



# Waterfront News

City of Norfolk  
Department of Utilities

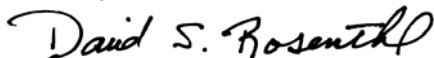
Spring 2008

## Dear Lakefront Resident:

Welcome to the second issue of *Waterfront News*. The first issue was very well received and I want to thank you for all of the positive comments. Due to the transient nature of the population in Hampton Roads, many of you have not lived in this area very long and may not know the history of the Norfolk Water System. In this issue I will give you a brief history of the system so that you have a better understanding of its importance. I will also expand on a few topics from the first issue and let you know how you can continue to preserve the water quality of the reservoirs for all of our various uses.

As always, if you have any questions or comments about the reservoirs, or this newsletter, you can contact me by email at [david.rosenthal@norfolk.gov](mailto:david.rosenthal@norfolk.gov) or by phone at (757) 441-5678. Our website is always being updated and you may find all the information you need at <http://www.norfolk.gov/utilities/resources/>

Sincerely,

  
David S. Rosenthal, CLM

## A Brief History of the Norfolk Water System

Prior to 1873 the City of Norfolk obtained its water from cisterns, public springs and wells. In the early 1870's the city leaders began exploring the area for a more reliable water source and ultimately chose an area in Princess Anne County called "Moore's Bridges." There were several streams in the area that flowed to Broad Creek and it was determined that if these two streams were dammed the resulting lakes would provide an adequate water supply. Along with the streams at Moore's Bridges, several ponds located on the plantation of Mr. Cole would "last 800 days without any rain." These three lakes are now known as Lake Wright, Lake Taylor and Lake Lawson. A "pumping station" was constructed at Moore's Bridges and the untreated lake water was pumped into Norfolk. In June 1885 the City purchased Lake Bradford and connected Lake Bradford to Lake Lawson by pipeline. The Engineers estimated there was "enough water for 1,611 days at 20 gal/person." However, by September 1885 the system was failing with only 30 days supply left in Lake Bradford. What is now known as Lake Smith was constructed downstream of Lake Lawson by placing a dam across "Taylor's Branch." The dam is now called Northampton Blvd. For the next ten years the city made do with what they had and began investigating other sources of water and the possibility of a filter plant connected to Lake Smith since that water was "impure if not filtered."

During the next 10-12 years the city investigated all possible sources near the City of Norfolk. Possible sources included Lake Drummond, Northwest River, Lake Joyce, an artesian well, Little Creek and the Lynnhaven River. The Council considered all of these options and decided that condemnation and acquisition of Little Creek was the most cost effective option and would provide the best long term solution. However, it wouldn't be until 1899 that construction was complete and water available. In the meantime, a pipeline was laid from Lake Joyce and an artesian well was drilled at the Moore's Bridges Filter Plant. Lake Joyce was unreliable and the well was abandoned in 1898 after complete failure. In 1899 Little Creek was condemned and two new lakes were created with the construction of the dam separating Little Creek Harbor from Little Creek Reservoir East and Little Creek Reservoir West. Little Creek Reservoir West is also known as Lake Whitehurst. These two lakes are interconnected by the Van Wyck Canal and connected to Lake Wright by Denny's Canal. The City of Norfolk now had a reliable supply for its new filtration plant built at Moore's Bridges next to the pumping station.

## What's inside:

- A History of the Water System
- Protecting the Reservoirs
- Our Reservoirs are a Regional Source for Recreation
- Shoreline Protection



## Protecting the Reservoirs for the Future

The City of Norfolk owns and manages almost 200 miles of shoreline including the equivalent of 11 square miles of property in four Hampton Roads jurisdictions. With this much area to cover, we need your help to protect the water quality in the reservoirs.

