

*Go Green*

# Purcellville



## Highlights of

**Innovative Efforts, Policies, and Activities for the Environment**

September 2008 - September 2009

## Purcellville Places Watershed In Conservation Easement

### Governor Kaine Applauds Town for Easement that is the Largest in Loudoun and First by a Municipality in Loudoun

The Town of Purcellville formally filed its agreement with the Virginia Outdoor Foundation (VOF) to place 1,271 acres of land in the Blue Ridge Mountains adjacent to the Appalachian Trail and west of Hillsboro into a conservation/open-space easement. The property includes a significant portion of the watershed above the J.T. Hirst Reservoir, three springs and the reservoir itself. The reservoir provides nearly one-half of the drinking water for the Town.

“This conservation easement is remarkable...”

Gov. Timothy M. Kaine

“I am proud of the Council taking action to protect our reservoir and its watershed,” said Purcellville Mayor Robert W. Lazaro, Jr. “The Town has a proactive environmental record including holding an easement on a ten-acre stream valley property and placing an historic easement on our Fireman’s Field property. This latest easement is the largest easement in Loudoun and the first by a municipality in Loudoun.”

The easement was filed with the Loudoun County Clerk of the Court on, April 22, 2009, which was Earth Day.

“I congratulate the Town of Purcellville for their foresight to protect the watershed for its drinking-water reservoir,” said Governor Timothy M. Kaine. “This conservation easement is remarkable, and it demonstrates the significant leadership role local governments can play in preserving open space. The Town’s decision will help protect local drinking water and maintain the area’s natural beauty for generations to come.”

This conservation easement is the largest granted in Loudoun County and the first by a municipality in Loudoun County. A conservation/open-space easement is a legal document made between a landowner and a public body, such as the VOF. The easement limits present and future property development. It allows the property to be used for its traditional use such as a farm, forest, open space, or natural area while protecting it. The easement is legally recorded and bound to the deed of the property permanently.

“While the majority of easements donated to VOF are from private landowners, this project is a great example of how municipalities, too, can take advantage of the Commonwealth’s unrivaled land conservation programs,” said VOF Executive Director Bob Lee.

Created by the General Assembly in 1966, VOF is the state’s largest land trust, protecting more than 530,000 acres of land across 102 counties and cities. This donation brings the total land under easement with VOF in Loudoun County to 24,117 acres – ranking it 6th in the state. It also adds to the 330,000 acres protected so far during Gov. Kaine’s administration, which has a goal of protecting 400,000 acres by 2010. Nearly 75 percent of the land protected to date has been through VOF easements. For more information about VOF, please visit [www.virginiaoutdoorsfoundation.org](http://www.virginiaoutdoorsfoundation.org).

# The Town of Purcellville and Dominion Virginia Power Partner to Conduct Pilot LED Lighting Project

## Purcellville Selected as First Project

The Town of Purcellville and Dominion Virginia Power have partnered to investigate the use of Light-Emitting Diode (LED) technology for street lighting. The LED Lighting Pilot Project is slated to run through July 2011. LED lights have significant potential advantages over existing lighting technologies such as high pressure sodium, metal halide and high intensity discharge (HID) mercury vapor lights. Some of the advantages of LED lighting include:

- Significantly reduced use of electricity.
- A much longer anticipated life and maintenance cycle.
- Dark Skies compliance and reduction of unnecessary back lighting.
- Smart technology to dim the lights in the early morning to further save energy.
- Non-hazardous material. Existing lighting technologies contain mercury, a hazardous material, that creates environmental and disposal concerns.
- Better quality of roadway and sidewalk illumination providing better visual acuity for both motorists and pedestrians at night.

LED Street Lighting Test Programs conducted in Oakland, California and Ann Arbor, Michigan have yielded promising results. According to USA Today, at least 30 cities nationwide have requested over \$104 million in federal stimulus funds to add LED street lighting this year. Similar programs are underway or soon to be installed in Anchorage, AK, Milwaukee, WI and San Jose, CA.

Under Purcellville's Pilot Project, 10 LED street lights were installed by Dominion Virginia Power along South 20th Street from the intersection with Main Street to just north of East G Street. The Purcellville Project was the first to be installed of nine additional pilot projects to be conducted by other localities in conjunction with Dominion Virginia Power around the Commonwealth. A lighting plan was created by Dominion to record the existing lighting levels at the project site for later comparison after the installation of the LED luminaries. The follow-up investigation revealed that the LED lights provided essentially the same level of illumination as the mercury vapor lights that were replaced, with a discernable improvement in light uniformity on the roadway and sidewalks. Additionally, undesirable "spill lighting" was substantially reduced due to the sharp cut-off characteristics of the LED lights.



