

Customer Handbook



Hilton Head Public Service District (PSD) is the public water utility serving the north- and mid-island areas of Hilton Head Island. The Customer Handbook is your guide to your utility services. Please consult it when you have questions about your water and sewer service.

Publication Date: February 2014

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Contact Us

In person: Our Water Resource Center is located at 21 Oak Park Drive, off Mathews Drive. Office hours are from 8 a.m. to 5 p.m. Monday through Friday. Customers can pay bills, set up new service, and receive other customer service. The Water Resource Center also features a drop box service for bill payment. Please drop by and visit our friendly and efficient Customer Service Team.

Drive-Thru Window: Customers can use our Drive-Thru Window at our Water Resource Center from 8 a.m. to 5 p.m. Monday through Friday to pay bills and receive other customer service.

Telephone: Our Water Resource Center can be reached 24 hours a day at **(843) 681-5525.** A PSD field service technician is on call 24 hours a day to assist with service calls at your home or business. Customers can pay bills using their MasterCard, Visa or Discover by calling Customer Service between 8 a.m. and 5 p.m. Monday through Friday.

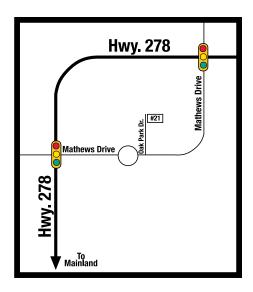
Internet: Our website, **www.hhpsd.com**, contains a wealth of information about the PSD and its services. Customers can pay their bill online, learn more about their water and how to use it wisely, meet their elected PSD Commission and much more. Questions and service requests can be emailed to the PSD at **info@hhpsd.com.** Additionally, our elected Hilton Head PSD Commission receives emails at **commissioners@hhpsd.com.** The Commission welcomes public input and would love to hear from you.

Mail:

Hilton Head Public Service District P.O. Box 21264 Hilton Head Island, SC 29925

Our physical address is:

Hilton Head Public Service District 21 Oak Park Drive Hilton Head Island, SC 29926



Customer Service

The PSD's staff is available to assist you with an array of customer service. Simply call our Water Resource Center at **(843) 681-5525** or email **info@hhpsd.com** for assistance with any of the following:

- Leak checks. Does your water bill seem inconsistent with your usage? You
 may have a leak on your property. PSD staff will come to your home or
 business to check for any possible leaks occurring outside the structure.
 We also will make emergency repairs if necessary.
- Low-Pressure checks. Are you experiencing low water pressure? PSD staff can assess the possible causes and provide information on available remedies.
- New service and address changes. Our Customer Service can assist you
 with establishing a new account or changing your billing address. Simply
 contact us at (843) 681-5525.
- Bill Payment. Please see the "Bill Payment Options" section of this handbook to find out about all of your options for paying your PSD water and sewer bill.



The PSD's Water Resource Center at 21 Oak Park Drive off Mathews Drive.

Bill Payment Options

Depending upon where you live or work in the PSD service area, you are billed either monthly or quarterly for your water and sewer service. PSD bills are sent via mail. Customers can pay their PSD bill using a variety of methods:

Online at www.hhpsd.com

Call our Customer Service at **(843) 681-5525** or email **onlinebilling@hhpsd.com** to set up your online account. MasterCard, Visa, Discover and American Express are accepted for payment online.

Check by mail

Send a check by mail to Hilton Head Public Service District, P.O. Box 602001, Charlotte, NC 28260-2001.

By phone

Call our Customer Service at **(843) 681-5525** to pay your bill using MasterCard, Visa or Discover.

By automatic bank draft

Simply provide the PSD with a cancelled check to set up automatic bank draft service.

Drive-Thru or Walk In

Both a drive-thru window and walk-in service are available between 8 a.m. and 5 p.m. Monday – Friday at our Water Resource Center at 21 Oak Park Drive off Mathews Drive on Hilton Head Island.

24-hour Secure Drop Box at our Water Resource Center

Payment can be made 24 hours a day at our Secure Drop Box on the left-hand side of the drive-thru lane at our Water Resource Center at 21 Oak Park Drive off Mathews Drive on Hilton Head. Please do not put cash in the drop box. No receipts are issued.

Bill Payment Policies

All PSD bills are due upon receipt and past due after the due date posted on the bill.

Service Termination & Reconnection

Service will be terminated on any account that is 30 days past due. All charges and a \$35 reconnection fee will be collected before service is restored. Service is restored during normal business hours, from 8 a.m. to 5 p.m. Monday – Friday (excluding holidays).

Late Fee

A late fee of \$5 or 2 percent of the bill amount, whichever is greater, will be collected for bills more than 30 days past due.

Returned Check Fee

Customers will be charged a \$15 fee for returned checks. If a check is returned, the amount of the check will be charged back to the customer's account and payment must be made by cash, money order, or cashier's check within 15 business days of notification, in order to avoid termination of service.

Meter Reading

The PSD currently uses "touch-read" meters for all customers. These state-of-the-art meters provide several benefits for customers and PSD staff. Because the meter data is transmitted automatically to hand-held devices carried by our meter readers, customers can be assured of accurate readings and protection against "human error." The touch-read system also aides in the efficiency of District meter readers, allowing our staff to collect more readings in a shorter period of time, using less manpower. Meter readers simply "touch" the hand-held device to the top of your property's meter box, and the reading is transmitted and recorded.

The PSD is moving toward installation of an Advanced Metering Infrastructure (AMI) meter reading system. These "smart meters" are updated, digital versions of the traditional water meter. The meters are read using transmitters. Communication between the meter at your home or business and the transmitters provides an array of benefits for the customer and the utility:

 Meters can be read remotely, thereby reducing meter-reading administrative costs.

