ANNUAL UPDATE Regional Wet Weather Management Plan (RWWMP)



SWIFT Research Center Replenishes 100 Million Gallons of SWIFT Water[®]

Lacie Wever Community Education and Outreach Specialist, **HRSD**

On May 23, 2019, HRSD's Sustainable Water Initiative For Tomorrow (SWIFT) program celebrated replenishing the Potomac Aquifer with 100 million gallons of SWIFT Water[®]. HRSD employees from the Central Environmental Lab, Communications, Nansemond Treatment Plant, and Water Quality gathered at the SWIFT Research Center located on the grounds of HRSD's Nansemond Treatment Plant in Suffolk, VA to acknowledge this



moment. HRSD began recharging the Potomac Aquifer in May 2018, a few days before the SWIFT Research Center was opened to the public.

The SWIFT Water[®] used to replenish the Potomac Aquifer is wastewater treated to drinking water standards through an eight-step carbon-based advanced water treatment process. The multi-step disinfection process is used throughout the country and the world. The SWIFT Research Center is currently open to the public for tours. Tours are held on Wednesdays and Thursdays from 8AM—2PM and can be reserved through our online form. Students, educators, HRSD customers and water industry leaders are invited to visit. HRSD is currently taking steps toward opening the first full-scale SWIFT Facility at James River Treatment Plant in Newport News.

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

- Background information
- News articles
- Public presentations and
- Other related information

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Visit <u>askhrgreen.org</u> for information on everything green in Hampton Roads.

Visit elizabethriver.org to learn how to



Imagine A Day Without Water A Wednesday Without Water

Lacie Wever

Community Education and Outreach Specialist, HRSD



Wednesday, October 23 marked the fifth annual Imagine A Day Without Water. Imagine A Day Without Water is a day created to recognize the importance of water in the U.S. and bring awareness to the infrastructure needed to keep water flowing the way we have come to expect it. This year, HRSD hosted an outreach table outside the main office in Virginia Beach. In addition, HRSD hosted their SWIFT Pop-up Bar-at St. George Brewery in Hampton. At the pop-up bar, customers were given the opportunity to try SWIFT Water[®], wastewater treated to drinking water standards and chat about what it would be like to imagine a day without water. Customers in both locations were asked what a day without water would mean to them.



Beer could not be brewed

Of course, being at a brewery, water is very important to the staff. Beer is about 90% water. Before brewing, water must be tested in order to make sure it has the correct pH to brew the perfect beer. For the St. George Brewing Company, a day without water would mean a day without beer!

Hygiene standards would be different

One customer mentioned they could not imagine starting the day without a shower. "My morning shower is essential to the start of my day," the customer commented. No water, no shower.

Who would clean the wastewater?

For HRSD, a day without water would have a major impact on the more than

800 employees who help clean wastewater and return it to the environment. It would also impact the homes and businesses of 1.7 million residents in our service area. Can you imagine not having water to flush the toilet?

Water means something different to everyone. To some, water means clean. To others, water means the ability to cook and quench thirst. Some even associate water with recreation such as boating and fishing. To all of us however, water means survival. While we could live up to one month without food, we cannot live longer than one week without water. Despite this fact, Americans often take water for granted. In fact, our water services are so reliable we often

do not realize how clean water gets to our homes or where the dirty water is taken away. In Hampton Roads, clean water comes from your local utilities. The water is cleaned and sent through pipes into your home. The dirty water that is used from your home goes down the drain and travels to one of HRSD's 16 treatment plants before it is cleaned and returned to the environment. A day without water impacts public health and the lifeline of our communities.

Now, take a second, close your eyes and imagine the rest of your day without water. Will you be able to get that second cup of coffee or tea? Will you be able to use the bathroom or wash your hands? How would you shower or brush your teeth? Let's use this day to Imagine a Day Without Water, and all do our part to make sure we have clean water available for the future. in the future.





Old Habits Effectively communicating to those who "aren't there yet"

Lacie Wever

Community Education and Outreach Specialist, HRSD

This past weekend I went to Panera with my mom for lunch. We placed our order, paid, and received our drink cups. I went to the fountain to fill our cups with passion green tea (the best green tea there is!) and sat back down. My mom stared at the cup and then up at me.

"Where are the lids?" she asked, "And the straw? Where is the straw?"

"You don't need it," I responded, gently taking a sip from my cup, as if to prove a point. She laughed and began to get up from the table.

"I understand," she said "but I'm not there yet."

"It's just like drinking from a cup at home," I point out.

Still not convinced, she walked over to the drink counter and retrieved a lid and a straw for her cup. "I recycle at home," she said. "I do what I can."

Although the conversation ended there, I couldn't help but think more about this situation over the course of the day. Although my mom understood the reason I refused a disposable lid and straw, she still "wasn't there yet." As a Community Educator, I have a responsibility to teach others how to be environmental stewards of our Earth, but how do I teach someone who is not ready to learn? The question sat with me for a while before I remembered the last sentence my mom said to me: "I recycle at home. I do what I can." Although everything in me wanted to say, "Reduce, reuse, recycle, Mom. Reduce and reuse first, then recycle!" I knew that approach would not have been an effective way to communicate. It would not have gotten her any closer to refusing straws or reducing single-use plastics. Instead, I could have continued the conversation about recycling, encouraging her to make sure she was putting the right things in the bin and reinforcing an already positive environmental behavior.

