains.

"As someone with deep ties to the mountains, it is incredibly moving to see these memorials, with hundreds of family names, erected around Shenandoah National Park. It is our hope that these people, and their sacrifices, will never be forgotten," says Kristie.

Bill Henry established the Heritage Project in 2013, and the organization plans to erect the chimney memorials in Albemarle, Augusta, Greene, Madison, Page, Rappahannock, Rockingham and Warren Counties.

A dedication occurred this past May, and it was the third memorial put in place. There are five more chimneys currently underway. The site in Rappahannock County was made possible with the help of multiple families. The stone of the chimney was donated by Kristie's in-laws, John and Jyl Pomeroy, from their farm on Old Hollow Road in Sperryville, Va. Bill Fletcher donated \$12,000 toward the project, while Russell Jenkins donated land and construction services.

"During the dedication ceremony, it was very emotional for me to look out into the crowd and see folks smiling, crying and nodding their heads in agreement as we talked about the importance of this memorial. Some folks have told me they now have a sense of closure on the matter. For others, there may never be that sense of closure—but at least now there is something very visible to help tell the story of what happened," says Missy Sutton, head of the Rappahannock Committee for the Blue Ridge Heritage Project.



PEC's historic preservation manager, Kristie Kendall, is on the board of the Blue Ridge Heritage Project and the committee that helped dedicate this chimney memorial in Rappahannock County. She is part of three generations in this photograph, with her son and father, both Thomas Kendall, to remember their family members that once lived in the Blue Ridge Mountains before the Shenandoah Park was created.



# Making The Connection

By Paula Combs

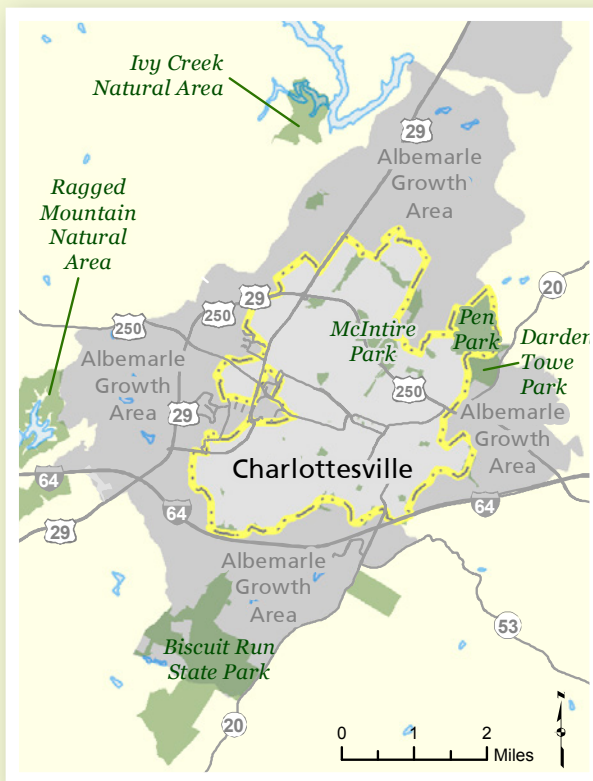
**B**ike and pedestrian connectivity is a great way to enhance quality of life and create healthy, thriving urban communities. This is why PEC is teaming up with the Thomas Jefferson Planning District Commission to build support for a comprehensive greenway system in the Charlottesville and Albemarle urban area.

"These locations have an opportunity to create a world-class bike and pedestrian system that connects neighborhoods, retail areas and places of work with iconic resources such as Monticello, the Downtown Mall, UVA Grounds, the Rivanna River and Biscuit Run State Park," says Rex Linville, our Albemarle County field representative.

There are many benefits that come from creating greenways, including improved health and wellness, expanded transportation options and greater economic development opportunities.

As the TJPDC is currently engaged in a re-write of their regional bike and pedestrian plan, this effort is designed to directly tie into their work and significantly expand the outreach component of their effort.

"The focus is on the City of Charlottesville and the Albemarle County urban area that directly surround the City," says Rex. "We will



**We received funding to build support for a comprehensive greenway system in Charlottesville and the Albemarle urban area. The above map shows the specific location for the greenway effort.**

be engaging those communities to build a shared vision for greenways among business and civic leaders, the public sector and nonprofit organizations."

The collaborative project is being funded with a two-year grant from the Charlottesville Area Community Foundation that has allowed us to hire Peter Krebs as the community outreach coordinator for the effort.

"I'm excited to work with PEC, TJPDC and CACF on a topic I'm very passionate about — connecting people and communities with opportunities to live better, healthier and more prosperous lives," says Peter.

Within the first year, we will primarily focus on outreach, collecting community feedback and coalition building. Then, the focus will shift more to implementation and funding.

As younger generations look toward urban areas as a preferred place to live, it is even more vital that communities invest in the amenities and infrastructure that connect people with the places they live, work, play and shop.

"Charlottesville is increasingly seen as an incubator for innovation. As the businesses leading this charge look to attract and retain new talent, we need to

offer amenities that help the region stand out from the crowd. Ensuring that the urban core is connected with bike and pedestrian greenway corridors is a great place to start," says Rex.

