

Annual Update

Integrated Plan/Regional Wet Weather Management Plan (IP/RWWMP)

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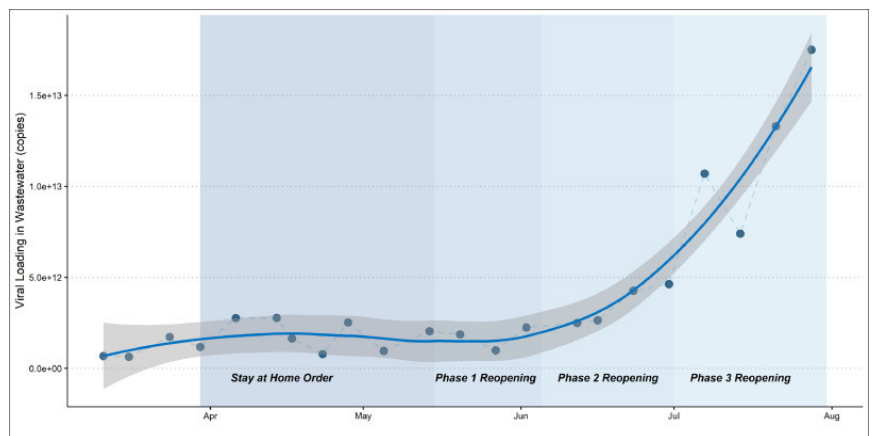
How to report SSOs

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HRSD service area map



HRSD conducts COVID-19 surveillance using wastewater-based epidemiology



Since the onset of the pandemic, HRSD water quality specialists have analyzed markers found in wastewater at nine major treatment plants. The data is used to track the trends of the SARS-CoV-2 infection in Hampton Roads, Virginia.

A detailed report of findings can be found [here](#).

Affiliate Information

Visit askhrgreen.org for information on everything green in Hampton Roads.

Visit elizabethriver.org to learn how to make restoration a reality.

HRSD continues outreach and education through virtual experiences

In the early spring of 2020, much like other events and activities around the world, HRSD outreach and education efforts came to a halt. Prior to COVID-19, the HRSD Community Education and Outreach Specialist and HRSD staff frequently conducted school outreach, presentations, and tours of our [SWIFT Facility](#). During COVID-19, HRSD has adapted to virtual experiences by continuing wastewater education and outreach with the following resources:

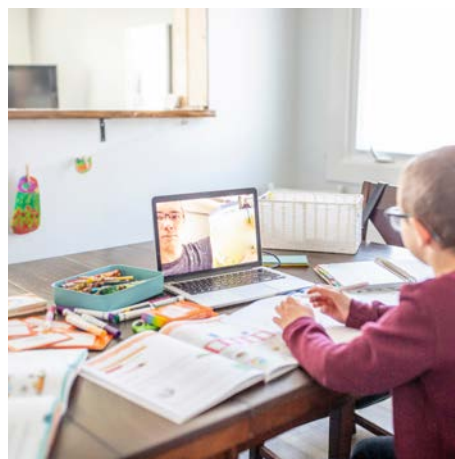
PRINTABLE OUTREACH RESOURCES

Simply click the link, print, and enjoy! These on-the-go worksheets are easy to print and use for classroom experiences and to reinforce STEM curriculums.

- [Cease the Grease: It's a No-Drainer Coloring Sheet](#)
- [Earth Day Bingo](#)
- [It's a No-Drainer: Always Follow Label Directions Coloring Sheet](#)
- [Grease Grinch Holiday Coloring Sheet](#)

SWIFT VIRTUAL TOUR

Now you can have a first-hand look at how HRSD is bringing wastewater to drinking water quality standards! [SWIFT](#) is an innovative water treatment project in eastern Virginia designed to further protect the region's environment, enhance the sustainability of the region's long-term groundwater supply and help address environmental pressures such as Chesapeake Bay restoration, sea level rise and saltwater intrusion. SWIFT takes highly treated water and puts it through additional rounds of advanced water treatment to meet drinking water quality standards. The SWIFT Water is then added to the [Potomac Aquifer](#), the primary source of groundwater throughout eastern Virginia. Take the SWIFT Virtual Tour [here!](#)



SOCIAL MEDIA CONTENT SHARING

According to research, 46% - 51% of US adults were using social media more since the pandemic began (emarketer.com). To take advantage of this increased engagement, HRSD has increased the amount of shareable content posted on social media platforms. HRSD customers are encouraged to follow us on [Facebook](#), [Twitter](#), [LinkedIn](#), and [NextDoor](#) for frequent updates.