A comparison of the existing mercury vapor lights on Main Street with the new LED street light on South 20th Street. The older technology creates significantly higher levels of light pollution through uplighting and spill lighting. The lighting uniformity level and overall visual acuity are enhanced in the LED area.



The Hadco "Evoaire" WI-100X LED Luminaire was selected for the Pilot Project. The new LED luminaire was placed on existing poles (picture of light fixtures up close).



## Painting Purcellville Green Event

The Purcellville Committee on the Environment is sponsoring a “Painting Purcellville Green” event to celebrate the environment through the arts and to educate the community regarding green activities and businesses in and around the Town. The event will take place on Saturday, October 17, 2009 from 10 a.m. – 2 p.m. at Town Hall, 130 E. Main Street, Purcellville. Activities include a green visual art exhibit by local artists in the Town Council Chambers, green-themed music from local bands and performers, and educational booths from local non-profit organizations and businesses with green products or services. As a precursor to this event, the Town partnered with the Commonwealth of Virginia to secure a grant to give away 300 mini spiral CFL Light Bulbs at the Purcellville Tag Sale in October 2008.

## Town Expands Protection of Stream Valley Corridors

The Town Council in September adopted revisions to the Stream & Creek Buffer provisions of the town zoning ordinance that increase the minimum buffer area required adjacent to major and minor stream valleys and associated wetlands and require that such buffer areas be forested. This will help implement the Town’s environmental goals by promoting water quality protection and preservation of significant environmental resource areas, wildlife habitat corridors and aquatic environments.

## Town of Purcellville Receives Environmental Award

Three Town of Purcellville Public Works facilities have been accepted as Environmental Enterprise (E2) participants in the Virginia Environmental Excellence Program (VEEP). The facilities covered under this application are the Town Maintenance Center, the Water Treatment Plant, and the Basham Simms Wastewater Treatment Plant.

VEEP was established to encourage superior environmental performance through the development and implementation of environmental management systems and pollution prevention efforts. VEEP drives environmental excellence by encouraging facilities within the Commonwealth that have strong environmental records to go above and beyond their legal requirements. VEEP members earn recognition and are potentially eligible to utilize specific regulatory and administrative flexibilities.

An award ceremony was held on February 24, 2009 at Town Hall.



## Arbor Day 2009

The Town of Purcellville Town Council and Tree and Beautification Commission sponsored an Arbor Day celebration on April 25, 2009 where 100 free trees were distributed to organizations and communities to plant. Free tree seedlings were also distributed to any members of the public who attended the event.

## Purcellville Receives Tree City USA Recognition, Growth Award

Purcellville has been named a Tree City USA community by the Arbor Day Foundation to honor its commitment to community forestry. It is the third consecutive year Purcellville has received this national recognition.

Purcellville is also the recipient of a Tree City USA Growth Award for demonstrating progress in its community forestry program in the following activity areas: Education and Public Relations, Community-Wide Tree Event, Planning and Management, and Tree Inventory and Analysis. The prestigious Growth Award recognizes environmental improvement and higher levels of tree care in Tree City USA communities.

The Tree City USA program is sponsored by the Arbor Day Foundation in cooperation with the National Association of State Foresters and the USDA Forest Service.

“A community, its elected officials and its citizens that provide needed care for its trees deserve recognition and thanks,” said John Rosenow, Chief Executive of the Arbor Day Foundation. “They recognize that trees are a vital component of the infrastructure in our cities and town, providing environmental and economical benefits. Trees moderate climate, conserve water and provide habitat for wildlife. Trees in urban areas reduce the heat island effect caused by pavement and buildings. Properly placed trees can increase property values. Communities that are recognized with a Tree City USA designation and Growth Award go to great lengths to plant and care for the community forest.”

While many of the successes of this program are due to the commitment of the Town Council to support this program, the excellent work of the Tree and Beautification Committee cannot be overlooked. This Committee has worked hard to change the culture of tree preservation and maintenance throughout the Town. They have also been available to assist the Town and staff on issues related to tree preservation and expansion of the Urban Canopy.

“The Council is delighted that the Town has once again achieved this award for the third consecutive year. Purcellville is a great place to live and raise a family and we are thankful to all who help make our Town a little bit more ‘green’ each and every year,” said Purcellville Mayor Robert W. Lazaro, Jr.