We will be hosting a kickoff event this fall in the Charlottesville area featuring a smart growth/walkability expert. Stay tuned for more details at [pecva.org/cville-way](http://pecva.org/cville-way)

## What is a Greenway?



Photo by Marco Sanchez

Sometimes there is confusion on what a greenway is, and it will often be called a "trail." Here is a more descriptive explanation of a greenway:

1. A linear open space established along either a natural corridor, such as a riverfront, stream valley, or ridgeline, or overland along a railroad right-of-way converted to recreational use, a canal, a scenic road or other route.
2. Any natural or landscaped course for pedestrian or bicycle passage.
3. An open-space connector linking parks, nature reserves, cultural features, or historic sites with each other and with populated areas.
4. Locally, certain strip or linear parks designated as a parkway or greenbelt.

Credit: Greenways for America. 1990, Charles E. Little

## A Buzz Worthy Home • Creating a habitat for native bees

By Celia Vuocolo

**Y**ou don't have to be a genuine bee keeper to help our native bees. You can create a place for them to thrive right in your backyard garden.

First, assess your location. Is your project area in full sun, partial sun or is it fully shaded? Soil drainage also matters, whether it's average, dry or wet soil. Once you know this, pick the plants that would thrive in that specific environment.

Choosing native plants is best for native bees, as they have adapted to each other over time. You can visit the Virginia Plant Atlas at [vaplantatlas.org](http://vaplantatlas.org) to see a selection of native species or review PEC's "Go Native Go Local" guide at [pecva.org/gonative](http://pecva.org/gonative) to find retailers selling natives.

It's nice to pick a suite of plants that will bloom through the entire growing period, which is early April through late October, locally. Also, make sure the plants you purchase are not treated with pesticides.

If you have selected the right plant for the right place, native plants generally do not need fertilizer or compost. You should plan to water the plants on a regular basis until they are established, and weed around them until they fill out and shade out weeds (usually this takes about one to two growing seasons). Leave dead stems standing

through the winter and only clean out the garden in the early spring in preparation for new growth. Do not rake or remove dead vegetation unless absolutely necessary — insects will use the leaf compost to overwinter in, which is healthy for the ecosystem, and therefore our native bees.

### Selecting your plants:

- Pollinators are highly visual, and choosing a large mass of color will help them spot your garden.
- Perennials will make up the majority of your plant list, but you should have 1–2 native grass or sedge species and at least one type of spring-flowering shrub or small tree, if possible.
- If you are short on space, pick a few species that attract a wide variety of pollinators such as goldenrod, mountain mint, asters, Monarda and joe-pye weed, to name a few.
- Also include species that are uncommon in the landscape but are desirable to specialist bees or bumble bees. Some examples are golden alexander, bottle gentian and Lance-leaved loosestrife.
- Selecting the appropriate shrub or small

tree species depends greatly on the amount of space that you have. Some shrubs to consider for smaller areas are Virginia sweetspire or New Jersey Tea. If you have space for a small tree, redbud is a good choice.

### Making a "hotel" for bees:

Bees and other insects vary on the types of nesting structures they prefer, so there's no 'one way' to build an "insect hotel." If you google the term, you will find a variety of different types of structures. You can pack compartments with natural materials like tree bark, straw, leaves, sticks, etc. The key is to use natural substrate — nothing that has paint, wood stain or has otherwise been treated by chemicals.

Most solitary bees nest in the ground, so you may not attract a wide diversity of them to your insect hotel, but leaf cutter bees (*Megachile*) and mason bees (*Osmia*) will be interested. These bees lay eggs in tube-like structures. In the wild, they use dead standing reeds/stems or tree branches. To mimic this, you can bundle bamboo reeds or drill holes into your structure. They are a bit particular about the size of the holes, so make sure you are putting in structures that are the right size for them to use:



The pollinator garden at PEC's 45 Horner Street office in Warrenton.  
Photo by Paula Combs

- For leafcutter bees, holes should be 1/4" wide and 2 1/2"–4" deep.
- For mason bees, holes that are 6" deep, 5/16" wide.
- Try to space holes at least 3/4" apart, and never drill entirely through the wood.

Your insect hotel will need maintenance from time to time. Natural materials degrade and will need to be replaced, and any nesting tubes/tunnels that are used will need to be cleaned out, otherwise bees won't use them the following season.



## Eight Reasons

Continued from cover

- Construct grade-separated interchanges along Rt 50 at Loudoun County Pkwy and more
- Complete improvements on Rt 15 and Rt 9 to better manage traffic

Investing in our existing road network, providing better access to transit, and figuring out how to increase capacity on the American Legion Bridge are all options that deserve more focus than a new bridge.