- The new technology reads meters in shorter intervals, which means:
 - PSD can identify possible leaks on the customer's property and in our distribution system, reducing the potential for costly repairs.
 - PSD can provide customers with information about not only how much water they're using, but also when they're using it, which helps customers consider how they can use water more efficiently.

AMI meters already are installed in more than half of all utilities in North America. The PSD believes this important technological upgrade will benefit our customers and the utility for decades to come.

PSD Community Room



The PSD Community Room at our Water Resource Center on Oak Park Drive is used by a wide variety of civic groups for meetings and presentations.

The Hilton Head PSD Community Room is located at our Water Resource Center at 21 Oak Park Drive, off Mathews Drive. The Community Room is available free of charge to nonprofit and civic groups in need of meeting space. In fact our Community Room is one of the few free meeting spaces available to the public on Hilton Head Island. The room can accommodate groups of up to 100. It is fully equipped with a kitchenette, projection screen, chairs, easels, folding tables, and restrooms. The room is used by a variety of civic groups. The PSD asks groups using the room to make a contribution to the Bucks for a Better Island Fund to help low-income customers cover utility bills and connect to the public sewer system. To reserve the Community Room, please contact Customer Service at **(843) 681-5525**.



The PSD offers tours of our Recycled Water Plant on Oak Park Drive and our Reverse Osmosis (RO) Water Treatment Facility on Jenkins Island.

Facility Tours & Speaking Opportunities

We would be glad to give you or your group a tour of our Reverse Osmosis Water Treatment Facility and our Recycled Water Plant. PSD staff also is available to speak to your group about our services and the water environment on Hilton Head Island. Simply contact our Water Resource Center at **(843) 681-5525** or email us at **info@hhpsd.com** to learn more.

Commercial Grease Trap Program

Hilton Head PSD's service area includes scores of restaurants and other businesses that are required under state law to have commercial grease traps to reduce the introduction of fats, oils and greases into the public wastewater system. The PSD performs scheduled inspections of the grease traps. PSD staff also educates commercial customers about the reduction of fats, oils and greases and the proper maintenance of their grease traps. Please contact Customer Service at **(843) 681-5525** if you have any questions about the grease trap program.

PSD Quick Facts

- Serves more than 18,000 customers in the north- and mid-island areas.
- Provides an average of 6 million gallons of water per day.
- Experiences a peak demand of 11 million gallons of water a day in the summer.



The PSD's Fire Station Well draws water from the fresh water Upper Floridan Aquifer. It is located in the Spanish Wells area.

- Provides water from three different sources:
 - Reverse Osmosis (RO) Water Treatment Facility on Jenkins Island treats brackish groundwater from the 600-foot-deep Middle Floridan Aquifer. The RO plant provides 3 million gallons of fresh water a day and is expandable to provide 6 million gallons a day.
 - Wholesale water is purchased from the Beaufort-Jasper Water & Sewer Authority and is delivered to the island via a large pipeline underneath the Intracoastal Waterway.
 - Wholesale water also is stored in the PSD's Aquifer Storage & Recovery well inside Hilton Head Plantation. The ASR well stores the treated water during the winter months of low demand and withdraws it for retreatment and distribution during the summer months of higher demand, when wholesale water rates are more expensive. The ASR well provides 2 million gallons of water a day during the summer months.
 - Water wells in the 150-foot-deep fresh water Upper Floridan Aquifer.
 These wells are the island's traditional source of water but are being lost to the phenomenon of saltwater intrusion into the fresh water aquifer.
- Has the ability to provide a total of 2.8 billion gallons of water per year.
- Uses five elevated water storage tanks and three ground-level tanks with a collective capacity of 8.4 million gallons.
- Maintains more than 220 miles of water lines throughout our service area.
- Maintains more than 200 miles of sewer mains throughout our service area.
- Maintains more than 120 sewer lift stations located throughout our service area.

- Operates a Recycled Water Plant with a capacity to treat and recycle 6.4 million gallons of wastewater per day.
- Recycles more than

 billion gallons of
 wastewater a year for
 beneficial use in golf
 course irrigation and
 wetlands nourishment.
 No wastewater is
 discharged to area
 waterways.
- Provides recycled water to 11 golf courses for use in irrigation.
- Provides recycled water to four wetlands in Hilton Head Plantation and Palmetto Hall as part of a statemonitored wetlands nourishment program.



Renowned wetlands biologist Todd Ballantine monitors the PSD's recycled water program. This photo shows Todd taking measurements in the Palmetto Hall wetlands. Photo by Marianne Ballantine.

 Uses three storage lagoons capable of holding up to 30 million gallons of recycled water.



Hilton Head PSD recycled water feeds the Cypress Conservancy wetlands in Hilton Head Plantation. Recycled water helps maintain this vital plant and wildlife habitat. Photo by Marianne Ballantine.

History

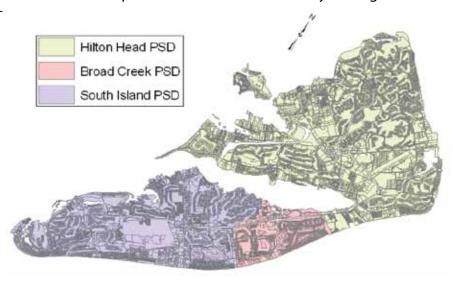
The Hilton Head Public Service District (PSD) is a special purpose district created by the South Carolina General Assembly in 1969 to provide water and sewer services to Hilton Head Island.

Residents of Hilton Head Island relied on private wells for their water needs until 1957. At that time, a local development firm called the Hilton Head Water Company introduced a community waterworks system, installing water lines and drilling wells throughout the island. As the community expanded and development progressed, however, Hilton Head citizens became increasingly aware of the need for enhanced services, a need especially apparent in fire protection, water flow and sewer services.

