

Summer 2011

100% more!  
See page 3  
for details.

*The Occoquan Reservoir*

## It's NOT Just Water Over the Dam

Now that Fairfax Water has the capacity to treat 345 million gallons of water a day, it is hard to believe there was a time when our only source of water was the Occoquan Reservoir and it could support a capacity of only 50 million gallons per day. The reservoir was created when the Alexandria Water Company constructed the Upper Occoquan Dam in the late 1950s. Fairfax Water purchased the Alexandria Water Company in 1967.

It was clear even then that we would need to expand our water supply and facilities to meet the growing customer demand for water.

Before plans to increase the water supply could be put in place, Hurricane Agnes hit in 1972. After nearly 16 inches of rain, the Occoquan water treatment facilities were flooded, storage tanks were depleted, and system pressure was lost. The supply line between the reservoir and the treatment plant was severely damaged.

Limited water service was restored to Fairfax County in 35 hours and full service was restored in eight days.



*The Occoquan Reservoir and Dam*

The storm provided an opportunity for Fairfax Water to build new water-treatment facilities and add to the water supply. To augment water-supply storage, the height of

*See Occoquan Reservoir, page 2*

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*Fairfax Water Technology Division*

## Moving Water With A Mouse

Fairfax Water moves an average of 167 million gallons of water every day - 24 hours a day and 365 days a year. You probably don't think about it when you turn on the shower or the washing machine, but somewhere a computer is ensuring that you have the water you need. For the Fairfax Water Technology Division, technology is not just a tool, but a strategy we use to run lean and clean!

There are three departments in the Technology Division. The *Information Technology Department* supports our computers, phones, hardware, software, servers and network. In other words, they ensure that employees have the technology to do their jobs and to communicate with each other and with our customers. One of the most important functions of this department is securing our technology to protect the critical information stored on our hardware and software.

The *Business Solutions Support Department* focuses on using technology to enhance our operations. They work with front-line employees to design systems that work smarter. For example, field personnel are now provided with mobile-computing capability so they can complete much of their work without returning to the office throughout the day.

*See Moving Water, page 2*

## The Occoquan Reservoir *Cont. from page 1*

the Occoquan Dam was raised two feet in the late 1970s, bringing the reservoir capacity to 8.3 billion gallons.

The reservoir covers a surface area of 1,539 acres. It is 14 miles long, 65 feet at its maximum depth, and 900



feet at its widest. The Occoquan Dam is 122 feet above mean sea level. A downstream tunnel delivers raw water to a pumping station and from there to the Griffith Water Treatment Plant. The plant

has the capacity to treat up to 120 million gallons of water from the reservoir each day.

In 2010, work began on the Occoquan Dam to renovate the dam's powerhouse, remove hydroelectric generation equipment, and replace it with water supply equipment and controls. Initially, the dam



was used for both water supply and hydroelectric generation, mainly to power water pumps and a now-closed treatment plant. The hydroelectric generation equipment is no longer functional due

to age and, based on research, it does not make sense economically to restore it to operational condition.

It is anticipated that the renovation to the dam will be completed in June 2012. During the renovation work, the dam will continue to function and you will not notice any difference in the supply or quality of your drinking water. You can see more photos of the dam

## Moving Water *Cont. from page 1*

This department also manages our new enterprise system, which consolidates almost all our operations. If you call Fairfax Water with a problem, this system follows the progress of your call until your concern is

*I only hope we don't lose sight of one thing - that it was all started by a mouse. Walt Disney*

resolved. Employees can track everything from the number of fire hydrants in the warehouse to the maintenance schedule for a fleet vehicle.

The *Instrumentation and System Control Department* is responsible for the systems that operate the treatment plants and pumps, route water, and adjust the flow in response to customer demand. These systems also alert plant operators to any changes in the treatment process. Using technology allows us to operate our plants efficiently and securely with fewer employees.

When it comes to the importance of the Technology Division at Fairfax Water, the mouse rules! §

## Who Ya Gonna Call? Boat Busters!

Boating and fishing are allowed on the Occoquan Reservoir, but the presence of the dam creates a unique challenge for boaters. Two mishaps in the past few years resulted in boats being swept up in the current and carried dangerously close to the dam. Fortunately, the boaters were rescued safely, but their boats were destroyed when they were swept over the dam.



After extensive research on available safety options, in 2009 Fairfax Water installed approximately 1200 feet of



a continuously linked and highly visible floating barrier across the Occoquan Reservoir to define a security and safety zone above the Occoquan Dam. These "boat busters" not only provide additional safety for boaters,

they also provide a added security for our facilities.