### 2. The bulk of the traffic is east-west.

The numbers speak volumes:

- 47% of Loudoun residents work in the county, 92% work in Virginia or D.C.
- 46% of Fairfax residents work in Fairfax; 96% work in Virginia or D.C.
- 49% live and work in Montgomery County; approximately 8% work in Fairfax and inner suburbs out of 9.3% total employed in Virginia
- 62.9% of Frederick residents work in Frederick and Montgomery Counties; 90.4% work in Maryland or D.C., 5.9% work in Virginia

### 3. New and ever-widening roads create development pressure and induce sprawl.

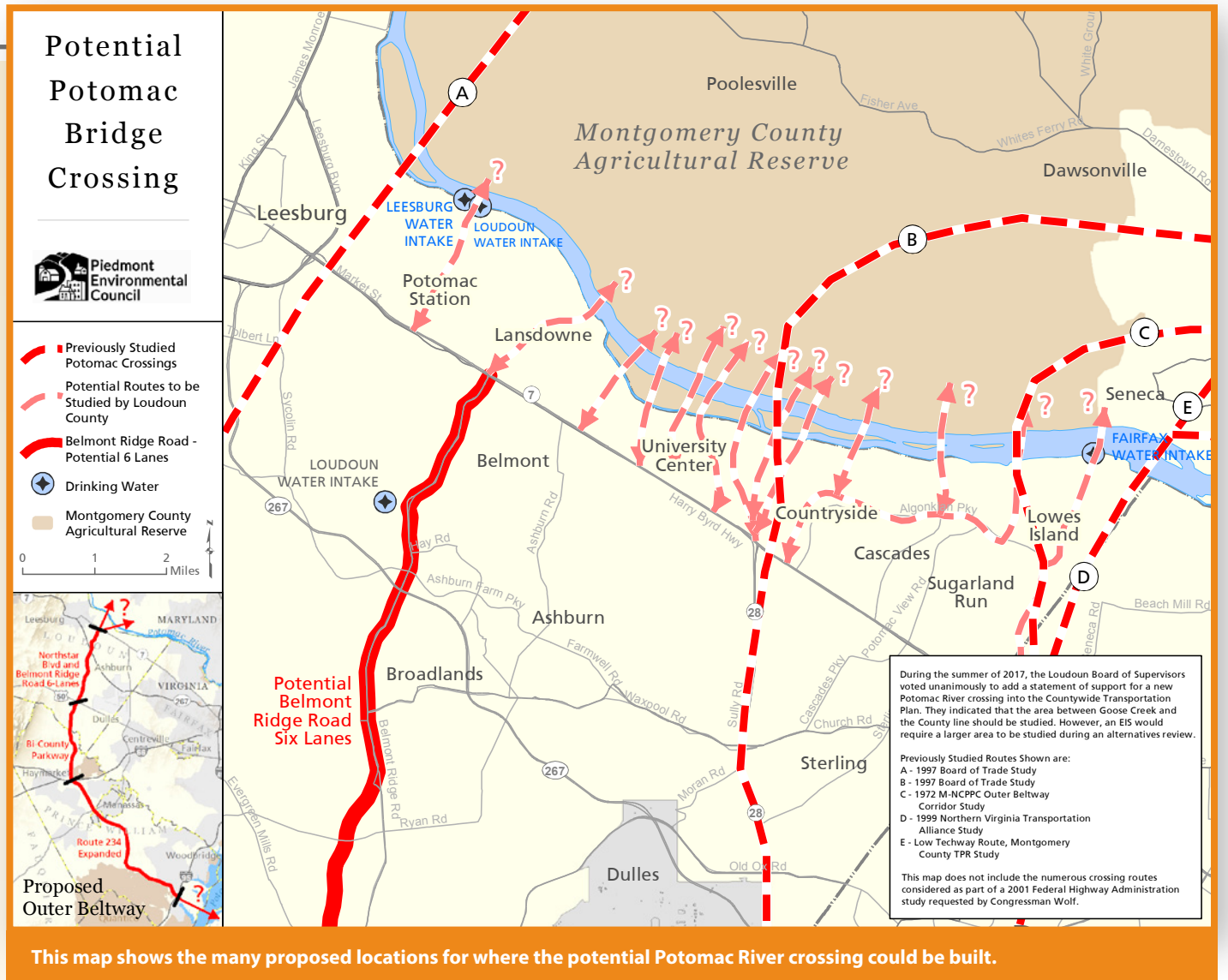
Instead of supporting walkable, thriving communities, they become physical barriers and incentives for people to move farther away from work.

Furthermore, when combined with the Bi-County Parkway to form the Outer Beltway, a new bridge would promote increased development in the Loudoun Transition Area, Montgomery County Agricultural Reserve and the Prince William County Rural Crescent.

### 4. It would devalue other transportation investments and strain local road networks.

Inserting a new bridge undermines prior and ongoing investments in congestion relief projects on Route 7 and Route 28. These projects weren't planned to handle additional cross-river commutes and long-haul traffic. It would also disrupt non-peak hour mobility in eastern Loudoun and lead to more traffic all the time.

### 5. It's a threat to drinking water.



There are short-term and long-term considerations, such as:

How would our regional drinking water source (and others downstream) be adequately protected during construction or in the event of a spill on the bridge?

The additional development this sort of project brings with it will result in more impervious surfaces — making it ever harder to provide clean, safe and affordable drinking water.

Per the Loudoun Board's direction, staff is looking at sites for a bridge within eight miles upstream of the intake, and some sites could be within a mile. Depending on location, pollution could hit the intake with little time to react.

Keep in mind that Fairfax Water serves Loudoun, Dulles, Herndon, Alexandria, Falls Church and the City of Fairfax as well as Fort Belvoir and Prince William from two intake sites. The northern intake for the Corbalis treatment plant is mid-river in the Potomac, just upstream from the Loudoun-Fairfax county line.

### 6. Direct impact on neighborhoods near the bridge.

Noise, pollution, new traffic and lower home values are all issues existing homeowners would face. In addition, how

many would be threatened with eminent domain in order to create a path for both the bridge and connecting roadways? Put yourself in their shoes. Why should they sacrifice their homes, property values, neighborhoods, clean air and water for a boondoggle project?