Through my experience with community education, I have found this to be true of many people. It isn't that people don't understand the importance of being environmentally responsible; they may simply not be ready to take that extra step, to be that environmental overachiever – and I think it's important to acknowledge that it's okay. While it is important to educate as much as possible about how to be the best environmental stewards we can be (and all the benefits of doing



so), I realize that it is equally important to meet people where they are. Some may not be willing to give up single-use plastics just yet, but they would be interested in recycling their plastic bags at the grocery store. Some may not be willing to give up their plastic straws, but they recycle what they can at home. Some may forget their reusable bags at home (we've all been there!), but understand the benefits of reusable bags over plastic bags.

Even if you're not following every environmental tip on our blog, are you doing *something*? If we all consistently and correctly did something, we would have a large impact on our environment. Don't get discouraged if you're not the neighborhood environmental hero - every little bit counts. Whatever initiative you are currently doing, challenge yourself to continue as accurately and consistently as possible. If you recycle, recycle right. If you have pledged not to litter, put a litter bag in your car. If you don't buy bottled water, bring your own water bottle every day. And maybe, when you're ready, add a new initiative!

What is the old habit you have a hard time giving up for its eco -friendly alternative? What new initiative do you think you can incorporate into your lifestyle? Let us know on <u>Facebook</u> or <u>Twitter</u>.

ANNUAL UPDATE Regional Wet Weather Management Plan

Sanitary Sewer Overflow Report FY 2019 (July 1, 2018—June 30, 2019) Summary

Hampton Roads Sanitation District (HRSD) is required to track all Sanitary Sewer Overflows (SSOs) within the HRSD system. HRSD officially reports SSOs through Department of Environmental Quality's (DEQ) Sanitary Sewer Overflow Reporting System (SSORS) and maintains an internal database.



FY 2019 Summary

(Small Communities excluded)

- HRSD treated approximately 55.41 billion gallons of wastewater (WW).
- HRSD had 14 overflows from its sanitary sewer system.
- HRSD released approximately 1,366,725 gallons of WW.
- Volumes for 2 SSOs were unable to be estimated.
- Untreated water released is equal to 0.02247% of what HRSD treated.
 - 1,366,725 gallons of WW released / 55,506,600,000 X 100

SSO History 2010-2019

Fiscal Year	Number of SSOs	Volume Lost (Gallons)	Capacity Related	Rainfall Total (Inches)	Comments
2019	14	1,366,725	8	55.89	
2018	20	1,006,196	10	46.16	
2017	43	4,580,652	33	57.32	Hurricane Matthew - 2.1 mg from Laskin Road pipe break
2016	22	1,748,034	16	50.67	
2015	22	1,636,660	11	49.59	
2014	17	780,510	5	47.15	
2013	45	22,966,611	34	54.87	Hurricane Sandy - 18 mg from Wilroy Road pipe break
2012	33	2,446,481	18	52.00	
2011	43	3,118,964	28	41.20	
2010	59	3,378,912	43		
	HRSD	conveys and treats an	average of 55	5,000,000,000 gallo	ns each year.

By The Numbers: 2019 HRSD SSOs HRSD SSO Summary Charts

<u>Chart 1:</u> Number of FY 2019 HRSD SSOs by Cause (SSORS cause used)



Working with the Localities, standard causes for SSOs were created to categorize the reason the SSO occurred. The definition of each cause is listed below:

- **Capacity, non-weather:** overflow caused by lack of available capacity in the pipe, pump station or downstream infrastructure.
- **Capacity , weather related:** overflow caused by a lack of available capacity in the pipe, pump station or downstream infrastructure caused by weather.
- Infrastructure: overflow caused by equipment and/or pipe failure.
- Maintenance: overflow caused by maintenance-related issues.
- **Power Loss:** overflow caused by loss of grid power not related to storms.
- Power Loss, storm: overflow caused by a loss of grid power attributable to a storm.
- Damage by others: overflow caused by third parties.
- Third Party Action: overflow caused by third parties where damage did not occur.
- **Other:** overflows caused by circumstances not fitting one of the above.

<u>Chart 2:</u> Volume Released by Cause (gallons)



These volumes were unable to be recovered before reaching state waters. Infrastructure-related SSOs accounted for approximately 93% of the total volume. Two Capacity-Weather Related SSOs were unable to be estimated due to flooding or hazardous conditions.

<u>Chart 3:</u> Number of FY 2019 HRSD SSOs by Jurisdiction



HRSD categorizes the location where each SSO occurred by Jurisdiction in Chart 3. In this period, the majority of SSOs occurred in the City of Hampton. HRSD SSOs occurred in six of the 14 major jurisdictions. **ANNUAL UPDATE** Regional Wet Weather Management Plan

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Participating Localities

Chesapeake Gloucester Hampton Hampton Roads Planning District Commission (HRPDC) HRSD Isle of Wight James City Service Authority **Newport News** Norfolk Poquoson Portsmouth Smithfield Suffolk Surry 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>	During Business Hours	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	757-566-0112
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	757-365-4200	757-357-2151
Virginia Beach Public Utilities	757-385-1400	757-385-3111
Williamsburg Public Works	757-220-6140	757-220-6196
York County Public Works	757-890-3752	757-890-3773

