# **Annual Update**

Visit the RWWMP Web page at www.HRSD.com for:

- Background information
- Related news articles
- Public presentations and
- Other related information

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HRSD Service Area Map

For information on everything green in Hampton Roads, visit: www.askHRgreen.org

#### Go to:

www.elizabethriver.org to learn how to make restoration a reality. February 2016

Volume 8, Issue 1

### HRSD Reports Progress on Sanitary Sewer Overflow (SSO) Reduction Program

Chris Wilson, P.E. Brown and Caldwell

HRSD held its annual meeting to review the status of the Regional Wet Weather Management Plan (RWWMP) on January 26, 2016. The public was invited to attend this session, which included information about the extensive cooperation between HRSD and the localities it serves. The wastewater system in the Hampton Roads region includes city and county (locality) owned local sewer collection systems and pumping stations, as well as HRSD owned regional pipelines, pumping stations and treatment plants.

HRSD is engaged in a multi-year effort to reduce sanitary sewer overflows (SSOs) in the Hampton Roads area. These overflows occur when the system is overloaded with excess storm water or groundwater that enters the system during rain events, or when pipes or pumps fail due to unexpected mechanical problems or pipe breaks. The SSO reduction program includes wide-scale monitoring of wastewater flows, pressures and rainfall; development of a computer model of the pipe network; inspection of the system's many assets (pipes and pumping stations); and development of a RWWMP. The HRSD system flow, pressure and rainfall monitoring program; development of the computer model; and condition assessment activities have been completed in previous years, although ongoing monitoring and model maintenance continues.

In 2014, HRSD completed an amendment to its Consent Decree with the United States Environmental Protection Agency (EPA) and

Virginia Department of Environmental Quality (DEQ) that shifts responsibility to HRSD for completing all the improvements required for the RWWMP. This responsibility had previously been split between HRSD and the localities. HRSD will continue to consult with the localities and exchange critical information necessary to develop the plan.

To implement this new approach, HRSD has been conducting an updated round of flow monitoring, pipeline condition assessment and sewer system modeling activities in the locality systems, which was completed in June 2015. These activities, along with data collected by the localities, provides a clearer picture of regional system condition and helps estimate the extent of sewer system rehabilitation needed to reduce the amount of rainwater and groundwater entering the sewers during wet weather. HRSD will continue to use the computer model to identify system capacity improvements and will submit an Alternatives Analysis to the EPA and DEQ by August 1, 2016. This analysis will document the results of this work and recommend a future Level of Service that can be attained in the regional sewer system. Following the submittal of the Alternatives Analysis Report, HRSD will work to complete the RWWMP and submit it to the EPA and DEQ not later than October I, 2017. HRSD will continue to consult with the localities throughout the RWWMP development process.

#### Tips to Protect Area Waterways

### Dos and Don'ts For Sewer Bowl Sunday

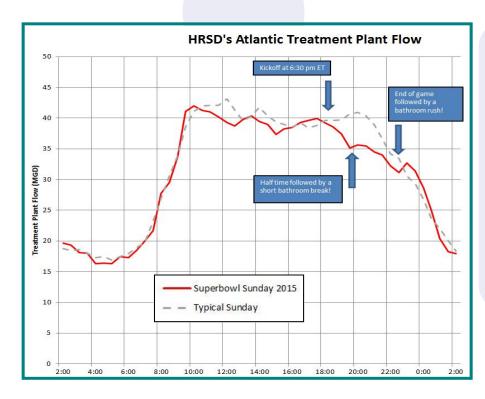
#### Sarah Crawford HRSD Community Educator

"Don't wait too long or you will have an accident." My 4-year old hears this all the time. In fact, she has recently started asking me, "Do you need to go potty?", which I think is some kind of passive-aggressive way to tell me to back off. I obviously have an issue with letting other people's "business" stay as their own business because it doesn't stop at my own children. I'm interested in everyone's toilet habits, but hey, it comes with the job.

For the past 3 years I've looked at sewage flow during the Super Bowl, and it turns out the region is fairly regular (pun intended) when it comes to wastewater flow during this unofficial American national holiday. Wastewater flow is lower than normal after kickoff while everyone is watching the game, with a spike in flow around half-time and a larger spike in flow at the end of the game when everyone who is "holding it" finally runs to the bathroom. Check out the flow graph below of HRSD's Atlantic Treatment Plant in Virginia Beach during the 2015 Super Bowl - that's some serious synchronized flushing.