### 7. Who would pay for it?

Bridge boosters suggest making this a toll project would avoid the drain on limited regional funds. Adding a ten dollar or more toll for the bridge, on top of tolls on 95, 66 and the Beltway, seems unrealistic. And whatever the initial toll, Loudoun residents also have some experience with ever-rising rates on the Greenway. Even worse than high tolls, there is a real possibility that the region's taxpayers will be asked to absorb the cost through a regional tax or a large share of all funds available for transportation from federal and state sources.

### 8. Old-fashioned, outdated outer beltways are transportation solutions from the 1950s.

A majority of businesses now prefer transit-oriented locations, moving away from isolated campuses scattered along

access roads radiating out from the Beltway. Maintaining and improving our existing roads and highways, plus adequately maintaining and funding Metro, are better investments for today that will help reduce traffic now and into the future.

So how do we put an end to zombie projects like this one and focus on better solutions for our congestion woes? A simple comparison of our options is a good start (instead of just deciding yes/no on one mega-project). The pros and cons of the various transportation projects should be brought to the forefront, allowing for an informed decision on how we spend our limited dollars. Any comparison should factor in things like induced development and traffic, community disruption, access related to affordability and east-west congestion needs, to name a few.

These boondoggles are primarily supported by speculative developers seeking to increase the value of scattered parcels. We can't afford a diversion of our resources to construct them, particularly when it means a delay in the funding of real solutions to address existing congestion in the region.

It's time this zombie dies for good.

To learn more and take action, visit [pecva.org/takeaction](http://pecva.org/takeaction)

## More than \$1 Million Worth of Solar Installed

By Bri West

The benefits of solar power are multi-fold: it provides peak power close to the demand, energy security, cost savings, local employment opportunities and emission reductions. These benefits are why, for the last three years, we've partnered on a *Solarize Piedmont* campaign with friends at the Local Energy Alliance Program and the Northern Virginia Regional Commission.

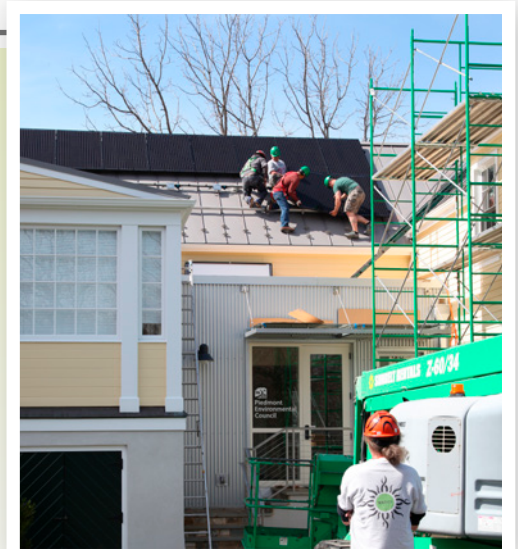
The campaigns empower area residents to get a free solar assessment and a bid from a qualified local installer. Now that the 2017 Solarize Piedmont campaign has come to a close (it ran from mid-March through April), we wanted to share the results from these past three years:

- Signed Contracts: **41**
- Dollar Value of Systems: **\$1,260,005**
- Installed Capacity: **395 kW**

- Locations: **Albemarle, Charlottesville, Culpeper, Fauquier, Greene, Loudoun, Orange & Rappahannock**

These numbers represent 41 individuals and families that chose to move forward with a financial investment that also provides clean, distributed generation back to the grid.

If you missed this year's campaign, stay tuned for more details on our 2018 campaign. Or if you're motivated to get something going sooner, you can reach out to a solar installer this fall to get an estimate. Visit [pecva.org/solarize](http://pecva.org/solarize) for a list of solar providers that work locally!



The installation of solar panels on PEC's headquarters office in 2016.



# Free Flow: Restoring Rivers & Connecting Habitat

Continued from cover

When water stagnates behind barriers, sediment can build up and water quality can be impaired. Downstream water can become warmer, causing limited oxygen for fish to breathe. You can tell a stream's health by the type and quantity of bugs that you find. Where there is poor water quality, you will find less diversity and less food source for fish and other wildlife.

"The project was a total success and the stream through this property has never looked better," says Karl Beier, landowner along the Robinson River. "The result of this restoration project is both functional and visually impressive. I really appreciate the effort that PEC went through to see this project through."

Recent work at Sprucepine Branch reconnected 2 miles of stream habitat, as a set of culverts were removed from a private driveway and replaced with a bridge. Both projects at Sprucepine Branch and Robinson River included natural channel design and construction, which was completed by the U.S. Fish and Wildlife Service and Shenandoah Streamworks. The work included re-grading stream banks and in-stream structures that restored the natural hydrology of those streams. This stabilizes the banks, as well as improves water quality and habitat, too.

"We are delighted with the changes that the culvert project accomplished," says Minna Vogel, another landowner along Robinson River benefiting from the

effort. "We are so appreciative of all the work and the funding that went into this project, and the very obvious results that we see everyday."