“A community, its elected officials and its citizens that provide needed care for its trees deserve recognition and thanks.”

John Rosenow, Chief Executive of the Arbor Day Foundation

## Town Receives Grant Funds to Conduct Tree Care Workshops and a Tree Inventory

The Virginia Department of Forestry and the U.S. Forest Service have awarded \$6,205.00 to the Town for three Community Tree Care Workshops and the creation of a Prototype Tree Inventory and risk assessment/condition analysis. These programs will be administered and developed by the Town's Tree and Beautification Committee with Town staff assistance.

The community's tree canopy is located across three broad swaths of ownership and responsibility including public spaces, common lands located within private residential communities and private residential lots. The Community Tree Care Workshops will target each of these segments of our community with specific workshops tailored for each group. The first workshop will be for employees of the Town who have or will have duties and responsibilities that interact with the care, upkeep and maintenance of trees located on public land. The second workshop will host board members from the various Homeowners Associations within the Town to present tree care information for use on the properties that these organizations manage. The final workshop will be for all Town residents and designed to help property owners care for and maintain the trees on their properties.

Some of the activities planned for the workshops include:

- An "Air Spade" demonstration that will show participants the nature, size and extent of a mature tree's root system.
- Professional arborists will present tree pruning demonstrations to detail how and when to prune a tree in a beneficial manner.
- Information will be provided concerning how to hire tree care professionals, best practices for tree maintenance and differences in care for young and mature trees.

The Tree and Beautification Committee also hopes to partner with local nurseries to distribute tree seedlings carefully selected by the Committee and industry professionals to compliment and enhance the Town's Urban Tree Canopy Plan.

The second component of the Department of Forestry grant is a Prototype Tree Inventory to be conducted on Town owned property including Fireman's Field. The 2025 Comprehensive Plan and the Town's Tree Ordinance call for the development of a Master Tree Plan for public properties. The Tree Inventory will be completed by a professional arborist and will also include an assessment of the condition of the trees inventoried. This data will be mapped using GIS software that will plot the location and condition of each tree. The data collected through the inventory will then be made available to the Town's maintenance staff on their laptops to facilitate tree maintenance and upkeep.

The Tree Care Workshops are planned to start this fall with the final workshop for residents scheduled for the spring of 2010. The Prototype Tree Inventory will be completed in the spring of 2010 with the GIS data available by the end of June.

## Waterworks Department Receives the Virginia Department of Health's Excellence in Waterworks Operations/Performance Award

The Town of Purcellville was recently notified by the Virginia Department of Health (VDH) that the Town's Public Works Department's Waterworks Division has received the 2008 Excellence in Waterworks Operations/Performance Award. Each year, the VDH Office of Drinking Water Recognition Program rewards water systems that have demonstrated excellence in performance and operations and for the treatment and distribution of drinking water to the public. Excellence in performance and operations involve setting and achieving goals well beyond the established regulations and making a commitment to customer satisfaction. VDH announced the winners and presented the awards on May 7, 2009 at the Holiday Inn Roanoke Valley View Hotel as part of National Drinking Water Week.

The VDH regulates approximately 1,310 community waterworks which serve about 6 million residents in the Commonwealth of Virginia. Of all those water suppliers, only 77 water plants received the Excellence in Waterworks Performance and Operations.

## Wastewater Project – State-of-the-Art Upgrades Nearing Completion

Congressman Wolf joined Mayor Lazaro and Town officials in June 2009 to tour the Basham Simms Wastewater Facility (BSWF) in Purcellville. In 2005, the State of Virginia developed new regulations mandating that municipal wastewater treatment plants reduce nitrogen and phosphorous in effluent discharged to the Chesapeake Bay and its tributaries. Upgrades to the BSWF are underway to provide the additional treatment needed and also increase the capacity of the facility from 1 million gallons per day (1 mgd) to 1.5 mgd. In response to these new regulatory requirements for the removal of nutrients, the facility will be upgraded to achieve state-of-the-art nutrient removal. The facility will cut the concentration of Nitrogen by 50 percent and reduce the phosphorous concentration approximately 80 percent. Completion of the project is scheduled for October 2010.



Congressman Wolf joined Mayor Lazaro and Town officials in June to tour the Basham Simms Wastewater Facility in Purcellville.

## Community Shred Event

On September 26, 2009, the Town of Purcellville in partnership with Pro Shred Security and the Loudoun County Sheriff's Office held a free Community Shred Event. Residents were able to recycle old paper documents and confidential files safely and securely.