As you know we own property around each of the reservoirs and many of you use that area as an extension of your property. We have allowed the use of this property with appropriate permits for pier and bulkheads and encourage that the property be left in a “natural” state to help filter pollutants that might enter the reservoirs. We need your help in keeping this “buffer” area around the reservoirs clear of material that might be harmful to the reservoir. These items include yard waste—grass, leaves, tree limbs.

While we can't prevent leaves from falling into the water

every year, placing the leaves and cut grass from your yard in the buffer area, or even along the shore can be detrimental to water quality. If you compost your yard waste, please place the compost pile away from the water.

We also can't stop trees from falling into the reservoir. This is a natural process, and actually creates beneficial habitat in the reservoir. For more information on the benefit of trees in the water, please visit our website and read the article “A Second Life for Trees in Lakes”, first published by the North American Lake Management Society.

For more information visit our website at <http://www.norfolk.gov/utilities/resources/>.

## A Regional Source for Recreation

The Norfolk Reservoir System is well known in the area as a source of recreation. While the primary use of the water is as a source for drinking water, it is also used by various groups for all types of recreation.

Western Branch Reservoir and Lake Prince are known throughout the state for the number of Citation fish caught every year and Lake Smith is a favorite for the local bass fishing clubs. In addition to fishing, Lake Whitehurst is also the site of the local high school rowing regattas. Several weekends in the Spring are a great time to see local high schools competing in this unique sport.

The reservoirs are also part of the Virginia Birding and Wildlife Trail—Coastal Trail. This trail was developed with the nature enthusiast in mind. For more information and maps, visit the Virginia Department of Game and Inland Fisheries website at <http://www.dgif.virginia.gov/vbwt/>.

Using the Norfolk Reservoirs for recreation has been very popular since the reservoirs were created in 1873. Since that time, the City has established guidelines and regulations for fishing and boating to protect the reservoir water quality and the surrounding property. The reservoirs provide an excellent resource for recreation. Following a few reservoir rules, we can enjoy these waterways responsibly and protect water quality.



Some rules to know:

- The reservoirs and surrounding properties are open from sunrise to sunset.
- There is no fishing from shore except at designated areas at the fishing stations. However, if you have a pier, you may fish from your pier with a valid fishing license.
- Everyone must comply with state regulations for boating and fishing. This includes having a valid fishing license and all safety equipment.
- All boats must have a City of Norfolk boat permit, including canoes and kayaks. The permits are available at 400 Granby Street in Norfolk and at several satellite locations in Virginia Beach and Suffolk. Check our website at <http://www.norfolk.gov/utilities/resources> for location information.
- Boats with operational motors up to 12 h.p. are allowed in the reservoirs. You can also use a canoe or kayak. No inflatables, houseboats or personal water craft, such as jet skis are permissible in the lakes.
- Fish can be caught by rod and reel only. Netting is not allowed.

For a complete listing of all of the reservoir use regulations, you can visit your local library, call us at (757) 441-5678, or visit our website at <http://www.norfolk.gov/utilities/resources>.