PEC is thankful for our projects' supporters, who have given their time, talent and funds toward restoring the Piedmont's rivers and streams. The U.S. Fish and Wildlife Service has provided technical assistance and funding for both Sprucepine and Robinson River. The Virginia Department of Game and Inland Fisheries has provided fish population monitoring on both projects, as well. These projects were also made possible because of our partners: the Nimick Forbesway Foundation, Trout Unlimited and the Krebsler Fund for Rappahannock County. In addition, we extend our gratitude to the landowners — the Beier, Griffin, Hennaman, Northup, Sutton and Vogel families — who have guided much of our work and contributed financially to its success.

"Because of the complexity and cost of these projects, we are grateful for the landowners, funders and partner organizations who banded together to get the job done," says Peter.

We are lining up additional culvert removal projects with our partners for the next several years. Efforts that are currently in the works are located on Kinsey Run near Graves Mill, Bolton Branch near Huntly and Cedar Run at the White Oak Canyon trail head in Shenandoah National Park. Stay tuned for updates on these projects in 2018!

## Sprucepine Branch, Rappahannock County



Before



▲ The culverts on Sprucepine Branch in Rappahannock County before they were removed.

The bridge that replaced culverts on Sprucepine Branch in Rappahannock County.



After

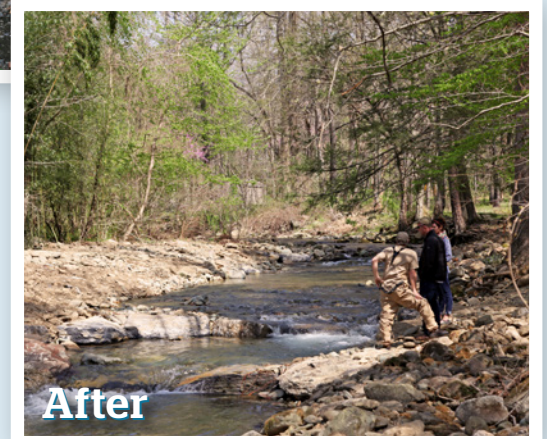
## Robinson River, Madison County



Before

◀ The culvert, surrounded by an eroding concrete bridge, before it was removed on the Robinson River in Madison County.

▼ After the culvert was removed on the Robinson River, which helped reconnect 5.3 miles of habitat for aquatic species such as American eel and brook trout.



After

## PEC Photo Contest

..... SUBMIT BY **SEPTEMBER 30** .....

There's a little time left to participate in our photo contest! This year, we're adding "Recreation" as a new category, so enter your favorite local outdoor adventures. Also, please encourage any young photographers you know to submit their photos to the "Youth Category."

The winners of each category will receive a \$75 gift certificate to a nearby *Buy Fresh Buy Local* restaurant! And the youth category winner will receive a \$75 gift card to iTunes!

Categories include: Beautiful Landscapes and Streetscapes, Native Plants and Wildlife, Recreation and the Youth Category (for ages 17 and under).

The deadline for submission is **September 30!** For contest details, go to [pecva.org/photocontest](http://pecva.org/photocontest). For questions, email [photos@pecva.org](mailto:photos@pecva.org).



ABOVE: Winner of the "Native Plants and Wildlife" category of the 2016 PEC Photo Contest. Photo by Susan Tucker

There are a lot of events happening this fall!  
So many that we couldn't fit them in the newsletter!  
**Visit [pecva.org/events](http://pecva.org/events) for details.**

## Pop Quiz

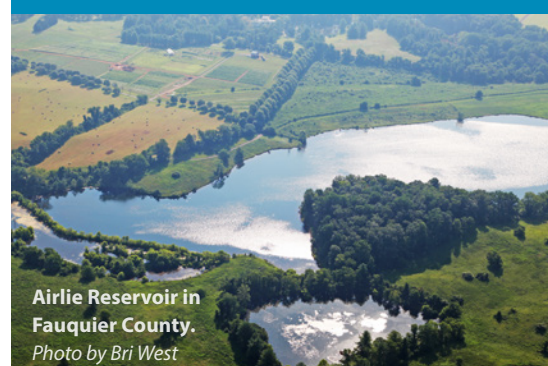
### QUESTION

How many of the nine counties that PEC serves are reliant on groundwater resources?

### ANSWER

**d) 9**

All nine counties are dependent on groundwater resources. Groundwater provides the base flow for all our local streams and rivers, which feeds many of the reservoirs. It's also the drinking water source for many of the municipalities, and provides water for agricultural needs.



Airlie Reservoir in Fauquier County. Photo by Bri West



# Out & About

PEC's fellowship is a seven-week program where college students and recent college graduates gain the practical knowledge and skills necessary to successfully transition into careers in conservation, urban planning, agriculture, historic preservation, public policy and other related fields. See what our 2017 fellows were doing 'out & about' during the program this past summer!



## RAPPAHANNOCK COUNTY, VA

At The Farm at Sunnyside, the fellows learn about best management practices and help harvest organic garlic. *Photo by Callee Manna*



## ALL AROUND THE VIRGINIA PIEDMONT

Fellows used a 15-passenger van to visit many locations throughout the Piedmont. They had the opportunity to visit: the Piedmont Memorial Overlook — Roundabout Meadows — Bull Run Mountains Natural Area Preserve — Bellair Farm — the Robinson River— Over Jordan Farm — Bruce Jones Nature Preserve — Sunnyside Farm — the Montpelier-Green Trail — James Madison's Montpelier — Gilmore Cabin — Downtown Culpeper — Main Street Warrenton — Arlington Smart Growth Walking Tour — Clarke County Planning Commission Hearing — Mock House of Delegates Session — Rappahannock River Paddle — Marriott Ranch — Thomas Jefferson's Monticello — Walking Tour of Downtown Charlottesville.