## Water Conservation Program Off to a Successful Start

Forty-one applications have been received from residents wanting to participate in the Water Conservation Rebate Program. Thirty-seven applications were for clothes washers, three for toilets, and one was for both a washer and toilet. Seventeen appliances have been purchased since the program was announced on August 14, 2008.

One hundred fifty letters were sent to residents between October 3 and December 15, 2008, announcing the availability of retrofit kits containing two shower heads, two aerators, and some dye tablets. Patrick Henry College has also been participating in the Water Conservation Program and requested 18 retrofit kits to install. The College plans to install kits in all the showers and sinks in one dormitory to measure the effect this will have on water use. Town residents have picked up 15 kits in response to the letters which makes a total of 33 kits distributed so far. Staff has been working with Loudoun Valley High School to install retrofit kits in all of the sinks at the high school.

The Town is saving an estimated 3,900 gallons per day with the present low-flow appliances/devices installed.

Restaurant spray nozzles were delivered to three restaurants in early September and two were picked up by Patrick Henry College in November. Seven spray nozzles were recently installed in seven other restaurants by Maintenance Department staff for a total of 12 now installed. Staff has also been working with Loudoun Valley High School to install the restaurant spray nozzles in all of the kitchen sinks at the high school.

The total estimated water savings as of September 2009 based on the number of appliances/devices installed and water factors from the Water Conservation Plan is 1,004,000 gallons. The Town is saving an estimated 3,900 gallons per day with the present low-flow appliances/devices installed.

## Town of Purcellville and Keep Loudoun Beautiful Partner for Community Clean Up

This year, the Town of Purcellville worked in partnership with the Keep Loudoun Beautiful Committee and various community organizations to complete a community wide clean up over a three week period from April 1, 2009 through April 27, 2009. The Town, the Keep Loudoun Beautiful participants and volunteer organizations collected over 100 bags of trash which were taken to the landfill. This resulted in one ton of trash and over 20 car and tractor tires that were collected from throughout the stream beds and on vacant lots within the Town. The following groups participated heavily in this years' clean up: Keep Loudoun Beautiful Volunteer Coordinator Libby Backman and group, Loudoun Valley High School, local Girl and Boy Scout Troops, the Church of Jesus Christ of Latter Day Saints and members of the Town Council and staff. A special thanks to the Purcellville Police Department Citizen Support Team for assisting the Maintenance Department with the trash collection.

## The Town of Purcellville & Loudoun Soil & Water Conservation District Hold Second Annual Rain Barrel Workshop for Town Residents

### Purcellville to Offer Rain Barrel Rebates for Town Residents

The Town of Purcellville in conjunction with the Loudoun Soil & Water Conservation District conducted a workshop on the utilization of rain barrels to provide non-potable water for lawns, plants, and washing cars and outdoor equipment. The workshop was held on Saturday, May 9, 2009 at the Purcellville Skating Rink located at 250 South Nursery Avenue in Purcellville. The workshop taught Town residents how to build a rain barrel and informed participants on the different applications and uses. Rain barrels allow individuals to store water for future use such as watering the garden or for any emergency situation. The harvesting of rain water is important because it can decrease the high demand of domestic water use associated with residential irrigation. The workshop also provided Town residents with free seedlings for planting.

Also, the Town of Purcellville will offer rain barrel rebates to encourage utilization of non-potable water for lawns, plants, and washing cars and outdoor equipment as part of its water conservation program. The total amount of water saved to date by the Town's residents as part of the water conservation program is approximately 750,000 gallons. The rebate amount is \$25 per barrel for Town residents only. Rebates will be offered towards the purchase of rain barrels made after August 13, 2009. Due to the limited supply and availability, the rebate is limited to one barrel per property and is contingent on the availability of funds in the Water Conservation Program. The rebate program is a continuation of the Town's Water Conservation Program and Go Green Initiative and follows the successful rain barrel workshop sponsored jointly by the Town and the Loudoun Soil and Water Conservation District. The most recent rain barrel workshop for Town residents was held on September 22, 2009 at Town Hall.

The Water Conservation Plan and Rebate Program Application are available online at [www.purcellvilleva.gov](http://www.purcellvilleva.gov) or telephone (540)338- 5024. Rain barrels may be purchased from the Loudoun Soil and Water Conservation District located at 30 Catocin Circle, SE, Suite H, Leesburg, VA 20175. For more information, visit their website at: [www.loudounsoilandwater.org](http://www.loudounsoilandwater.org).