If you plan to spend the day on the reservoir, remember that boat motors are limited to no more than 10 horsepower. And keep a close eye out for the boat busters. We don't want you to be the one that got away! §

renovation on our Web site at [www.fairfaxwater.org](http://www.fairfaxwater.org). Just scroll down on the homepage and you'll see a link to the dam photos under the heading, "Check Out Our Recent Construction Photos!" §

## Drink Responsibly

According to the Earth Policy Institute, the United States is the world's leading consumer of bottled water, with Americans drinking more than 26 billion liters a year, or approximately one 8-ounce glass per person every day. According to *Back<sub>2</sub>Tap*, the amount of oil currently used to produce water bottles each year could fuel over one million cars for an entire year. And it takes the equivalent of three bottles of water to make and distribute one bottled water.

In addition to the environmental impact of bottled water, consider this: As a Fairfax Water customer, you can fill a 20-ounce water bottle every single day for 10 years for the same cost as buying one 20-ounce bottled water for \$1.25. So join the back-to-the-tap movement and keep the earth – and your wallet – full of green! §



## The Jennings Randolph Reservoir

Now that the summer heat is here, water utilities across the country worry about the “D” word – drought! Thanks to some great planning in the 1970s by the three major water providers in the region, the Washington Aqueduct, the Washington Suburban Sanitary Commission, and Fairfax Water, we have a secret weapon to fight drought – the Jennings Randolph Reservoir.

The reservoir was built in 1981 on the Potomac’s North Branch in western Maryland and West Virginia and stores more than 13 billion gallons of water as a “savings account” against severe drought conditions.



Jennings Randolph Dam

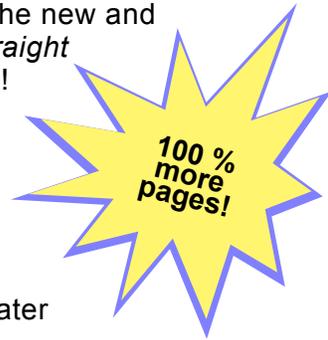
Generally, water supply withdrawals from the Potomac are a tiny fraction of the river’s flow. The average flow of the river is about seven billion gallons per day. The average summer demand of the region’s water utilities is about 500 million gallons per day.

Although our water supply is designed to meet demands in a drought, water can be released from the Jennings Randolph Reservoir to replenish the supply in the Potomac River if a serious drought threatens the region.

The water released from the reservoir flows about 225 miles down the Potomac and takes about nine days to reach our area. A regional agreement ensures that area water utilities share the additional water resources from the Jennings Randolph Reservoir equitably. §

## Glad You Asked!

Welcome to the new and expanded *Straight From the Tap!* We are very pleased to be able to bring you additional information about your water service.



But let’s get the BIG question answered first – how much is this expanded newsletter costing you? Here’s the bottom line – the expanded newsletter costs you about 16 cents a year for four issues. You may wonder why we don’t just post the newsletter on our Web site. Although we’re fortunate to live in a very “connected” community, 25 percent of our customers don’t have access to a computer. Given the importance of safe drinking water to the health and well-being of you and your family, we feel it is a good investment to expand the newsletter to provide additional information to all of our customers.

In this new version, we’ll provide new columns as well as additional news features. We’ve added a *Kid’s Corner* to reach out to our youngest customers and expanded the calendar to include water-related events in our community. The expansion also provides space to provide information from Fairfax County about the wastewater system and the fees that are included on your water bill.

And finally, we expanded this *Glad You Asked!* section. The section is devoted to your questions – so make sure you send them to [pr@fairfaxwater.org](mailto:pr@fairfaxwater.org) and we will answer as many as we can.

Fairfax Water is dedicated to providing safe, high-quality drinking water and top-notch service to our customers. We look forward to continuing this tradition with you! §

*If you have a question, concern, or compliment, please contact us at [pr@fairfaxwater.org](mailto:pr@fairfaxwater.org) or call 703-698-5600, TTY 711.*



### News from the Fairfax County Wastewater Division

Beginning with the Fall 2011 issue, information from the Fairfax County Wastewater Division will be included in *From the Tap*. Although a sanitary sewer charge appears on your water bill, wastewater services are not provided by Fairfax Water.

The Fairfax County Department of Public Works and Environmental Services’ Wastewater Division is responsible for the wastewater system.