## FAUQUIER COUNTY, VA

The fellows participate in a land use charette and learn what it's like to plan for a real estate development.



## KELLY'S FORD IN FAUQUIER COUNTY, VA

On the Rappahannock River, fellows pick up trash such as tires during their tour with the Friends of The Rappahannock. *Photo by Paula Combs*



## ORANGE COUNTY, VA

The fellows visit James Madison's Montpelier. *Photo by Paula Combs*

## She's a Fellow, She's a Volunteer... She's Dana Ek!

Meet **Dana Ek**, a PEC fellow and volunteer intern from this past summer. Dana is a student at George Mason studying Conflict Analysis and Resolution and Global Affairs. Dana hails from the Northwest, and grew up with a passion for the environment. She joined PEC as a volunteer intern in May, seeking to apply her passion

toward her career goals. Since then, Dana has focused her remaining semester on completing a concentration in Environmental Conservation.

"I wanted to learn more about conservation and connect to my new home in Virginia," says Dana, who moved to Fauquier County during high school. "I found the opportunity to learn the full breadth of PEC's work and the experience from the staff incredibly helpful in learning what is being done in environmental work today and where I can take that in my own career."

As a participant in our fellowship program this year, Dana and fellow Callee Manna collaborated to complete their practicum, "Eastern Brook Trout Monitoring Protocols for Headwater Streams in Virginia's Piedmont," a guidebook that will steer future monitoring and reporting for PEC's stream restoration initiatives.

Dana continues this fall with her final semester studying at the Smithsonian Conservation Biology Institute. After graduation, she plans to gain experience working in wildlife conservation and water quality issues.



2017 Fellow and Volunteer Intern, Dana Ek.



# On the Ground

## Albemarle

### › Route 29 Transportation Improvements & Land Use Planning Update

#### Hydraulic Road and Route 29 Intersection Improvements

Since March, an advisory panel of local citizens, city and county officials, and VDOT have been developing a land use and transportation plan for the area. That first phase of the study will wrap up this fall, and drafts of the various land use concepts will be presented to city and county for formal review. Then, the panel will use that plan to develop, assess, and ultimately recommend potential transportation improvements.

#### Rio Road and Route 29 Small Area Plan

With the improvements at this intersection completed, the focus has shifted to the higher-density, more urban-scale development — approximately 1,000 acres — around the intersection. Integrated into this plan will be the framework for a transportation network of smaller streets, bike and pedestrian paths, greenways, and the elements necessary to facilitate current and future transit options. Information about preferred concepts should be available for review this fall.

#### Relocation of County Courthouse remains a real concern

Within the discussions of the Rio/Route 29 Small Area Plan, advocates for relocating the courthouse and/or the County's administrative office suggest that locating one or both near the Rio intersection would be a catalyst for additional development. We will continue to oppose the relocation of the courts, a position almost unanimously held by the legal community. By December, the County anticipates a consultant's report outlining public-private partnership options that might be necessary to facilitate the move.



The courthouse in Charlottesville that the County may move to the intersection of Rio and Route 29. Photo by Marco Sanchez

## Clarke

### › Quarry Site & Sporting Clays for Conservation

The County is proposing to develop a County-operated citizen convenience center for waste and recycling to be located on the quarry property through a long-term lease. The Planning Commission will forward the application to the Board of Supervisors for a public hearing in September.

If you enjoy shooting and supporting a good cause, join us for this year's Sporting Clays for Conservation event on Sunday, Oct. 22 at beautiful Prospect Hall Shooting Club. To register, visit [pecva.org/events](http://pecva.org/events) or contact Karissa Epley at [kepley@pecva.org](mailto:kepley@pecva.org).

## Culpeper

### › The Future of Solar Farms

Large-scale solar farms will play a role in the state's energy matrix. However, in our desire to see greater implementation of renewable energy projects, we should be mindful of the site specific considerations that hold true for any large-scale energy project. In June, we provided Culpeper with a list of siting criteria and recommendations for a public permitting process, including avoidance of prime agricultural soils and historic resources, as well as the removal of the systems at the end of their useful life. We are pleased to see many of these criteria contained within the language advanced to the Planning Commission, including the use of a conditional or special use permit to ensure site specific concerns are addressed.

## Fauquier

### › Water in Marshall & Buckland Bypass

Marshall faces two problems in regards to its water supply, a limitation on the amount of uncontaminated water they've been able to access and a lack of information to make informed decisions. Besides having a significant amount of undeveloped land that is zoned and approved for development, there are several rezonings that have been approved that also have no water available.

The WSA is conducting a study of ways to address the Marshall issue that will look at treatment, alternative wells and surface water options.

Another issue that has reemerged is the Buckland Bypass. Prince William County is studying options to relieve traffic through Buckland Battlefield along Rt. 29. At their last meeting they indicated that options for a bypass had been taken off the table. However, in a side meeting, the consultant, Prince William County and various stakeholders met without Fauquier County representatives present and brought a new option of a 'short bypass' forward. The newly proposed bypass options would start at Rt. 29 at the Vint Hill Rd. (Rt. 215) intersection and go north to connect to Rt. 15 before the railroad track.