Ten separate utilities, both public and private, provided water and wastewater services to the residents of the island at the time of the District's creation. Beginning in 1995, the District acquired the four utilities that now comprise its current service area, including Hilton Head Plantation Utilities, Hilton Head Island Rural Community Water District, Coastal Utilities and Hilton Head Utilities. In addition, the PSD acquired two small systems on the island previously served by the Beaufort-Jasper Water & Sewer Authority. Consolidation of the remaining island utilities formed the three public service districts currently serving Hilton

Head Island – Hilton Head, Broad Creek, and South Island PSDs.

Today, Hilton Head PSD serves more than 18,000 customers in the north- and mid-island areas of Hilton Head Island, from



Windmill Harbour to the Hilton Head Resort.

The remainder of Hilton Head Island is served by either the Broad Creek PSD, which serves Palmetto Dunes and the Shelter Cove area, or South Island PSD, which serves all areas of the island south of Shelter Cove. The three island PSDs work together on an array of issues, including staff training, hurricane operations and recovery, and future water supply planning.

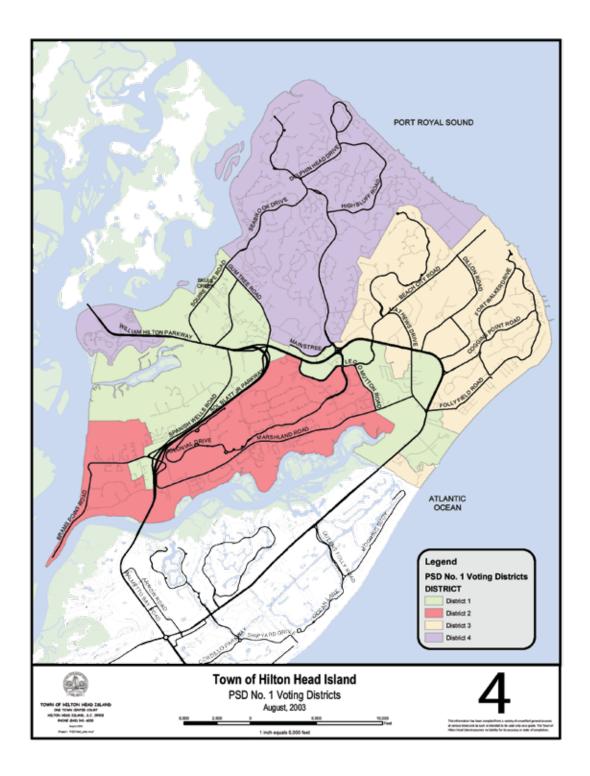
The PSD Commission & PSD Voting Districts

Hilton Head PSD is governed by a seven-member Board of Commissioners. The commissioners are elected to four-year terms during general election cycles, from four separate voting districts within the PSD service area. The voting districts are:

- District 1 (One commissioner): Comprises areas along William Hilton Parkway, Squire Pope, Wild Horse, and Gumtree roads in the Stoney neighborhood, as well as the Chaplin neighborhood and part of the Spanish Wells neighborhood.
- **District 2** (One commissioner): Comprises Indigo Run and Spanish Wells Plantation as well as areas along Spanish Wells and Marshland roads.
- **District 3** (Two commissioners): Comprises Port Royal and Palmetto Hall plantations and the Union Cemetery Road area.
- **District 4** (Three commissioners): Comprises Hilton Head Plantation and the Main Street area.

The Commission's duties include setting the policies and long-term goals of the PSD, and approving the annual operating budget and PSD property tax rate. The Commission also selects and employs the PSD's general manager.

The Commission normally meets on the fourth Tuesday of each month. Meetings are held in the PSD Community Room, at our Water Resources Center at 21 Oak Park Drive, off Mathews Drive. The public is welcome and customer input is invited. Customers can contact the Commission via email at commissioners@hhpsd.com.



Hilton Head Public Service District Vision, Mission & Strategic Goals

VISION STATEMENT:

Our vision is to be a state of the art water and sewer public utility, operated by an excellent, highly trained staff, providing the best practical levels of customer service and satisfaction.

MISSION STATEMENT:

Hilton Head Public Service District's mission is to:

- A. Provide high quality drinking water, wastewater treatment and recycled water services to customers within the District;
- B. Deliver those services in a cost-effective and timely manner,
- C. Maintain sensitivity to the needs of the community, and
- D. Contribute to the improvement of public health and the environment of the District.

STRATEGIC GOALS:

Goal No. 1 – Water Services: Meet all of our customers' water supply needs with the highest quality water possible in a cost-effective manner.

Goal No. 2 – Water Reclamation Services: Meet all of the District's wastewater process and reclamation services in a cost-effective manner while enhancing and protecting the Island's environment.

Goal No. 3 – Environmental: Operate in a sustainable manner with high regard for protecting and improving the environment.

Goal No. 4 – Customer Satisfaction: Direct all activities to achieve a consistently high level of customer satisfaction.

Goal No. 5 – Financial Responsibility: Conduct all District activity in a fiscally responsible manner.

Goal No. 6 – Organizational Excellence and Leadership: Achieve organizational excellence and leadership.

Goal No. 7 – Asset Management: Improve, maintain and secure the District's property, information, plant and equipment assets.

Goal No. 8 – External Relations: Develop, expand and leverage the District's positive relationships with external organizations, utilities and governments.

Where Does the Water Come From?

The PSD has multiple sources of water, which allows us to select from the most economical options for our customers and also provides us with resiliency in the face of a natural disaster such as a hurricane. Let's look at the sources and treatment techniques for the PSD's water.