The use of rain barrels will save significant amounts of our water resources.

## Teenagers Kick Off National Campaign to Get Drivers to Check Their Tires and Keep Them Properly Inflated

This past Earth Day, the Newton Marasco Foundation, in partnership with students from Loudoun Valley High School and the Town of Purcellville, launched the enGAUGE It campaign to teach motorists about the value of checking their tires and keeping them properly inflated. From 12:30 p.m. to 6:00 p.m. on April 22, 2009 students handed out free tire gauges at various locations around Purcellville along with instructions on how to check and inflate tires, and information about the benefits to individuals and the environment.

The event launched a national campaign to get 2,010 high schools around the country to participate in 2010 to educate drivers in their communities about tire pressure.

The Newton Marasco Foundation, a non-profit organization dedicated to inspiring the next generation of environmental stewards, sponsored the enGAUGE It campaign and provided students with the tire gauges. For more information about the program, please visit [www.newtonmarascofoundation.org](http://www.newtonmarascofoundation.org).

The U.S. Department of Energy has estimated that 1.2 billion gallons of gas are wasted annually due to under-inflated tires. When tires are properly inflated, fuel economy can improve by as much as to three percent, and motorists can save up to six cents per gallon. Tires should be checked monthly. For more information, visit [www.fueleconomy.gov/feg/maintain.shtml](http://www.fueleconomy.gov/feg/maintain.shtml).

## Town Partners with Loudoun Valley High School to Assist with Recycling Fundraiser

In continued support of Loudoun Valley High School programs, the Town of Purcellville is providing a drop off point and additional media outlets for the Loudoun Valley Publications Recycling Fundraiser. This unique program does not require any purchases and the school is simply asking people to protect the environment by donating used cell phones, ink jets, laptops/notebook computers, iPods, digital cameras and digital video cameras. These items can be dropped off at the Town Hall and other designated recycling points. It is hopeful that many of these items are tax deductible and will be recycled in accordance with EPA regulations or refurbished and sold. 100 percent of these proceeds will go towards helping fund the Loudoun Valley High School's newspaper and yearbook.

## Purcellville recognized as a VML-Certified Green Government

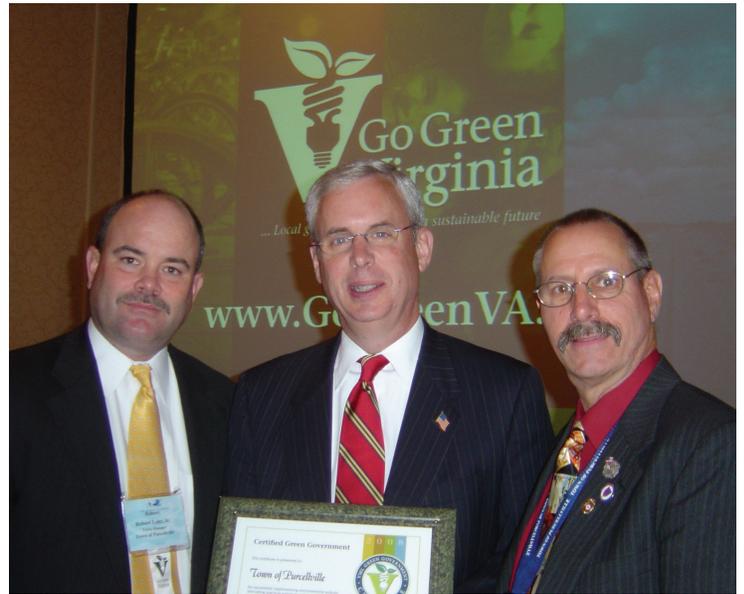
The Town of Purcellville was one of 26 local governments that are members of the Virginia Municipal League to receive certification recently as a “VML-Certified Green Government.” The award was presented to Mayor Robert Lazaro during the league’s annual conference held in Norfolk in October 2008.

“Purcellville is pleased to be able to achieve this designation. Our thanks to our citizens and Town staff for all their hard work in protecting our environment which is a big part of what makes our Town a great place to live and raise a family,” said Purcellville Mayor Bob Lazaro.

The cornerstone of VML’s “Go Green Virginia” environmental initiative, the “Green Government Challenge” is a friendly competition among VML member local governments to encourage the implementation of specific environmental policies and practical actions that reduce carbon emissions.