## Greene

### › Making Main Street More Walkable

The Commonwealth Transportation Board (CTB) approved almost \$400,000 of a Transportation Enhancement Alternatives grant for sidewalk construction on the east end of Main Street in Stanardsville. The Town still needs to raise more than \$100,000 in matching funds from the local community to complete the project. This is an important part of the revitalization of Stanardsville, a project we've been following and supporting for over a decade.

## Loudoun

### › Transportation Planning & Comprehensive Plan Updates

Planning for Loudoun's future has gotten a lot of attention through the summer. We continue to track and inform the public about the many critical transportation decisions currently being considered, which could drastically impact the County's character. Decisions on a potential new Potomac River Bridge crossing and traffic improvements on Route 15 north of Leesburg are in the works (see "Eight Reasons" on page 1). In addition, the new comprehensive plan draft is getting fleshed out with new land use designations for the suburban and transition areas, called "Place Types," and a revision of all policies are in preparation for the next round of public input sessions in January 2018. Please stay tuned as we will be alerting you of important decisions and opportunities for public involvement.

## Madison

### › Civil War Battlefield Research

The 1863 battles of Jack's Shop and James City in Madison County were important engagements in the Civil War. Yet, little is known about how they unfolded or the significance of the battles within the context of the war. We received a grant from the National Park Service's American Battlefield Protection Program to research and document these two battlefields, and we selected Rivanna Archaeological Services to undertake the research and mapping project to develop a better understanding of these battlefields. To kick off this project, we hosted a community meeting on July 11 in the historic village of Rochelle to explain the project and gather information about the battlefields. Contact Kristie Kendall, our historic preservation manager, at [kkendall@pecva.org](mailto:kkendall@pecva.org), if you want to learn more about this effort.

## Orange

### › Gordonsville Park Initiative

The Town of Gordonsville is working with PEC to develop a master plan for refurbishing Verling Park, a neighborhood park in the heart of the community. Over the summer, the Town held three community meetings and conducted a survey to gather input for the park master plan, which is scheduled to be completed by fall. It will include a design for refurbishing the park, improving park access from Main Street and Baker Street, and developing sidewalks to connect Verling Park with Firemen's Fairgrounds. The plan will be used to secure private and public funding for refurbishing the park.

## Rappahannock

### › Sprucepine Branch Restored!

This June, three culverts were replaced with a driveway bridge at Sprucepine Branch, near Huntly, Virginia. A special thanks to landowners — the Northup and Griffin families — who made this work possible, and are steadfast stewards for Sprucepine Branch. Many thanks to partners at the U.S. Fish and Wildlife Service, Shenandoah Streamworks, Trout Unlimited, and the Krebsler Fund for Rappahannock County in supporting this work to improve habitat for Eastern Brook Trout and restore water quality for the Piedmont's headwater streams. See "Free Flow: Restoring Rivers & Connecting Habitat" on page 1 for more details.



# Dear Friends,

We were blessed with rain all through the summer. We noticed it because we did less watering than expected in July and August of the hundreds of native trees and shrubs we planted at our office on 45 Horner Street.

Our region is close to long-term averages for annual precipitation this year. Given the plentiful rainfall, stories about a shortage of drinking water seem odd. However, those stories are everywhere you look. For instance, in Fauquier County, water shortages from a combination of reduced flow and contamination in existing wells spurred negotiations for new wells in Marshall. Also, concerns about the availability of water were central to the debate over future development in Warrenton. Greene County is considering constructing, at considerable expense, a new storage reservoir for withdrawals from the Rapidan River. In addition, Loudoun Water is purchasing quarry sites along Goose Creek for future storage. On a state level, the debate over the Atlantic Coast Pipeline (see page 2) has become charged by the possibility that it could affect water supplies in Rockbridge County and Staunton.

We are concerned that long-term economic development and land use planning largely ignores increasing evidence of limits to local and regional water supplies. Frankly, Virginia and most localities have not taken the proactive steps needed to protect their sources of drinking water or to encourage conservation measures to reasonably reduce consumption. Some localities are planning in isolation and failing to incorporate water supply limitations, infrastructure costs and how to protect the quality of water sources into the future.

In 2004, PEC participated in a General Assembly mandated Task Force to provide guidance to localities tasked with evaluating long-term water

supplies. We argued that in addition to estimating future demand and identifying future sources of water, localities should be required to evaluate the impact of current and future land uses on water supplies. Unfortunately, the Department of Environmental Quality would not support requiring a review of future land use plans.

Take Marshall, Virginia. Recent headlines have highlighted a shortage of available groundwater to meet *current* demand from residential and commercial customers. Developers of new properties are being required to demonstrate new sources of water supply in order to gain approval. Our Fauquier field representative, Julie Bolthouse, presented preliminary analyses that suggest that the existing zoning within Marshall, if actually built out, would far exceed existing or planned supplies. Despite this, the long-term plans for Marshall do not address the need to secure additional water supplies, nor do they call for the implementation of water conservation measures in new development or to manage existing demand.