Reverse Osmosis (RO) Water Treatment Facility

The PSD's Reverse Osmosis (RO) Water Treatment Facility provides more than 40 percent of our water supply. Reverse osmosis is a pressure-driven membrane separation process that removes ions, salts, and other dissolved solids and nonvolatile organic compounds. The separation capability of the process is controlled by the diffusion rate of solutes through a barrier and by sieving. The membranes are comprised of synthetic polymers similar to Nylon. The polymers are permeable to water but reject particulate matter such as salts and other minerals. The process produces fresh water and yields a concentrate of the rejected solids.

The PSD's RO Plant, located across U.S. 278 from Windmill Harbour, began operations in April 2009. It provides customers with 3 million gallons of fresh water a day, about half of the average daily demand for water. In 2013, the PSD began preparations to expand the plant's production to 4 million gallons a day. The RO Plant's construction was necessary to replace water supply lost to saltwater intrusion. The plant uses state-of-the-art filtration to produce a very high-quality water. In fact, it's the same process used to produce many brandname bottled waters and other beverages. The RO plant is expandable to provide 6 million gallons of water a day. The PSD has the capability to expand the plant in



The PSD's RO Plant is located on Jenkins Island. The reverse osmosis process produces high-quality water and is the same process used to produce many brand-name bottled waters.

1-MGD (million gallons per day) increments, thereby allowing the plant's capacity to increase as it is needed to replace water supply lost as a result of saltwater intrusion.



The interior of the PSD's RO Plant on Jenkins Island.

The RO Plant is fed by three raw water wells drilled into the 600-foot-deep Middle Floridan Aguifer. The wells are pumped at a rate of approximately 1,500 gallons per minute (gpm) and the plant operates 24/7. The groundwater in this aguifer is brackish and requires filtration in the RO Plant. For every 3 MGD of water produced by the plant, less than 1 MGD of

concentrate is diffused into the saltwater background of Skull Creek via a pipeline at the end of Jenkins Island Road. Scientific research and monitoring has shown that the Middle Floridan Aquifer is a very abundant and long-term source of water for the island's future.

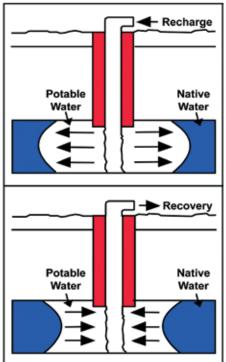
Wholesale Water

We purchase wholesale water from the Beaufort-Jasper Water & Sewer Authority (BJWSA). This treated water enters the PSD's water storage tanks via a large pipeline underneath the Intracoastal Waterway. Wholesale water comprises about 30 percent of our current water supply.

Aquifer Storage & Recovery (ASR) Well

The PSD constructed the island's first-ever Aquifer Storage & Recovery (ASR) well inside Hilton Head Plantation in 2011. The well both stores and withdraws water. During the winter months of low water demand, the PSD takes advantage of a reduced wholesale water rate from BJWSA and stores wholesale water in the Middle Floridan Aquifer using the ASR well. Then, in the summer months when water demand and the wholesale water rate increase, the ASR well is used to withdraw and re-treat 2 MGD of water.

The ASR process involved the PSD injecting 240 million gallons of treated wholesale water into the 600-foot-deep Middle Floridan Aquifer to build a bubble of fresh water in the brackish aquifer. The fresh water displaces the



The ASR process involves injecting treated water into the underground aquifer and then withdrawing and retreating it for distribution.

brackish water and a buffer zone is created at the edges of the fresh water bubble. When the ASR well is used to withdraw water, the water is drawn from the center of the fresh water bubble.

The Upper Floridan Aquifer

The Upper Floridan (Floor-ih-dun) Aquifer is a limestone, freshwater aquifer located 50 to 150 feet underground. It is one of the largest aquifers in the world, and stretches from the Beaufort area southward through the Florida Everglades. Groundwater from this aquifer requires little treatment. The PSD utilizes automatic feeders that supply precise amounts of chloramines at our wells to treat the groundwater.

Unfortunately, this aquifer has been impacted by saltwater intrusion.



The PSD built the island's first-ever Aquifer Storage & Recovery (ASR) well in 2011. It is located inside Hilton Head Plantation.

Water Quality Testing

The PSD routinely collects water samples for analysis from its wells, treated wholesale water supplies, storage tanks and numerous strategically located sampling sites throughout the distribution system. In fact, more than 500 samples of PSD water are analyzed during the year to verify the safety of the water we provide to you. We analyze the quality of our water in our Water Quality Laboratory. The PSD posts its annual Water Quality Report to its hhpsd.com website each year.

Visit the U.S. Environmental Protection Agency's "Water" homepage at **http://water.epa.gov** for a wide array of information about national water quality regulations.



The PSD routinely performs both lab and field tests of our water quality to ensure the safety of the water we provide to our customers.

Water Hardness

Hardness is a measure of the amount of naturally occurring minerals found in water, namely calcium and magnesium. While calcium and magnesium are essential minerals for human health, hardness may cause spotting on dishes and shower walls, affect the lathering of soap or cause deposits on water related fixtures. The PSD has implemented measures to reduce hardness levels, which in the past have been significantly higher than current figures. Depending on the

exact blend of water coming from different sources at any given moment, water hardness levels may vary.

To determine the water hardness level in your particular area, refer to the "Water Hardness" page at **www.hhpsd.com**. We regularly update the hardness level at designated sampling points throughout our service area.

Saltwater Intrusion & Hilton Head's Response

The water supply coming from our Upper Floridan wells continues to be threatened by saltwater intrusion. Extensive scientific research conducted by the states of South Carolina and Georgia, the U.S. Geological Survey and the PSD have shown that the intrusion is advancing at a rate of about 400 feet per year across Hilton Head and all Upper Floridan wells on the island will eventually be lost to the intrusion. The PSD has lost six of its 12 Upper Floridan wells since 2000 and anticipates losing five of the remaining six wells by 2024.

