



21 Oak Park Drive  
PO Box 21264  
Hilton Head Island, SC 29925  
[www.hhpsd.com](http://www.hhpsd.com)

---

## **HILTON HEAD PUBLIC SERVICE DISTRICT MASTER SEWER PLAN**

April, 2015

### **I. Introduction**

Hilton Head No. 1 Public Service District aka Hilton Head PSD, here also referred to as the "District" was formed in 1969 by act of the South Carolina legislature to provide water and sewer service to the north part of Hilton Head Island. Since that time, the District has grown and expanded with the area and now serves 22 square miles of Hilton Head and Jenkins Island. Approximately 95 percent of the District's customers have sewer available, but 5 percent remain without access to sewer service. The same concerns of public health and environmental degradation remain.

Due to significant progress in the last five years, the Hilton Head PSD Commission instructed staff to create a new Master Sewer Plan, with the goal of providing service to every parcel of land in the District. With the assistance of a consulting professional engineer (Lowcountry Engineering), the District has completed a design and cost estimates to serve the entire north end of Hilton Head including the system improvements necessary for the ultimate build-out of the Island.

Currently, the District has water service throughout its entire service and those not connected are served by private wells by their own decision. Total number of residences and businesses served by private water systems is minimal, estimated at no more than fifty (50) including Wells East.

The District currently serves 16,786 water customers (homes and businesses) of that 15,589 or 92.88 percent have sewer service as well. In addition, approximately 300 customers have sewer available but have not connected. Thus, approximately 95 (94.7%) percent have sewer service available.

The District owns and maintains a wastewater recycling (treatment) plant capable of treating 6.4 million gallons per day, which is more than enough to meet the needs of the District customers at the ultimate build-out of the district service area.

## II. Background

Prior to development, Hilton Head Island residents and businesses waste disposal needs were provided by septic tanks or other systems. Hilton Head's soils and notoriously high water table complicated by development at urban levels and the clustering of homes, made a central waste disposal systems necessary. Planned unit developments (PUDs) began constructing their own systems or contracting with a Public Service District (PSD) to provide service on a District-wide basis. With this process some areas were left out or not considered.

In late 2003, the Town of Hilton Head (Town) and Hilton Head PSD jointly determined that a plan was necessary to serve the unserved areas with sanitary sewer. At that time, 80 percent of the District was served, but mostly the planned unit developments (PUDs) of Hilton Head, Port Royal, Indigo Run, Palmetto Hall, Port Royal and Windmill Harbour. The Master Sewer Plan was to develop an overall engineering plan to bring sewer service to all areas of the District. The plan did not develop a process for all individual properties to be served or a funding mechanism.

Starting in 2005, a series of "Sewer Summits", meetings of the elected representatives of the Town and Hilton Head PSD as well as the public and other interested parties have been held on a regular basis (2005, 2008 and 2011) to update the elected officials and the community of the progress in extending sewer service. Since the 2011 Sewer Summit, significant progress has been made with the completion of several major Town funded projects (Baygall, Stoney Area, Chaplin and others).

After the 2005 Sewer Summit, the Town approved a series of policies to assist Hilton Head PSD in extending sewer service, which included:

- The Town committed to bring sewer service to its existing and planned parks and public buildings.
- The Town assistance would be used to lower the cost of connecting for all unserved residents.
- The Town reaffirms its commitment to securing rights-of-way on private dirt roads.
- The Town would work with the PSDs, the County, the State and Palmetto Electric to coordinate paving, drainage improvements, power line burial and extension of water and sewer service to neighborhoods in a cost-effective manner.
- The Town would reaffirm its commitment to work with HHPSD, Project SAFE, and residents.

The District, with a goal of providing sewer service to everyone, has:

- Designed and constructed the Town-funded (TIF and CIP) sewer extension projects.
- Used new minimally evasive construction techniques to serve existing neighborhoods.
- Managed and funded the SAFE (Sewers Access for Everyone) program through customer contributions, to assist low to moderate customers' connection to the

sewer system. Approximately \$800,000 has been spent to assist low to moderate income customers connect to the sewer system over the years.

- Provided long-term, low-cost financing for customers to extend sewer service and connect using the front foot assessment funding method (FFA). The District has funded over \$8.8 million dollars of front foot assessment projects. Some of the areas served by FFA are Port Royal PUD, Squiresgate, Folly Field, Holiday Homes, Burkes Beach, Bradley Beach, Blue Heron Pointe, Spanish Pointe and numerous individual lots.
- Added new lift stations to serve unserved areas.
- Maintains a sewer treatment plant large enough to meet all future needs of the District.

With this partnership of effort, the District has service available to 95 percent of its customers up from 2003 when only 80 percent had sewer available.

### **III. The New Master Sewer Plan - 2015**

Approximately 900 parcels do not have access to sewer service. Parcels can represent one or multiple customers. The new Master Sewer Plan to provide service to currently unserved areas deals with reaching these unserved parcels.

The 2005 Master Sewer Plan was developed to identify system infrastructure needs, thereby having a plan when development or outside funding was available to bring sewer service to the twenty (20) identified areas. The new Master Sewer Plan (2015) concentrates on providing service to all properties and the system improvements necessary to serve the ultimate build-out of the District (according to the Town's recently approved Land Management Ordinance (LMO)). It divides the remaining unserved areas into ten (10) project areas based on main streets. See attached Master Sewer Plan Map.