Since we share the same customers, it just makes sense to consolidate our bills and eliminate the cost of sending two separate bills. However, the consolidation can cause confusion about whom to contact if you have a problem or question about sewer services. We hope that including information from the Wastewater Division will make it easier for you to find answers to your questions and contact the folks who are in the know when you need help.

The Wastewater Collection Division’s 24-Hour Trouble Response Center provides assistance to homeowners facing a sewer backup. If sewage is backing up in your home or if you observe sluggish flow in a sink, toilet, or tub, call 703-323-1211, TTY 711. If you observe an overflowing sanitary sewer manhole or wish to report an odor related to the sanitary sewer system, call 703-323-1211, TTY 711. For more information, visit the Fairfax County Web site at [www.fairfaxcounty.gov/dpwes/wastewater/](http://www.fairfaxcounty.gov/dpwes/wastewater/). §



**We Want to Know...**

If you have comments or suggestions about this publication, please e-mail us at [pr@fairfaxwater.org](mailto:pr@fairfaxwater.org), call us at 703-698-5600, or write to the address below:

From the Tap Editor  
Fairfax Water  
8570 Executive Park Ave.  
Fairfax, VA 22031

**Important Numbers**

**Fairfax Water Services**

Questions about water service:

703-698-5800

After-hours water emergencies:

703-698-5613

To report a water main break:

703-698-5613 or send an e-mail to [watermainbreak@fairfaxwater.org](mailto:watermainbreak@fairfaxwater.org).

Questions about billing:

703-698-5800

All other Fairfax Water departments:

703-698-5600

**Fairfax County Services**

24-hour trouble-response center for sewer back-ups or sluggish flow in a sink, toilet, or tub: 703-323-1211  
Sanitary sewer back-ups and line maintenance: 703-250-2003

**Dig with C.A.R.E.**

Miss Utility at 1-800-552-7001 or 811

Use TTY 711 (Virginia Relay) for all numbers unless otherwise stated.

**KIDS' CORNER**

**Fun Facts About Water...**

See how many of the questions you can answer and then check your answers below!

1. How much water does it take to make a hamburger?
2. How long can a person live without food?
3. How long can a person live without water?
4. How much water is used to flush a toilet?
5. How much water is used to brush your teeth?
6. How much water does an individual use daily?
7. How much of a chicken is water?
8. How much of a pineapple is water?
9. How much of an elephant is water?
10. How much of an ear of corn is water?
11. How much of you is water?



The Science Guy

- Answers**
1. Approximately one gallon
  2. More than a month
  3. Approximately one week
  4. Two to seven gallons
  5. Two gallons
  6. 50-100 gallons
  7. 25 percent
  8. 80 percent
  9. 70 percent
  10. 80 percent
  11. 70 percent

Source: The Environmental Protection Agency, Office of Water, [www.epa.gov/safewater.gov](http://www.epa.gov/safewater)

**MARK YOUR CALENDAR**



**Fri., June 10 – Sun., June 12**  
Visit Fairfax Water for a free glass of ice water at the annual Celebrate Fairfax festival.  
703-324-3247, TTY 711 r [www.celebratefairfax.com](http://www.celebratefairfax.com)

**Mon., July 4**  
Fairfax Water offices closed for Independence Day

**Thurs., Sept. 1 – Mon., Oct. 31**  
2011 Virginia Waterways Cleanup  
[www.signuptocleanup.org](http://www.signuptocleanup.org)

**Mon., Sept. 5**  
Fairfax Water offices closed for Labor Day

**Sat., Oct. 1**  
Fall For Fairfax KidsFest,  
[www.fallforfairfax.com](http://www.fallforfairfax.com)  
703-324-3247, TTY 711

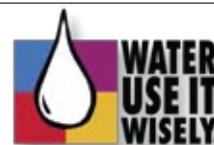
**Mon., Oct. 10**  
Fairfax Water offices closed for Columbus Day

**Fri., Nov. 11**  
Fairfax Water offices closed for Veterans Day

**Thurs., Nov. 24 & Fri., Nov. 25**  
Fairfax Water offices closed for Thanksgiving



Fairfax Water is a public, non-profit water authority serving nearly 1.7 million people in the Northern Virginia communities of Fairfax, Loudoun, Prince William, Fort Belvoir, Herndon, Dulles, and Alexandria.



**Water-Saving Tip**

Adjust sprinklers so only your lawn is watered and not the house, sidewalk, or street. If you have an automatic sprinkler, install a rain shut-off device to eliminate unnecessary watering. For more information and water-saving tips, visit [www.fairfaxwater.org](http://www.fairfaxwater.org).