

# Annual Update

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

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### Affiliate Information

Visit [askhrgreen.org](http://askhrgreen.org) for information on everything green in Hampton Roads.

Visit [elizabethriver.org](http://elizabethriver.org) to learn how to make restoration a reality.

## HRSD's First Consumer Annual Report

This year, HRSD released its first Consumer Annual Report! The report spans 18 months, covering January 1, 2022 - June 2023. In the future, reports will fall in line with the HRSD fiscal year of July - June.

The report details how the work of our staff helps to carry out our promise and our vision. At HRSD, we promise to treat wastewater and recover natural resources to protect public health and the environment. Our vision is that our communities will have clean waterways and reliable water resources for generations to come.

The content in this report is driven by the topics of cost transparency, environmental impacts and industry and innovation leadership. The report details our accomplishments and major initiatives in the last year and a half while also detailing information that is of interest to our customers.

You can view the full Annual Report [here](#).

### HRSD by the Numbers

<p><b>"How much are you charging me in Fiscal Year 2024?"</b> Average cost per gallon: \$0.01</p> <p><b>"Where does my money go?"</b> Out of every dollar, \$ .23 goes to our employees, \$ .25 goes to our Operating Expenses, and \$ .52 goes to our Infrastructure Projects.</p>	<p><b>"What is the 2024 Infrastructure Budget?"</b> <b>\$725,000,000</b></p> <p><b>"What is the 10-year Infrastructure Budget?"</b> <b>\$3,863,947,000</b></p>	<p><b>"How much money will you borrow over the next 10 years?"</b> <b>\$1.8 Billion, representing 46% of the 10-year infrastructure budget</b></p>	<p><b>"Where does your money come from?"</b> <b>97%</b> Revenues from customer bills and only <b>1%</b> Revenues from new connections (economic growth)</p>
<p><b>"How much debt does HRSD have?"</b> • Total O/S Indebtedness (thousands, as of June 2023) <b>\$979,742</b> • Debt per account (June 2023) <b>\$2,016</b></p>	<p><b>"How many HRSD employees are there?"</b> <b>905</b> full-time employees</p>	<p><b>"How many service connections do you have?"</b> • 486,000 Service Connections • 20% of Virginia's Population</p>	

# Infrastructure Week: Project Spotlights

Written by Lacie Wever, HRSD Community Educator

HRSD was formed in the 1940s to address water quality concerns in Hampton Roads. As the regional wastewater agency, HRSD is responsible for conveying and treating about 150 million gallons of wastewater each day from 20 communities in Southeastern Virginia. We are proud to be part of Infrastructure Week each year to shine a light on the infrastructure we too often take for granted, but every community needs to thrive.



## What Is Infrastructure Week?

Infrastructure Week is a week of education and events promoting the infrastructure we depend on to strengthen the quality of life and improve people's health. Infrastructure is the roads, rails, pipes, ports, power grid, airports, and water systems our country depends on.

To celebrate Infrastructure Week 2023, HRSD highlighted two projects to showcase how infrastructure works. #Infrastructureworks was the theme of the week!

## Surry County

If you live, work or travel in Surry County, you might notice these metal valve boxes located along the grass shoulders of many roads. This is one of the only visible signs of a \$45M project to extend sewer service to numerous areas in Surry County. The initial phase of this project has been completed and sewage is flowing from the Town of Surry ultimately to the HRSD Treatment Plant in Suffolk. This project has allowed HRSD to close two sewage treatment plants and to provide sewer service to certain areas in Surry County. This 25 mile pipeline and multi-pump station project is a great example of how the investment in infrastructure can improve the lives of our citizens and the environment we all love.



## Eastern Shore

If you travel along VA Route 13 on Virginia's Eastern Shore, you might notice these markers located along the shoulder of the road. These buried pipe markers are located along the pipe route to indicate the location of the pipe and to locate valves in this system. These markers are also an indicator of progress and of the \$38M project to extend sewer service to numerous areas in Accomack and Northampton Counties. The project will be completed later this year and will direct flow to the existing sewage treatment plant in Onancock. This project will allow the closing of several sewer treatment plants and to provide sewer service to numerous areas on the Eastern Shore. This 24 mile pipeline and multi-pump station project is another example of how the investment in infrastructure can make a difference in the lives of our citizens.