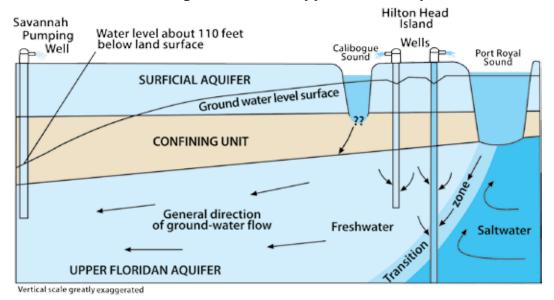
Studies and monitoring have shown that the over-pumping of this aquifer in the Savannah, Ga., region has reversed the flow of the groundwater bringing saltwater from Port Royal Sound into the Upper Floridan Aquifer at Hilton Head Island. Some naturally-occurring plumes of saltwater also have impacted the Upper Floridan.

Hilton Head Island's withdrawals from the Upper Floridan Aquifer have been capped by the State of South Carolina since 1997. In that same year, Hilton Head and Broad Creek PSDs spent \$16 million to construct a 24-inch water supply transmission line and related distribution equipment to bring wholesale water to the island. The PSD's RO Plant and ASR well were needed to replace water supply lost as a result of saltwater intrusion into the Upper Floridan. The island's three PSDs estimate that they have collectively spent \$129 million combatting saltwater intrusion since 1998 – including the development of alternative water supplies and purchasing more wholesale water. The three utilities estimate that another \$80 million may be spent in the next 20 years to continue replacing lost supply.

Saltwater Intrusion Timeline:

- 1995 South Carolina Department of Health and Environmental Control (DHEC) declares capacity use zone.
- 1999 Pipeline from mainland provides treated wholesale water.
- 2000 PSD begins losing wells to saltwater intrusion.
- 2004-2006 PSD undertakes series of feasibility studies to determine alternative supply options.
- 2009 PSD opens its Reverse Osmosis (RO) Plant.
- 2011 PSD builds island's first-ever Aquifer Storage & Recovery (ASR) well.
- 2013 PSD plans to add an additional 1 million gallons per day capacity to RO Plant.

The illustration below shows a cross section of the saltwater intrusion affecting Hilton Head's Upper Floridan Aquifer wells.



Recycled Water & the Wastewater Treatment Process

The PSD annually recycles more than 1 billion gallons of wastewater into beneficial recycled water. It then plays a vital role in the island's economy and ecology by providing irrigation water for 11 golf courses – thereby conserving precious water. Recycled water also is used to nourish wetlands in Palmetto Hall and Hilton Head Plantation. Renowned wetlands biologist Todd Ballantine



The PSD's Water Resource Center and Recycled Water Plant are located on Oak Park Drive off Mathews Drive, behind Port Royal Plaza.



The PSD uses sodium hypochlorite – or liquid chlorine – to treat recycled water.

monitors the wetlands for the PSD and reports that these unique habitats for plants and wildlife would cease to exist without the benefit of recycled water.

The recycled water process mimics, at an accelerated rate, the naturally occurring process of water purification. In the initial phase of treatment, screens and grit chambers remove large solids as

well as sand and gravel, protecting the remaining treatment infrastructure from excessive wear and damage. The wastewater then flows to the aeration



The "Muffin Monster" is a state-of-the-art machine that removes large solids from the wastewater stream and makes our treatment process more efficient.

basin where microbes biologically break down or consume the organic matter. After aeration, the water flows to the sedimentation tank, or clarifier, where the water is separated from microorganisms and solids that settle by gravity. The water then receives a chlorine injection to destroy any remaining bacteria or microorganisms. Finally, the water undergoes tertiary, or advanced, treatment that removes extremely fine solids and particles. The bio-solids produced by the process are dewatered and disposed of in a sanitary landfill.

The recycled water is then stored at the PSD's Recycled Water Plant on Oak Park drive, pumped to designated lagoons and tanks at golf courses, or sent to the wetlands.

The PSD and the Town of Hilton Head Island

The PSD is its own local governmental subdivision and is not a department of the Town of Hilton Head Island. However, the PSD and the Town government work closely on an array of issues, including extending the public sewer system, water supply projects, emergency response and hurricane operations, and construction permitting. The PSD's Water Resource Center also houses the Town's 911 dispatchers and serves as the Town's Emergency Operations Center in the event of a hurricane or other disaster. The 911 dispatchers also handle the PSD's after-hours calls on our **681-5525** hotline.



The PSD continues to roll out the public sewer system in our service area.

The Town has partnered with the PSD to work on the issue of installing sewer service in areas of the island that still rely upon septic tanks. More than \$3 million in Town funding has been dedicated in recent years to installing sewer service in neighborhoods along Squire Pope, Wildhorse, Spanish Wells, Mitchellville, and Fish Haul roads. Septic tanks have been found to be ill-suited to the island's high groundwater table and sandy soils, resulting in frequent failures. The Town Council has adopted a goal of eliminating septic tank usage on Hilton Head Island.



Sewer pump stations like this one are needed to move wastewater to the PSD's Recycled Water Plant. The utility operates more than 120 sewer pump stations throughout our service area.

Sewer Service Extension Program

The PSD in 2004 embarked upon a long-range program to provide access to the public sewer system to all properties in our service area. That effort has since resulted in more than 95 percent of the PSD's service area now having sewer access. Several projects that kicked off in 2013 will help push the PSD toward its goal of 100-percent sewer access throughout our service area.

The Town of Hilton Head Island has been an integral partner in this effort by providing funding for projects as well as town-owned land for the location of needed sewer infrastructure. The PSD Commission and Town Council have held a series of "Sewer Summits" to gauge their progress toward the goal of 100-percent sewer access.