UPDATED HRSD CLASSROOM

Our [HRSD Classroom](#) provides a network of information, resources, and games for teachers and students of all ages! We've recently updated this webpage to include new lesson plans that can easily be incorporated into school curriculums from your home office for virtual school or in the classroom!

VIRTUAL PRESENTATIONS

In lieu of personal classroom visits and outreach event attendance, HRSD is offering virtual presentations. Public, private, and homeschool educators can now schedule time with the [HRSD Community Education and Outreach Specialist](#) for a live virtual classroom presentation. These virtual presentations offer customized lessons to address water education needs based on your curriculum.

For virtual hands-on activities such as those shown in the [HRSD Classroom](#), educators can request to have supplies dropped off to a central location in order to be distributed or picked up by students. Once students receive materials, the activity can be done collectively via the chosen virtual platform with the HRSD Community Education and Outreach Specialist. In addition, virtual presentations can also be arranged for civic groups, colleges, Scouts groups, and other organizations.

We've all made adjustments in our personal and professional lives for the public health and safety of our communities. HRSD is no different. We remain fully operational throughout the region to ensure reliable, continuous service. Our goal with providing virtual education and outreach services is to continue to serve our ratepayers with environmental education to help ensure future generations will inherit clean waterways and be able to keep them clean.

Imagine a day without wastewater treatment

Wednesday, October 21, 2020 recognized Imagine A Day Without Water.

If you consider yourself a resident of the 757, you already know Hampton Roads is a water-rich region. This means that we can often take for granted our access to clean water. We never have to question where our water comes from or where it goes when it is dirty.

As the Environmental Education and Outreach Specialist for HRSD, I often find myself at schools talking to kids about water education. I always ask the students, "What happens to the water you flush down the toilet?"

The answers are often hilarious and range from "It goes away" to "It goes to the sewer." My favorite response of all times was from a five-year-old homeschooler. Her answer was "It's like magic! It goes away and then comes back clean!"



My favorite response of all times was from a five-year-old homeschooler. Her answer was "It's like magic! It goes away and then comes back clean!"



I would venture to say the response of this five-year-old is the same as many others when it comes to our water infrastructure. It's magic. The dirty water leaves, and the clean water reappears.

What would it look like if dirty water didn't leave your home and reappear clean? What if we were to imagine a day without wastewater treatment? Without wastewater treatment, where would the dirty water flowing from sinks, showers, and dishwashers go?

As you can imagine, raw wastewater has a smell. Without wastewater treatment, that smell would travel along with pathogens, bacteria, dirt, human waste, and everything that goes down the drain.

It wouldn't be long before that smell traveled to local neighborhoods, leaving an unpleasant odor in the air. The sewage would also pass to other communities through our connected waterways, eventually entering the Chesapeake Bay. While the Chesapeake Bay can naturally filter a certain amount of pollutants, an influx of raw sewage would harm critical wildlife which depend on the Chesapeake Bay for survival.

Although this may be hard for us to imagine now, this is not too far from the reality many people in Hampton Roads faced before HRSD's creation in 1940. Prior to our creation, raw sewage was being discharged without treatment, which led to increased pollution of the Chesapeake Bay.