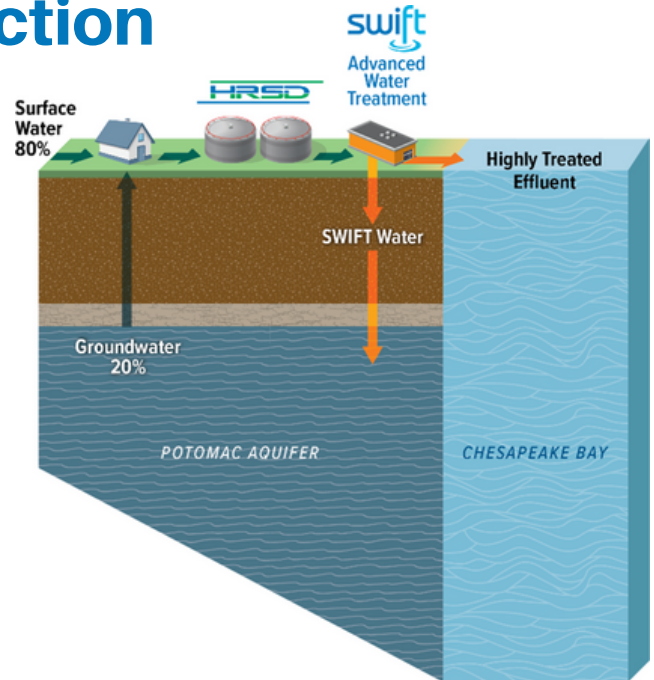


The infrastructure we build or replace improves the lives of local citizens, provides job opportunities, and acts as a catalyst to purchase equipment, materials and services here in Hampton Roads. Infrastructure Week is an annual event. Check online at [unitedforinfrastructure.org](https://unitedforinfrastructure.org) to find in-person events and virtual events!



# SWIFT and Nutrient Reduction

**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.



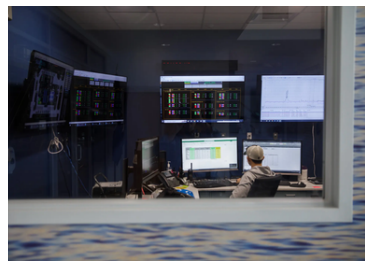
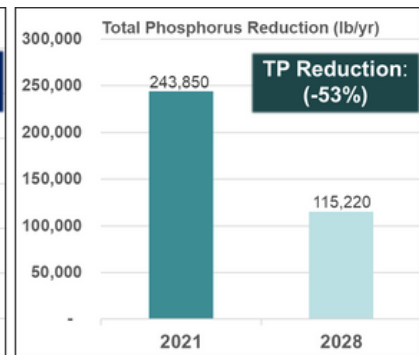
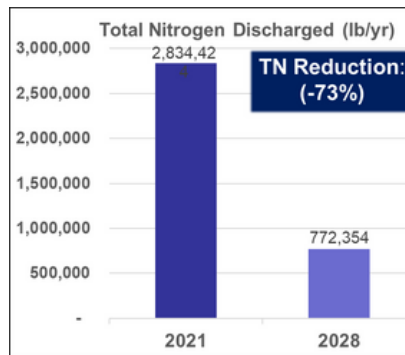
SWIFT water:

- meets drinking water standards
- reduces nutrient discharge
- provides a sustainable groundwater supply
- reduces land subsidence
- protects the aquifer from saltwater contamination

Learn more about why SWIFT matters [here](#).

## Significant Reduction in Nutrients Discharged by 2028 - Lower James River Basin

The James River SWIFT facility is expected to be online in 2026 and will be able to replenish the Potomac aquifer with up to 16 million gallons of drinking-water quality SWIFT Water™ per day using advanced treatment processes. The project also includes advanced nutrient reduction improvements for the James River Treatment Plant. Track construction updates on this project [here](#).