The PSD constructed a sewer pump station to serve the mid-Spanish Wells Road area.

The PSD uses two types of sewer systems. The primary system is known as gravity sewer. Sewer service lines, known as laterals, from homes and businesses connect to PVC sewer mains in the street. These mains conduct the wastewater via gravity to a nearby sewer pump station or to a pressurized sewer force main.

The utility also uses low-pressure sewer systems. This type of sewer system uses a grinder pump that works similar to a garbage disposal and is located outside and adjacent to the home it is servicing. The unit is buried. Solid materials in the household wastewater are ground into a liquid form and then pumped out into a pressurized small-diameter HDPE pipe and transported to the PSD's conventional gravity sewer system. The pressurized lines eliminate the need for gravity to force the wastewater from homes to the gravity sewer system. In many cases, the low-pressure sewer pipes can be bored into the ground – rather than placed in trenches like gravity sewer mains. That means less construction disruption to neighborhoods, such as tree removal and tearing up roads in order to bury gravity sewer lines. These features make the low pressure sewer system an excellent alternative for existing neighborhoods. The PSD remains responsible for the maintenance of low-pressure sewer systems after installation.

The PSD's Recycled Water Plant on Oak Park Drive is the final destination for all wastewater collected in the public sewer system. The PSD annually recycles more than 1 billion gallons of wastewater into beneficial recycled water for golf course irrigation and wetlands nourishment.

Project SAFE

The effort to provide access to the public sewer system on Hilton Head Island still is going strong. Project SAFE (Sewer Access for Everyone) plays a key role in the effort by providing sewer connection grants for low- and moderate-income homeowners. SAFE has provided more than \$300,000 in connection assistance since 2001 – helping more than 130 families connect to sewer.

But hundreds of homes on Hilton Head remain unconnected to the public sewer system, relying instead upon septic systems to treat their household waste. Unfortunately, septic systems frequently fail on Hilton Head due to our high

groundwater table and numerous tree roots. These failures can pose a threat to public health and to the island's environment and waterways. Hilton Head Public Service District (PSD) and the Town of Hilton Head Island have a shared goal of eliminating septic system usage on the island. Unfortunately, many of



the homes that are without sewer connection are owned by low-income families that struggle to meet the cost of installing sewer. That's where Project SAFE, a charitable fund of the Community Foundation of the Lowcountry, steps in.

You can help protect public health and the quality of life on Hilton Head Island by making a donation to Project SAFE today. Call the Foundation at **(843) 681-9100** or Hilton Head PSD at **(843) 681-5525** and say you'd like to make a donation to Project SAFE. To donate online, simply visit the Foundation



Play it SAFE

What if your children couldn't play in the backyard because the soil is soggy and polluted from a failing septic system? Sadly, that is reality for many families on Hilton Head Island. Project SAFE, a charitable fund of the Community Foundation of the Lowcountry, provides qualified homeowners with assistance in connecting to the public sewer system.

Please consider giving to Project SAFE by calling the Community Foundation of the Lowcountry at (843) 681-9100 or visit www.cf-lowcountry.org/give/donate-online and choose "Project SAFE Fund" from the drop-down menu on your screen.

You'll be helping to make the Lowcountry quality of life we all envision a reality for your neighbors in need.







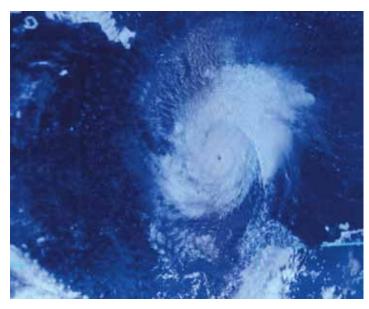
at **www.cf-lowcountry.org**. Select "Give" from the top menu bar and then select "Donate Online." You will be directed to a page where you can choose "Project SAFE Fund" from the drop-down menu of funds.

Bucks for a Better Island

Bucks for a Better Island is the PSD's utility bill round-up program. Customers contribute more than \$30,000 annually to Bucks for a Better Island by rounding up their monthly or quarterly utility bills to the next-highest dollar. Donations are directed to either Project SAFE to help qualified homeowners connect to the public sewer system, or they are directed to The Deep Well Project, which helps qualified clients cover their utility bills. More than 90 percent of PSD customers participate in Bucks for a Better Island. Customers' bills are automatically rounded up and customers need only contact the PSD if they do not wish to participate.

Hurricanes and Your Water Service

In the event of a hurricane, the PSD has developed a detailed emergency operations plan to protect both the water distribution system and wastewater treatment facility, as well as help ensure the safety of PSD employees and customers. It is important to remember that utility services may not be available to you as a result of a hurricane or other natural disaster. This makes it all the more



important for you to heed all evacuation notices and give yourself and your family plenty of time to get to safety. Please review the information below about your water and sewer services in the event of a hurricane:

In case of an evacuation, when will water service be discontinued?

For most areas of the PSD, the water system will remain pressurized. However, in certain areas where mains are vulnerable to wash-out from tidal surges, water service will be shut down prior to the arrival of gale force winds. Additional areas of the PSD are subject to shut-down or loss of pressure if a water main break occurs and cannot be repaired without placing utility personnel in danger.

Will the sanitary sewer system continue to function during an evacuation?

All sewer lift stations are shut down prior to the arrival of gale force winds to

prevent damage from flooding and sand. While the gravity sewers may function for a limited time, there is no guarantee. Again, the potential unavailability of utility services is a key reason why you need to evacuate the island when the order is given.

Can the PSD turn off water service to my residence if I am evacuating?