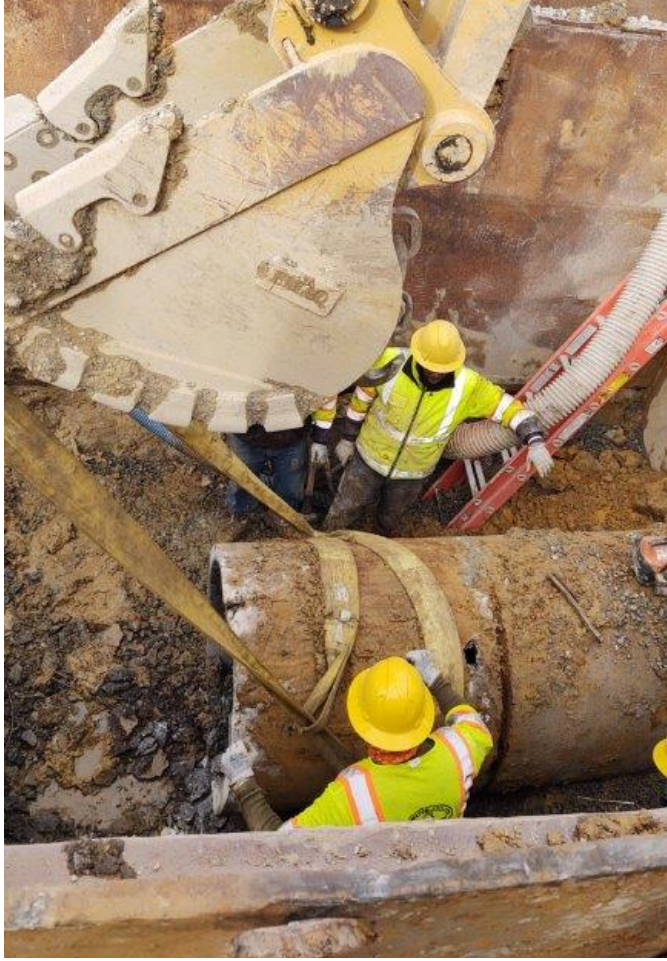
Due to the pollution, the Virginia Department of Health condemned a large oyster-producing area in Hampton Roads. HRSD was created on November 5, 1940 to clean wastewater in order to maintain public health and the waters of Hampton Roads. HRSD expanded from serving 288,000 residents in 1940 to 1.7 million residents today.

The water infrastructure we often don't notice is critical to our public health. Imagine what your day would look like without water! The next time you flush your toilet, remember the dirty water that disappears and the clean water that reappears is no magic trick.

Sanitary Sewer Overflow Report

FY 2020 (July 1, 2019 - June 30, 2020)

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 2020 Overview

- Over 51 billion gallons of wastewater treated
- 17 SSOs which released ~277,000 gallons of wastewater to state waters
- Untreated water released is equal to 0.00054% of what HRSD treated
- Two SSOs were attributed to Wet Weather

SSO History 2011 - 2020

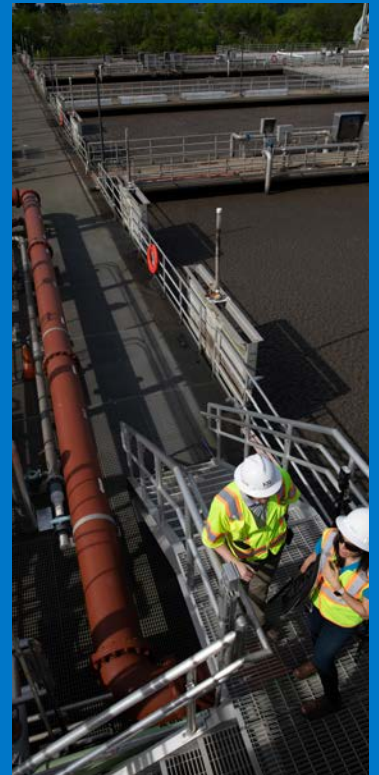
FY 20 - Conveyed 51.5 billion gallons
Total volume lost 0.00054%

HRSD SSOs

Year	# of SSOs	Volume (gal)	# of Unknown SSO Volumes (during wet weather)	Total Inches of Rain near ORF
CY2011	35	1,880,086	13	55
CY2012	40	22,850,543*	6	52
CY2013	14	722,237	2	50
CY2014	29	2,250,915	10	45
CY2015	18	516,704	3	53
CY2016	49**	6,148,239**	23**	69**
CY2017	21	259,057	4	42
FY2018	20	1,006,196	3	47
FY2019	14	1,366,725	2	53
FY2020	17	277,521	0	47

*Included single SSO at Wilroy Road of 18,352,000 gallons. Remaining volume ~4,500,000 gallons for 2012