## HRSD Program Highlight: Microbial Source Tracking (MST)

HRSD is one of the first entities in the country to use Microbial Source Tracking (MST). Through MST, HRSD is able to pinpoint sources of bacteria impairments. We use DNA markers to determine if the bacterial impairment is due to human waste or something else such as bird or dog poop. We are able to partner with localities and track the human signals back to the source! This program helps us to efficiently find SSOs. You can think of our MST team as "CSI" detectives. For these scientists however, the suspect is usually sewage.



# By the Numbers: FY 2023 HRSD SSOs

## HRSD Capacity Related SSO Summary

A Sanitary Sewer Overflow (SSO) is a release of untreated sanitary sewage, also referred to as “wastewater”, into the environment. HRSD (Hampton Roads Sanitation District ) is required to track all 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.

HRSD takes environmental protection very seriously and our record of permit compliance is unparalleled among wastewater treatment agencies in the United States. HRSD has won numerous awards related to permit compliance.

The pipelines and pumps that convey wastewater to treatment plants are designed to carry the daily volume of wastewater generated for the area. The design includes extra capacity for some precipitation entering the sanitary sewer system; the sanitary sewer system is not designed to accommodate excessive precipitation entering the system. Excessive precipitation entering the sanitary sewer system is called “infiltration and inflow” (I&I). I&I is the cause of most SSO events in the HRSD system. Due to the impact of wet weather and storms, the number of SSOs varies dramatically from year to year based on the weather.

### Causes for SSOs

- Capacity - Weather Related
- Aging Infrastructure
- Maintenance - Debris
- Maintenance - Grease
- 3rd Party
- Damaged by Others
- Power Outage
- Power Outage - (Storm Event)

Generally, SSOs that can be prevented to some degree



### FY 2023- Conveyed 55 billion gallons

Year	Total # of SSOs	Total Volume Of SSOs (gal)	Volume for Capacity Related SSOs (Gals)	# of Capacity Related SSOs	Named Storm
FY2018	20	1,006,196	134,886	10	None
FY2019	14	1,366,725	72,775	8	None
FY2020	17	277,521	16,530	2	None
FY2021	44	37,918,968	8,371,781	30	Remnants of Isaias & Sally
FY2022	10	768,133	0	0	TS Elsa
<b>FY2023</b>	<b>8</b>	<b>2,637,860*</b>	<b>18,510</b>	<b>3</b>	<b>Post-tropical cyclone Ian</b>



**FY 23 - Conveyed 55 billion gallons  
Total volume treated 99.995%**

Learn more about HRSD sanitary sewer overflows [here](#).



# How Can You Help Protect Our Waterways?

## Public Participation Opportunities

### Report Sanitary Sewer Overflows



### Reduce Stormwater Runoff



### Limit Fertilizer and Lawn Chemical Applications



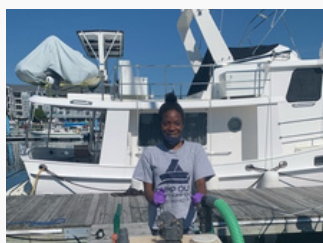
### What NOT to Flush



### Pick Up Animal Waste



### Use our FREE Boater Pump Out Program



### Capture Kitchen Grease in a Can



### Properly Dispose of Medications



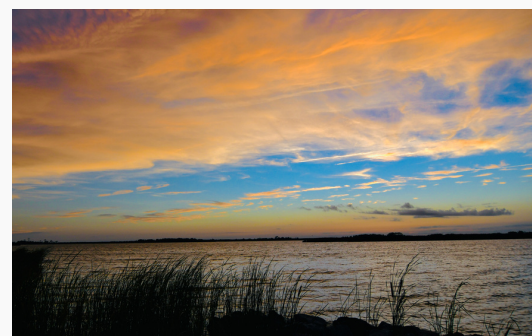
## Other Public Participation Opportunities

- Viewing [Integrated Plan Documents](#)
- [HRSD News Releases](#)
- Social Media
  - [Facebook](#)
  - [Twitter](#)
  - [LinkedIn](#)
  - [NextDoor](#)
- Open House Meetings
- [Construction Progress and Updates](#)
- [Tours/Presentations](#) for Community Groups



## DID YOU KNOW?

Did you know nature also helps to keep our waterways clean? Our waterways contain a number of microorganisms which naturally break down waste! When there is an SSO, our data consistently shows that once the SSO has been fixed, the dissolved oxygen and bacterial levels of the waterway return to normal in a few days. This is because breaking down waste is a part of nature's biological process!