What is most troubling though, is the lack of action to prioritize the protection of existing water supplies. In Marshall, nearly half of the wells that provide the current water supply are located in areas zoned for commercial and industrial development. Therefore, it's not surprising that industrial chemicals are being discovered in existing wells that are located next to businesses that used those products. Its encouraging that the




The Ragged Mountain reservoir near Charlottesville, Virginia.  
Photo by Deb Snelson.

County has taken first steps to establish well-head protection areas, near all the wells in the current system, moving forward. However, the possibility the WSA will target areas outside of Marshall for new wells in the future is frustrating, given the lack of specific policies to reduce consumption and to protect existing supplies.

What can you do? If you have well water, test it and learn what you can do to protect the groundwater you rely upon. If you drink water from the Town, take steps to conserve and reduce consumption and support policies to protect the existing water.

Now is the time to plan and protect the water we drink.

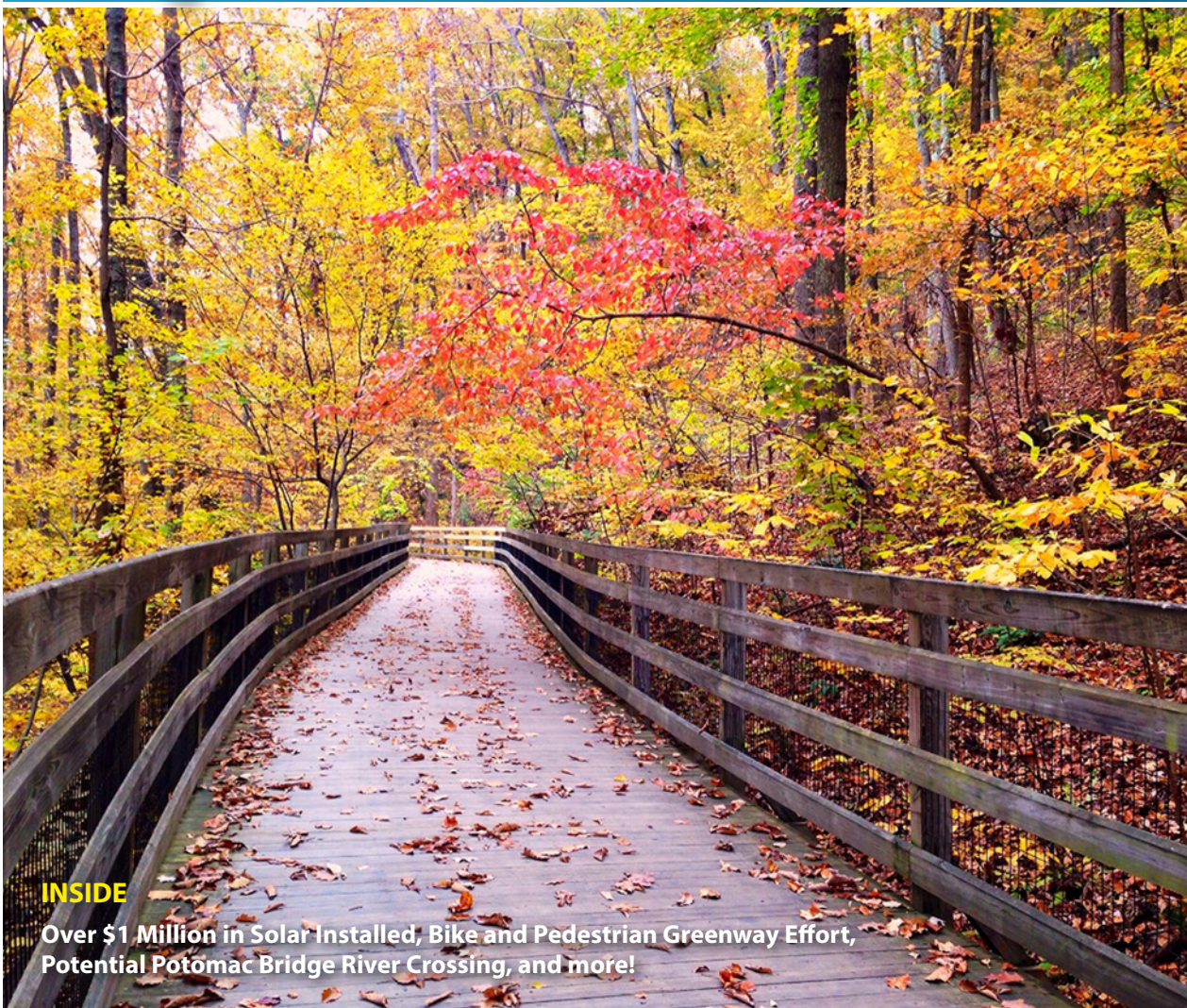
Sincerely,

  
Chris Miller, President



## The Piedmont View

A MEMBERSHIP NEWSLETTER OF THE PIEDMONT ENVIRONMENTAL COUNCIL AUTUMN 2017



### INSIDE

Over \$1 Million in Solar Installed, Bike and Pedestrian Greenway Effort, Potential Potomac Bridge River Crossing, and more!

Photo by Skip Plitt

## Pop Quiz

How many of the nine counties (Albemarle, Clarke, Culpeper, Fauquier, Greene, Loudoun, Madison, Orange and Rappahannock) that PEC serves are reliant on groundwater resources?

- a) 2    b) 3    c) 6    d) 9

ANSWER ON PAGE 5



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