HRSD knows when you flush thanks to more than 200 flow meters that give us eyes throughout the sewer system. More than I.6 million people flush and send their wastewater to us every day and these flow meters help ensure the proper collection and treatment of our region's wastewater. When you flush, the wastewater from your home's plumbing flows to the city-owned sewer pipeline and then to HRSD's pipeline system where it is sent to a wastewater treatment plant. At the plant, wastewater is treated and clean water is released into local waterways. In order to meet the wastewater needs of the region, HRSD keeps a close eye on what's coming down the pipes.

This year while you have your eyes on the game, we'll have our eyes on the sewer, and now that you've seen through the eyes of a sewer, don't just flush it and forget it. Help keep things flowing in the right direction by using a trash can for trash (not your toilet), and keeping fats, oils, and grease out of your sink drain. Sending them to the sewer can cause clogs and backups that lead to a sanitary sewer overflow. During a sewer overflow, untreated wastewater/sewage can quickly enter our stormwater drains and contaminate local waterways. And for all of you out there who held it during Super Bowl 49, I just have to say...this year please don't wait too long or you will have an accident.



Most of the time sanitary sewer flows follow a daily cycle, with higher residential flow during the daytime when we are typically awake. This pattern varies with the day of the week, holidays, and other events. In this graph, typical Sunday flow is shown in grey, and Super Bowl Sunday flow is shown in red. On Super Bowl Sunday, flow was below average during the game while fans were cheering for their favorite team, with an increase around half-time and a spike at the end of the game.

### **Pump Out, Don't Dump Out**

#### Sarah Crawford HRSD Community Educator

Wastewater comes from all different sources: sinks, toilets, showers, dishwashers, the list goes on and on. When we are at home or at work, all of this dirty water we create throughout the day is sent down the drain, pumped through pipes, and ends up at a wastewater treatment plant where it is cleaned and then discharged into local waterways. You probably just flush it and forget it. It's easy to do until you send something down the drain other than the 3 Ps (Pee, Poo, and [Toilet] Paper) that causes a clog and a sewer backup. Coming face to face with sewage is normally not a pleasant experience. We all want to keep it in the pipes.

However, not everyone can flush and forget. If you have a boat with a sanitary holding tank, you know that proper sewage disposal is not something that just magically happens. Nope, there is no sewage fairy that waves a magic wand and takes care of these things. When that tank fills up it's got to go somewhere, and someone's got to do it.

And that someone is us! HRSD offers a year-round boater Pump Out Program and we'll pump your sanitary holding tank for free. It's part of our Boater Education Program and one way we promote the proper disposal of wastewater from sanitary holding tanks and prevent dumping into waterways. HRSD was created 75 years ago to prevent sewage pollution, and we want to make it easy for boaters to do the right thing and help protect area waterways. Our network of over 500 miles of sewer pipelines might not reach your boat – but our Marina Interns will!

By remembering to Pump Out, Don't Dump Out, you'll help us ensure future generations inherit clean waterways and are able to keep them clean. Find out more about our Boater Education and Pump Out Program and schedule your pump out at <a href="http://www.hrsd.com/boatereducationproject">http://www.hrsd.com/boatereducationproject</a>.



HRSD Marina Interns make it easy for boaters to protect area waterways.





### Regional Wet Weather Management Plan

#### **Annual Update**

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### Locality Team Participants

Chesapeake

Gloucester

Hampton

Hampton Roads Planning District Commission

**HRSD** 

Isle of Wight

James City Service Authority

Newport News

Norfolk

Poquoson

Portsmouth

Smithfield

Suffolk

Virginia Beach

Williamsburg

York County

## Help Protect Our Waterways by Reporting Suspected Sanitary Sewer Overflows (SSOs)

Please call the number listed for your locality if you observe an SSO.

<u>Locality</u>	<b>During Business Hours</b>	After Business Hours
Chesapeake Public Utilities	757-382-6352	757-382-3550
Gloucester Public Utilities	804-693-4044	804-693-3890
Hampton Public Works	757-727-8311	757-727-8311
Isle of Wight Public Utilities	757-365-6284	757-357-2151
James City Service Authority	757-229-7421	757-229-7421
Newport News Public Works	757-933-2311	757-926-8195
Norfolk Public Utilities	757-823-1000	757-823-1000
Poquoson Public Works	757-868-3590	757-868-3501
Portsmouth Public Utilities	757-393-8561	757-393-8561
Suffolk Public Utilities	757-514-7000	757-514-7000
Town of Smithfield Public Works	757-365-4200	757-357-2151
Virginia Beach Public Utilities	757-385-1400	757-385-3111
Williamsburg Public Works and Utilities	757-220-6140	757-220-6196
York County Public Works	757-890-3752	757-890-3621