**Included two major weather events in Hurricane Matthew and Tropical Storm Hermine

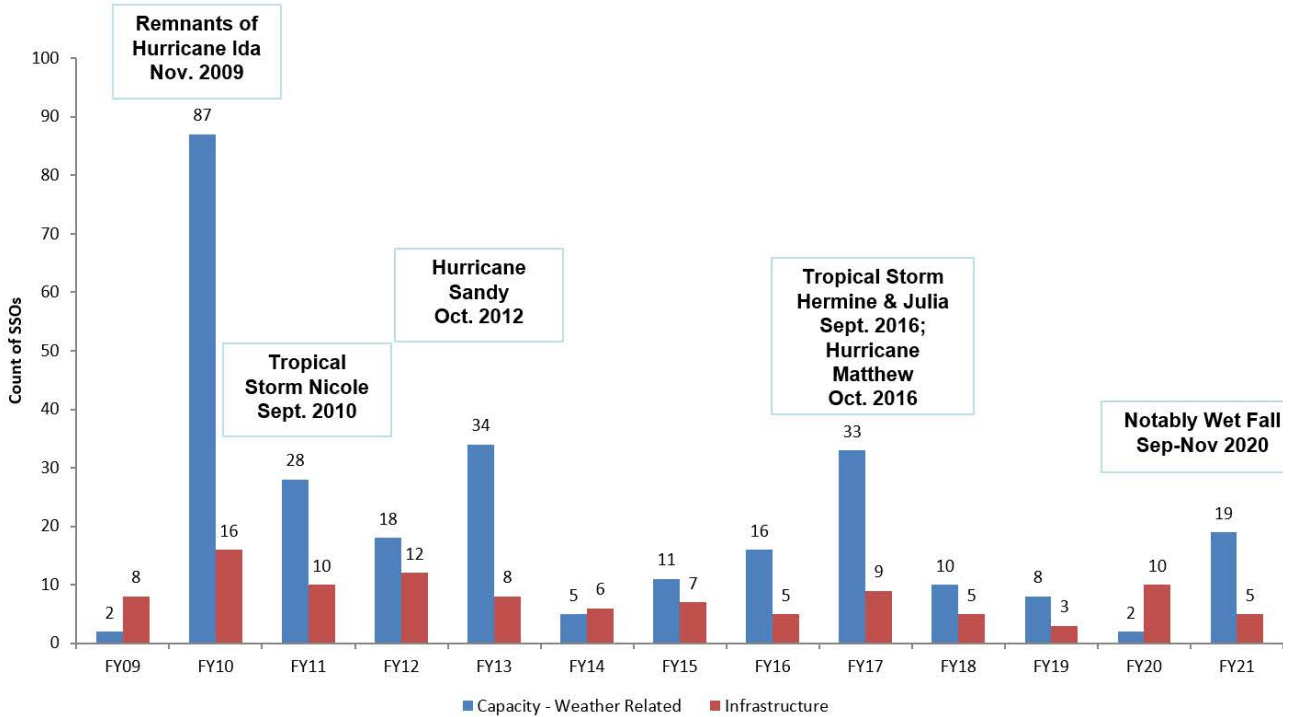


By the Numbers: 2020 HRSD SSOs

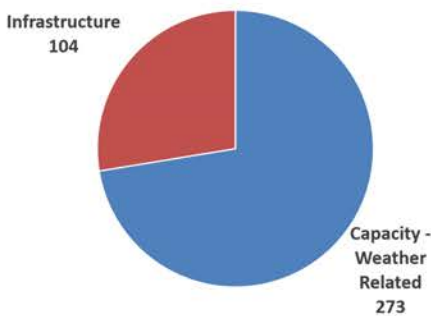
HRSD SSO Summary Charts



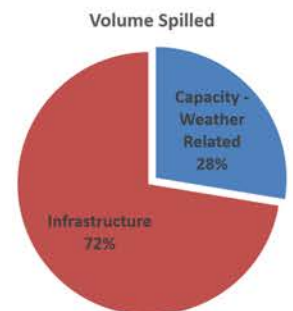
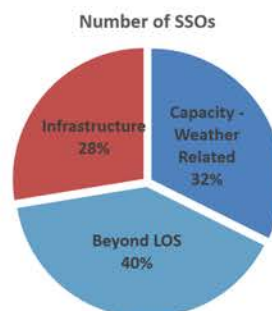
SSOs (July 1, 2008 – Present)



Number of SSOs (July 1, 2008 – Present)



July 1, 2008 - Present



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

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

Locality	During Business Hours	After Business Hours
Chesapeake Public Utilities	757-382-2489	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	757-234-4800
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	757-220-2331
York County Public Works	757-890-3750	757-890-3773

HRSD SERVICE AREA MAP



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