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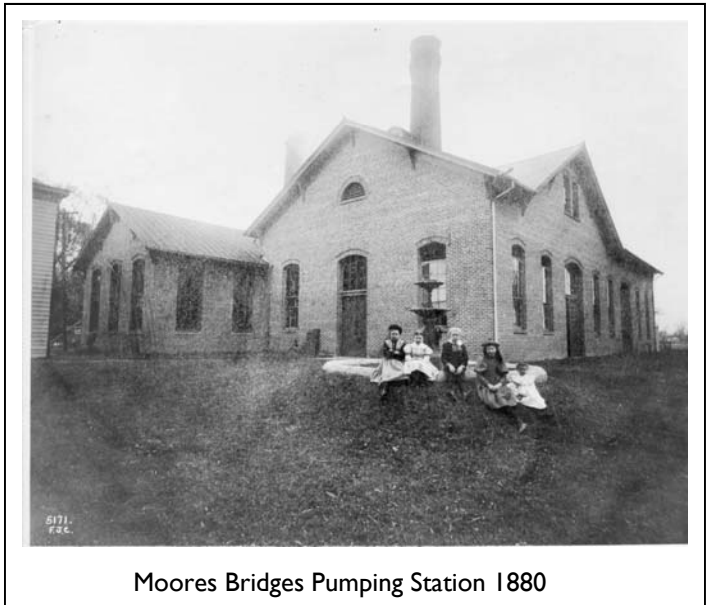
However, the city leaders projected tremendous growth in the area and continued to look for additional sources of water. Survey trips were made to the Blackwater, Nottoway and Chowan Rivers as well as areas in Nansemond County near the Western Branch of the Nansemond River. In 1912 the City purchased the Norfolk County Water Company, which included Stumpy Lake and diverted an existing pipeline to discharge Stumpy Lake water into the headwaters of Lake Lawson. In 1918 Norfolk acquired property to create Lake Prince and waited until 1940 to create Lake Burnt Mills. Following World War II, the Department of Defense conveyed two river pumping stations to the City for additional supply. These facilities are located on the Blackwater and Nottoway Rivers and are still in use. In 1960 Norfolk went back to Nansemond County and acquired property on the Western Branch of the Nansemond River. Western Branch Reservoir was constructed in 1963 and is located downstream of Lakes Prince and Burnt Mills. After a major drought in 1966, the city drilled four Deep Wells near Lake Prince and Burnt Mills to add water to the lake and increase the available water supply. In 2001 Stumpy Lake was sold to Virginia Beach and is now part of that city's water supply.

The water, both in the reservoirs and treated for drinking water is truly a regional resource. The reservoirs are used as a recreation source for the entire area, from as far away as Richmond and Petersburg and even North Carolina. The reservoir water is also supplied to Chesapeake for

treatment and to Portsmouth during low water conditions. The treated drinking water is supplied to Norfolk, Virginia Beach, a portion of Chesapeake and all Department of Defense installations.

These lakes are truly irreplaceable and it is everyone's responsibility to preserve them for the future.

For more information on how you can help protect the reservoirs, visit our website at <http://www.norfolk.gov/utilities/resources/>.



Moores Bridges Pumping Station 1880

## Shoreline Protection

Since the reservoirs were created over 100 years ago, the shoreline has changed. What was once plentiful with trees and shrubs is now surrounded by homes with green lawns and landscaping. The edge of the lake has changed as well due to natural processes. The City of Norfolk understands that some of these changes may affect your property as well and have attempted to provide you with opportunities to protect your property.



If erosion has changed the waters edge and is creating a condition that you feel needs to be addressed, we will be

happy to work with you to secure the shoreline. Please remember that this is City property and you should not attempt to address the problem without contacting us first.

There are several options available, the most desirable being a natural approach. We strongly encourage the growth of natural vegetation to secure the shoreline. This process may take several years to become effective, but will have the best long-term benefit to the reservoir. And if done correctly it can also be the least expensive.

There are situations where the natural vegetation alone cannot adequately address the situation, so we have approved methods that will allow you to secure the shoreline, such as with a riprap revetment.

If you would like more information, please contact us at (757) 441-5678 or view the information on our website at <http://www.norfolk.gov/utilities/resources/ShorelineProtection.asp>.



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# PROTECT IT

When it comes to protecting Norfolk's reservoir system, we're all in this together. Our actions around the reservoirs have an impact on the water quality in the lakes.

The area that drains into a body of water is called a *watershed*. A watershed also drains into the ground, affecting groundwater wells. Remember that water doesn't enter the lake just through backyards. Anything you do in your driveway, on the street and in the front yard can also affect the lake. Don't place grass, leaves, used motor oil and other fluids in the storm water system. These ditches and pipes are the fastest route to the lake. Also, if you have a septic system, please pump out regularly and watch for any wet spots in the yard that might indicate a problem with your drainage field. Thank you for being a water quality steward.

Remember—*your lake water becomes your tap water.*