Your residence should have a separate shut-off valve on your side of the meter box or just prior to the point where your water service line enters the foundation of your home. See the section entitled "Finding Your Water Shut-Off Valve" in this handbook for more information. The PSD will respond to requests to shut off individual water service only if personnel are available.

How much water should I store for use during or after the storm?

- Store at last three gallons of water for each person and pet for each day you may be without water
- Store water in clean, non-corrosive, tightly covered containers
- Store containers in a cool, dark location
- Collect water in bathtubs for non-drinking uses

Will PSD personnel remain present during an evacuation?

PSD personnel evacuate the island at the same time as do Town of Hilton Head Island Fire & Rescue personnel, which typically is prior to the arrival of sustained gale force winds.

How long does it take to get the water and sewer systems operational after a storm?

PSD personnel return to the island at the same time as Town of Hilton Head Island Fire & Rescue personnel. While it depends on the extent of damage, it can take a minimum of twelve hours or more, assuming no major damage has occurred, to restore the sewer system to operational status and to verify that the water is safe. It is important to consider the availability of water and sewer service before returning to the island after a storm. Bear in mind, an evacuation order may be lifted prior to the restoration of utility services.

How do I find out if my tap water is safe for drinking after the storm?

As you are returning to your residence after an evacuation, check one of the following sources of information:

- Tune to local radio stations
- Call the PSD Emergency Information Hotline at (843) 681-0555
- Check the PSD's web site at www.hhpsd.com

 Visit the "Hilton Head PSD" Facebook fan page or our @HiltonHeadPSD Twitter feed

Any areas that lose water service during the storm are automatically under a boil water advisory for at least 24 hours after water service is restored, or until notice is given otherwise. It is recommended that you use your stored water for drinking until safety of the tap water is verified.

How can I make tap water safe by boiling?

Use water from the cold water tap only. Heat the water in a clean container until it reaches a full boil, and continue boiling for at least three minutes. You can accelerate cooling by pouring the water back and forth between containers. Note that the boiling of water removes the chlorine or chloramine disinfectant residual. Boiled water should be used soon after it cools. Otherwise, refrigerate it or add a commercially available disinfectant tablet, which can be found at most camping supply stores.

Important numbers

Preparation is the key to a safe hurricane season. If you have questions about hurricane preparation, please contact the Beaufort County Emergency Management Department at **(843) 255-4000**, or visit the National Hurricane Center on the Web at **www.nhc.noaa.gov**.

The PSD's Emergency Information Hotline is **(843) 681-0555**. The Beaufort County Hurricane Information Line is **(800) 963-5023**. Keep these numbers with you in the event of an evacuation and call for updates on reentry and other important information.

Finding Your Water Shut-Off Valve

Your water can be shut off at the main valve. Everyone in your home should know where this is located. The main valve (usually with a wheel-type handle) normally is located either on the customer side of the meter box or just outside the point where the service line penetrates the foundation of the house. It will be in line with your water meter, which is usually located near the edge of your property line near the street.

Some homes may also have a water shut-off valve located in the garage. Bear in mind that closing such a valve will turn off water to the interior of the home, but not the exterior.

Also remember to turn off all electrical appliances that use water, such as water heaters, so that they do not create a safety hazard if they lose water. There also may

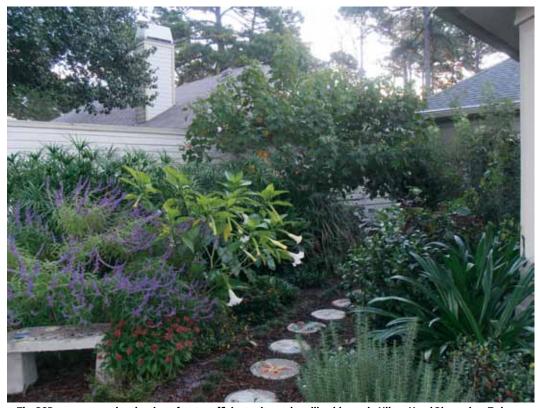
be valves on appliances and fixtures, such as the water heater, washing machine and toilet. It is a good idea to turn these valves on and off from time to time in order to ensure they're working when you need them.

If you have questions about your water service in the event of a hurricane, please contact the PSD at **(843) 681-5525** or **info@hhpsd.com**.

Water Efficiency & Irrigation

Hilton Head PSD encourages our customers to practice the efficient use of water both indoors and outdoors. The PSD partners with the Clemson University Extension Service to provide customer education about water-efficient and environmentally friendly landscape and lawn care practices. The PSD's Community Room is home to Clemson Extension's Master Gardener program on Hilton Head Island.

Clemson Extension offers an important program entitled Carolina Yards & Neighborhoods that teaches nine principles to help you create a landscape that uses less water and requires less maintenance. Carolina Yards & Neighborhoods can be found on the internet at www.clemson.edu/cyn



The PSD encourages the planting of water-efficient rain gardens like this one in Hilton Head Plantation. To learn more visit Clemson Extension's Carolina Clear program at www.clemson.edu/carolinaclear.

There are a variety of free resources available to help you learn more about water efficiency. Below are links to sources we recommend:

Clemson Extension Service main office: www.clemson.edu/extension Clemson Extension Service Beaufort County office: www.clemson.edu/beaufort

Clemson Extension Carolina Yards & Neighborhoods: www.clemson.edu/cyn

Clemson Extension Carolina Clear: www.clemson.edu/carolinaclear The American Water Works Association (AWWA): www.awwa.org

The Water Environment Federation (WEF): www.wef.org

The Alliance for Water Efficiency (AWE): www.allianceforwaterefficiency.org

The H2ouse: www.h2ouse.org

Clemson Extension's Beaufort County office can be reached at (843) 255-6060.

