



We approach this holiday season wishing for peace on earth and good will. From all of us at Volusia County Water Resources and Utilities, may you find peace, health and happiness.

Cub Scouts tour Halifax Plantation water treatment plant

In September, seven cub scouts from Pack 74, Ormond Beach, along with their parents, took an educational tour of the Halifax Plantation Water Treatment Plant. Everyone learned about the water treatment process.

At the conclusion of the tour, scouts were challenged with questions on what they had learned. Water Wise activity kits were distributed, each containing a high efficiency showerhead, kitchen aerator, bathroom aerator, mini tape measure, water temperature check card and a drip/rain gauge. A variety of handouts, including information on the Halifax Water Treatment Plant and a water conservation coloring book, were given to the scouts

Volusia County Utilities encourages and welcomes tours for children, through school or scouting functions. Tours may be scheduled by calling (386) 822-6465.



Water plant upgrades making it safer for you

Water Resources and Utilities is nearly complete with the conversion from chlorine gas to sodium hypochlorite (commercial grade liquid bleach) for disinfection at all the County water plants. The County owns and operates treatment plants in DeBary, Deltona, Spruce Creek and Halifax Plantation. Before well water is treated and distributed to customers, chlorine is added for disinfection purposes to meet drinking water standards established by federal regulations. Historically chlorine gas has been used for disinfection of bacteriological pathogens found in groundwater.

Chlorine gas is a powerful oxidant, but the gas is toxic and irritates the respiratory system. Changing from gas to liquid bleach will provide the same quality disinfection to the County's customers, but liquid bleach will be safer and easier to handle for treatment plant operators and nearby residents. The liquid bleach still provides the level of disinfection required by drinking water standards.

The change from gas to liquid for the five largest water treatment plants is being completed by McMahon Construction Inc. DeLand at a cost of \$679,300.00. Construction is complete at the DeBary, Deltona and Spruce Creek plants. The Halifax Plantation water treatment plant conversion should be complete by the end of this year.



Merry mulch

Volusia County Solid Waste offers free "Merry Mulch" each year. Merry Mulch is made from ground up Christmas trees. Check

your newspapers in early January for availability. Volusia County Solid Waste offers regular mulch year-round, free. This is a great way to retain moisture around your plants, helping to reduce watering.

Waterwise plant of the month



Carolina holly
illex ambigua

Lake Drive stormwater improvements

Flooding issues in west Volusia County were particularly troublesome during the 2004 and 2005 hurricane seasons. Much of the area within west Volusia County has small depression zones called "closed basins." This means that water has no outlet or overflow point. The closed basin could be a lake or an isolated low spot.

One of these areas of flooding is Lake Drive, in the Domingo Reyes subdivision (unincorporated DeLand area). The road was flooded so severely that some cars were unable to cross. Pumping temporarily provided some relief.

A permanent solution recently has been completed. This involved the construction of a wide, shallow retention area along both sides of the road right of way, as well as an enlargement of an existing retention area. The flood storage capacity has been increased so any flooding will be unlikely in the future.



The Carolina holly or sand holly is a deciduous shrub or sometimes a small tree. It can grow to a height of 18 feet. The leaves are deciduous. Its flowers are approximately ¼ inch wide; with four (sometimes five) rounded white petals on short twigs. The tree bears red fruit that are ¼ inch in diameter. There are both male and female plants. The plants have proven to be tolerant in many varied weather conditions and sites. It is considered to be an evergreen and is native to Florida.

Warning: All *Ilex* species may be somewhat toxic if ingested.

Fun water facts

Drinking water moisturizes your skin from the inside out. Water is essential to maintaining elasticity and suppleness and helps prevent dryness.

Increased water consumption can help you to control weight by preventing you from confusing hunger with thirst. Water also will keep your body systems, including metabolism and digestion, working properly and give you the energy and hydration necessary for exercise.

By helping to flush toxins, appropriate water intake lessens the burden on your kidneys and liver.

Researchers at Loma Linda University in California studied more than 20,000 healthy men and women and found that people who drink more than five glasses of water a day were less likely to die from a heart attack or heart disease than those who drank fewer than two glasses a day.