City, town and county governments earned “green points” by implementing or adopting up to 30 policies and actions divided into 11 categories ranging from energy efficiency and green buildings to land-use and innovation. Amassing at least 100 “green points” out of a possible 200 earned certification as a “Green Government.”

The level of participation in the Challenge was impressive. Sixty-eight VML member local governments took the time to register their interest on the Go Green Virginia Web site at [www.GoGreenVa.org](http://www.GoGreenVa.org). Of those 68, 41 local governments chose to participate in the Challenge and submit their accomplishments for review. And of those 41, 26 achieved the minimum score of 100 “green points” that was necessary for certification as a “VML-Certified Green Government.”



Town Manager Robert Lohr and Council Member C.J. Walker III joined with Mayor Lazaro in accepting the award on behalf of the Town.

## Town and PBPA Help Businesses Go Green

### Business Recycling Container Placed at Fireman's Field

To help businesses with an effective, economical way to reduce waste, the Town of Purcellville and the Purcellville Business & Professional Association (PBPA) have teamed up to place a recycling container for business use in the east parking lot beside the Skating Rink at Fireman's Field. The service began on April 1, 2009.

Purcellville businesses can bring their commingled recyclables and place them in the eight-yard container provided by the Town's refuse and recycling contractor, American Disposal Services. Access to the container in the east parking lot is via 20th Street.



ReStore, a new business in Purcellville affiliated with Habitat for Humanity, held a grand opening on April 18 featuring former Washington Redskin and Hall-of-Famer Art Monk. The store is located at Purcellville Plaza on Main Street. ReStore is a resale business that sells new and used building materials and home improvement items to the general public and contractors. All materials are donated by local retail businesses, building contractors, suppliers, and individuals, and are made available for sale to the public at 50 percent to 90 percent below retail prices.

“The Town is pleased to once again partner with the PBPA to improve the environment,” said Mayor Bob Lazaro who also spearheaded the Town's effort to establish a Committee on the Environment in 2008.

More businesses are expected to recycle as a result of this central collection point which will reduce the amount of recyclables sent to the landfill. Quarterly reports on the amount of recyclables collected at this container will be provided to the Town by the contractor.

Items that can be commingled and recycled are as follows: glass bottles and jars, aluminum and steel cans, food and beverage containers, plastic bottles and jugs, newspapers, magazines, phone books, junk mail, cracker and cereal boxes and corrugated boxes. American Disposal Services asks that containers such as bottles be thoroughly rinsed and drained and that corrugated boxes be flattened. Plastic bags are not accepted and all items not listed above should be disposed of as trash in another appropriate container.

Businesses may drop off recyclables during daylight hours, seven days a week. The container is not intended for residential use. American Disposal Services will collect the recyclables every Wednesday.

For additional information, contact American Disposal Services at 866-884-8700. Further information on single stream recycling can be found at [www.american-disposal.com](http://www.american-disposal.com).

## Town Sponsors Water Resources Alternatives Open House

The Town hosted an open house on Saturday, April 25, 2009 at Town Hall for residents to learn more about the ongoing Water Resources Study and potential alternatives for additional water supply. The information presented at the open house pertained to four questions of interest to residents: where do we get our water; why do we need more; how are we going to get more; and how will the Town meet its future water needs.

Purcellville currently gets its water from a reservoir and six groundwater wells. When one of these sources becomes depleted, it strains the Town's ability to produce sufficient water to meet demand. As was evident during recent summer droughts, Purcellville needs more water when demand is highest and supply diminishes.

The Town has already taken steps to reduce water needs and increase the water supply through implementation of a water conservation incentive program; starting up a new groundwater well, increasing pumping capacity on existing wells, and signing two new agreements for water from private wells; and adopting the Town Comprehensive Plan to ensure that growth occurs in planned areas and at a rate that can be supported by Town utilities. Together, these improvements increased the Town's water capacity by 71 percent. However, these improvements will only help the Town meet its short-term water needs.

To meet mid-term and long-term water needs, the Town is identifying potential locations for new groundwater wells, talking to neighboring water suppliers, and analyzing the potential for beneficial water reuse.

To learn more about implementation of the Water Resource Study, go to the Town website, [www.purcellvilleva.gov](http://www.purcellvilleva.gov).



## **Mayor & Town Council**

Mayor Robert W. Lazaro, Jr.

Vice-Mayor Stephen Varnecky

Thomas A. Priscilla, Jr.

Christopher J. Walker, III

Gregory W. Wagner

James O. Wiley

Joan Lehr

### **TOWN OF PURCELLVILLE**

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