Local Irrigation Law

Hilton Head PSD estimates that nearly half of all water consumed by our customers is for irrigation. We strongly believe it is each property owner's duty to irrigate responsibly in order to efficiently use our greatest natural resource – water. The Town of Hilton Head Island has adopted the following irrigation ordinance and the PSD strongly encourages property owners to adhere to this local law:

Town of Hilton Head Island Municipal Code Sec. 17-10-211 Exterior landscape irrigation restricted.

Exterior landscape irrigation is hereby limited to the following days for all customers within the town limits, as follows:

- (1) Detached, single-family residential with even-numbered address: Exterior landscape irrigation is permitted for customers having an even-numbered address on Tuesdays and Saturdays only.
- (2) Detached, single-family residential with odd-numbered address: Exterior landscape irrigation is permitted for customers having an odd-numbered address on Wednesdays and Sundays only.
- (3) Commercial/office/institutional/hotels and motels on a separately platted lot of record: Exterior landscape irrigation is permitted for customers on Mondays and Thursdays only.
- (4) Common areas and locations having no street address, box number or rural route number: Exterior landscape irrigation is permitted for customers on Mondays and Thursdays only.

Local Rain Sensor Law

Rain sensors, or rain shut-off devices, are designed to interrupt the cycle of an automatic irrigation system controller when a specific amount of rainfall has occurred. They are small devices wired to the irrigation system controller and mounted in an open area where they are exposed to rainfall.

To learn more about rain sensors, visit the Alliance for Water Efficiency's web page about these devices at:

www.allianceforwaterefficiency.org/Rainfall_Shutoff_Devices.aspx

The Town of Hilton Head Island requires rain sensors and the PSD strongly

encourages all customers to adhere to this local law:

Town of Hilton Head Island Municipal Code Sec. 17-10-313 Rain sensors required in new exterior landscape irrigation systems.

Any customer who installs a new exterior landscape irrigation system, in whole or in part after March 16, 1992, shall install a rain sensor on that irrigation system.

Flushing Your Water Heater

Many of us take for granted the hot water

that water heaters provide to our home on a daily basis. However, proper maintenance, including regular flushing, is essential to prolonging the life of the water heater and avoiding costly repairs.

As water goes through the water heater, mineral content settles at the bottom of the heater. As the sediment hardens, it provides a buffer area between the heating element and the water, reducing the heater's ability to heat the water. Accumulated sediment may eventually clog the drain valve, as well. You can avoid excessive mineral build-up by draining the water heater regularly.



Hilton Head PSD wants you to help save water. Know the local irrigation law:

- Single family homes with even-numbered addresses irrigate on Tuesdays and Saturdays only.
- Single family homes with odd-numbered addresses irrigate on Wednesdays and Sundays only.
- Commercial buildings irrigate on Mondays and Thursdays only.

It's the law. It's the right thing to do!



Following are some guidelines for flushing your water heater. Gas and electric heaters vary slightly, so be sure to read thoroughly before you begin. Please note that the following information is provided for general information purposes only. It is recommended that you refer to your manufacturer's direction for specific instructions.

- **Step 1** For gas water heaters, turn the gas control knob to the 'off' position. If you are not familiar with procedures for relighting your gas water heater, please consult with a plumber or gas supplier. With electrical water heaters, shut off electricity to the water heater at the circuit breaker panel.
- **Step 2** Turn on all cold water taps in the home, including faucets and showers. All of the taps should be running simultaneously. This allows fresh water from the street to flush the home's interior plumbing.
- **Step 3** Allow the taps to run for two to three minutes.
- **Step 4** Shut off all cold water taps.
- **Step 5** Turn on all hot water taps in the home at the same time, including faucets and showers. All of the taps should be running simultaneously. This scours the interior of the water heater, as well as the home's interior plumbing.
- **Step 6** Allow the taps to run until the water becomes cold, and until there is no sediment nor odor coming from the taps.
- **Step 7** Shut off all hot water taps.
- **Step 8** Restore the electricity to water heater at circuit breaker panel. Hot water should be available within 30 45 minutes. For gas water heaters, follow your manufacturer's lighting instructions or contact a gas supplier.

There are several factors to consider for determining the frequency of draining the water heater. High mineral content and water hardness levels necessitate more frequent draining. You can refer to the "Water Hardness" page at **www.hhpsd.com** for information specific to your area. In addition, excessive hot water use may require a greater frequency. However, because recommendations vary among models, you should consult with the manufacturer or product manual to determine specific time frames for draining your water heater.

Please contact the PSD if you have any questions regarding the flushing of your water heater at **(843) 681-5525**.

The Hilton Head Public Service District makes no warranties nor representations and assumes no liability for physical injury or property damage in any way related to or arising out of the above procedures or the draining of your water heater. Always consult your manufacturer's instructions for safety procedures before draining your water heater.

Water Facts

- Water covers 70.9% of Earth's surface.
- Only 3% of Earth's water is fresh water. The other 97% is salt water.
- Surface water (rivers, lakes, streams, etc.) comprises 0.3% of Earth's fresh water.
- 68.7% of fresh water is trapped in glaciers.
- 30% of fresh water is in the ground.
- Water comprises 55 to 78% of a human's body weight.
- It takes more than 10 gallons of water to make one slice of bread.
- · More than 700 gallons of water are needed to make one T-shirt.
- About 640 gallons of water are needed to make one hamburger.

The PSD has planted rain gardens at the entrance to our Water Resource Center on Oak Park Drive. The rain gardens feature Beauty Berry, Blue Flag Iris, Ajuga "Chocolate Chip" and Ruellia. They are fed by rain barrels located under downspouts. Visit the Water Efficiency page at www.hhpsd.com to learn more about water-efficient landscapes.



Notes



(843) 681-5525 www.hhpsd.com