#### **A. Funding Master Sewer Plan Construction Projects**

##### **1. Customer Projects**

Customer Projects are projects to serve individual customers, neighborhoods and/or new developments and have been funded by:

- Customer or contractor funds – Customers and developers provided their funds to extend sewer service from their own resources.
- Front foot assessment (FFA) – FFA is a process outlined in state law where the District creates a taxing district for the purpose of providing improvements to an area. The individual properties are assessed and pay back the loans through their property taxes. To date, the District has borrowed \$8.8 to bring sewer service into areas at customer request and provided financing assistance to connect to the sewer system.
- Town funded (TIF and/or CIP) – The Town of Hilton Head has funded projects via the Tax Increment Funding (TIF) Program, Town Capital Budget (CIP) and a

Community Development Block Grant (CDBG) Program. To date total \$3,471,000. See Appendix B for a list of Town funded projects.

- District funded – Hilton Head PSD has funded some customer projects, but just incidental to other Capital Budget projects.

## **2. District Projects**

District Projects are projects to accommodate new customers such as new/upgraded sewer lift stations, force mains, upsizing of gravity sewer mains and expansion of waste treatment equipment/facilities. These projects have been funded by:

- Developer contributions – Include on-site and off-site facilities to serve their project. These facilities include lift stations, force mains and gravity sewer.
- Long-term debt – The District has and will in the future borrow to fund capital facilities when current funding is not available.
- System capacity fees – Also known impact fees or system development charges are charges paid by new customers to connect to the sewer service based on the amount of loading they will add to the system. Capacity fees are calculated based on current existing sewer system debt and future improvements necessary to serve future customers.

### **B. Costs to Serve the Remaining Unserved Areas**

The **Customer Projects** to provide access to the remaining unserved areas are:

No. 1	Squire Pope Road	\$264,519
No. 2	Gumtree Road	487,188
No. 3	Stoney Initiative	450,738
No. 4	Fish Haul / Baygall Roads	501,126
No. 5	Dillon Road	597,975
No. 6	Chaplin Initiative	68,875
No. 7	Marshland Road	1,031,250
No. 8	Mid-Spanish Wells Road	445,238
No. 9	Spanish Wells Plantation (Private Subdivision)	617,963
No. 10	South Spanish Wells Road	415,938

**Total = \$4,880,806**

The **District Projects** to provide access to the remaining unserved areas are:

- Three new sewer pump stations (in area Nos. 7 and 10) = **\$1.2 million**

### C. Barriers to Serving the Remaining Unserved Areas

The remaining unserved areas are characterized by significant barriers to providing sewer service. Some of these barriers are:

- **Economics or ability to pay** – Most of the unserved areas are home to low to moderate income families who do not have the resources to extend sewer service or connect even with long-term, low interest loans available.
- **Private/unpaved roads** – Acquiring easements on private roads has proven difficult to the Town as well as the District.
- **Interior lots** – May require service by easement on other person's property which may also prove difficult to acquire even though they may have a right of access agreement.
- **Disinterested customers** – Not all customers, especially those with good operating septic tanks, are interested in sewer service such as our Spanish Wells POA experience.
- **SCDOT encroachment requirements** – Have become extremely burdensome as time has passed.
- **Rental properties** – Many of the low to moderate income areas have a preponderance of rental properties and landlords, especially absentee landlords, may not be interested in taking on any new expenses.

### D. Ultimate Build-Out of the District

To meet the ultimate build-out of the District's service area, the District also will face an additional \$5,968,169 for projects such as:

- Upgrading ten (10) sewer pump stations and associated force mains
- Upsizing trunk lines
- Replacing low pressure sewer (LPS) with gravity sewer mains

These projects will be paid over time as connections occur and demand on the system warrants upgrades and upsizing.

Currently, the District serves 15,589 residential equivalent units (REUs), which are homes and business. An REU is an approximation (300 gallons per day) of how much a residential unit uses the sewer system. This calculation is applied to multi-family and commercial building based on guidelines provided by the South Carolina Department of Health & Environment Control (DHEC).

Another 1,438 REUs have sewer service available but are not connected. All but approximately 300 of the 1,438 available REUs are vacant lots and parcels. In addition, 718 of the 1,438 parcels have previously paid their sewer capacity fees.

Based on the Town's Land Management Ordinance (LMO) adopted earlier this year, the unserved areas of the District have approximately 3,546 potential REUs at build-out.

This assumes each property will be built-out to its highest and best use under the Town's LMO; it does not include the impact of future re-zonings.

Therefore, the ultimate build-out of the District is as follows:

Current REUs	15,589
Unconnected REUs	1,438
Unserved REUs	3,546

Total REUs at District Build-Out = 20,573

#### **IV. Proposed Action Plans**

Town and District action plans can be developed with an aim toward finishing the job of providing sewer access throughout the District's service area. Proposed action plans are:

##### District:

1. Complete the remaining sewer pump stations
2. Serve as project manager for Town-funded sewer projects
3. Provide long-term/low-interest financing for customers
4. Assist the Community Foundation in acquiring more funding for Project SAFE
5. Expand the "moderate income" definition for Project SAFE

##### Town:

1. Directly fund sewer line installations in unserved areas
2. Coordinate road/utility easement acquisition on private roads with sewer installation
3. Provide sewer pump station sites on Town-owned property
4. Assist Community Foundation in acquiring more funding for Project SAFE
5. Create a program to eliminate septic tanks by encouraging connection to sewer

#### **V. Next Steps**

To facilitate the proposed action plans, the following next steps are proposed:

1. **Town-PSD Staff Sewer Working Group.** Staff members from the Town and PSD would be tasked with:
  - Recommend prioritization/implementation schedule of Master Sewer Plan projects
  - Recommend funding options for Master Sewer Plan projects
2. **Town/PSD/Community Foundation.** Staff members from all three agencies would be tasked with:
  - Create a plan to increase Project SAFE funding
  - Expand Project SAFE eligibility for moderate-income applicants