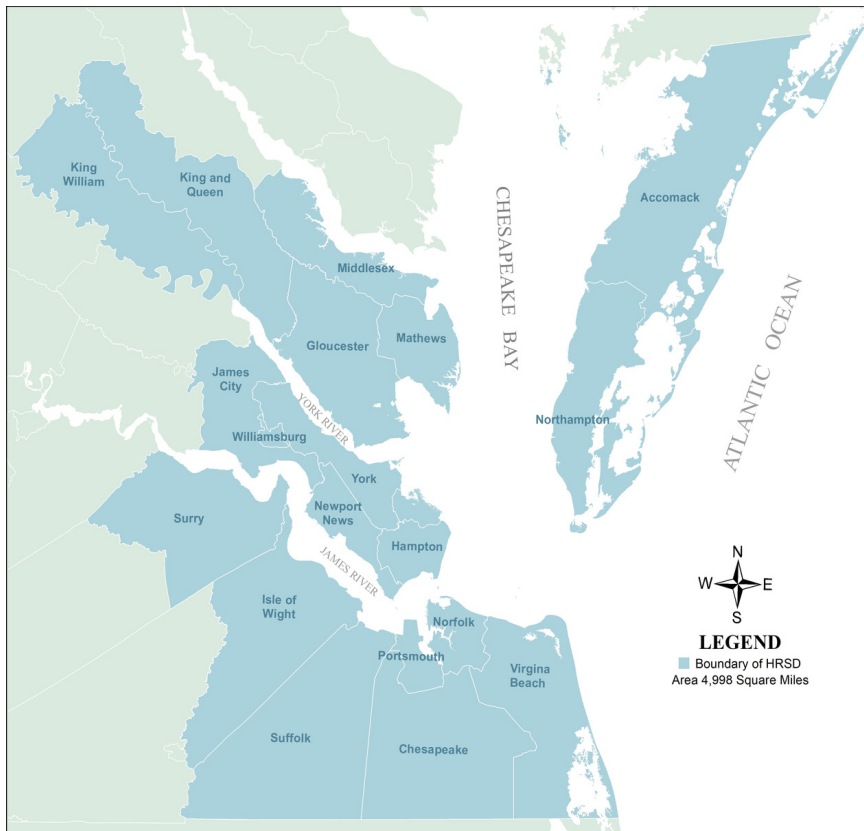
# Help Protect Our Waterways by Reporting Suspected Sanitary Sewer Overflows (SSOs)



Please call the number listed for your Locality if you observe an SSO.		
Locality	During Business Hours	After Business Hours
Accomack County and Town of Accomac	757-787-1468	757-824-0020
Chesapeake Public Utilities	757-382-2489	757-382-3550
Chincoteague Public Works	757-336-3366	757-336-3366
Exmore Public Works	757-442-3114	757-607-7188
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
Nassawadox	757-875-7547	757-875-7547
Newport News Public Works	757-993-2311	757-234-4800
Norfolk Public Utilities	757-823-1000	757-823-1000
Onancock Public Works	757-787-3363	757-710-5863
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	757-890-3373



## HRSD SERVICE AREA MAP



Political subdivision of the Commonwealth of Virginia



Governing body: Governor-appointed commission



14<sup>th</sup> largest wastewater utility in the US  
Population served: 1.9 million



Combined wastewater treatment capacity: 225 million gallons/day



Operate 8 major and 6 smaller treatment plants and 500 miles of pipelines



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