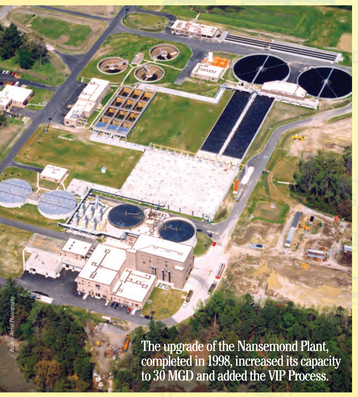
Excellence Becomes A Tradition

1990s

As the 1990s dawned, Hampton Roads and the nation geared up for a major challenge: Operation Desert Storm. Over 40,000 service members from across the region were deployed to operations surrounding the Iraqi invasion of Kuwait.



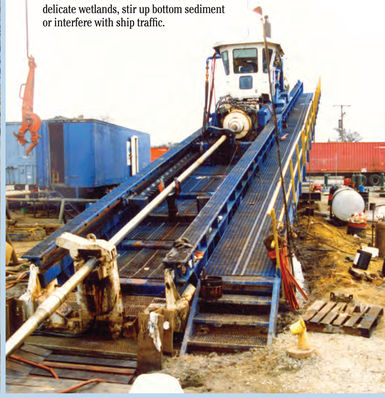
The upgrade of the Nansemond Plant, completed in 1998, increased its capacity to 30 MGD and added the VIP Process.

On the home front, HRSD's 10 plants were treating over 150 MGD from a service area of 2,100 square miles with a population of 1.4 million. By fall 1990, eight plants had been upgraded from primary to secondary treatment. The remaining two plants, Pinners Point and Lamberts Point, would soon be incorporated into the Virginia Initiative Plant, which was dedicated by Elizabeth Haskell, Virginia's Secretary of Natural Resources, on November 26, 1991. She would return to the region five months later to speak at the May 26, 1992, ceremony celebrating the expansion of the Williamsburg Plant to 22 MGD.

Meanwhile, HRSD expanded service to Gloucester as a new interceptor force main was routed under the York River to convey flows to the York River Plant.

The Williamsburg Plant was expanded to 22 MGD during a major upgrade completed in 1992.

When the decade began, HRSD's Interceptor Systems Department was responsible for operating and maintaining 400 miles of pipelines and more than 70 pump stations.



A directional drilling rig was used to install a pipeline under the York River so wastewater could be pumped from Gloucester to the York River Plant. This method of construction does not disturb delicate wetlands, stir up bottom sediment or interfere with ship traffic.

The Web became a publicly available service on the Internet in 1991.

"When the door of opportunity opens a crack, don't peek timidly through, boldly open the door and confidently step through to new exciting challenges."

— **James R. Borberg,** *General Manager 1978-1997*

1991 The 40 MGD Virginia Initiative Plant was dedicated.

1992 The Central Environmental Laboratory was constructed.

1992 The Williamsburg Plant expanded to 22 MGD.

1994 HRUBS provided consolidated billing.

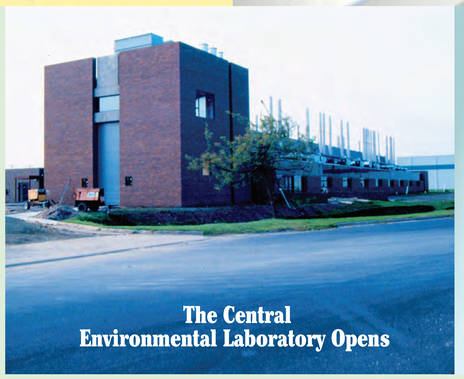
1995 HRSD received the EPA National Pretreatment Excellence Award.

1996 The Boater Education Program was launched.

1997 D. R. Wheeler became General Manager.

1998 The Nansemond Plant expanded to 30 MGD with the VIP Process.

1999 The Small Communities Division began operations.



The Central Environmental Laboratory Opens

HRSD constructed its Central Environmental Laboratory (CEL) at the Air Rail Avenue Operations Center in 1992 to consolidate two smaller regional labs and provide a full spectrum of analytical services. A vital component of HRSD's efforts to protect the Chesapeake Bay, and capable of handling 300,000 tests a year, the CEL used state-of-the-art technology and stringent quality control standards to meet increasing regulatory requirements.

Awards Abound

On the heels of game-changing innovation in the 1980s, excellence became the hallmark of HRSD throughout the industry. In 1990, the Virginia Initiative Process won the Governor's Environmental Excellence Award. HRSD and its partner CH2M HILL jointly earned national awards from the American Engineers Council and the American Academy of Environmental Engineers.

OPS Challenge Award

HRSD also distinguished itself in state and national Operations Challenge events. These competitions, considered the Olympics of the wastewater industry, were designed to promote quality wastewater treatment. The Chesapeake-Elizabeth team brought home HRSD's first national title in 1990. HRSD teams continued this winning tradition throughout the decade, earning overall first place five times.

ACEC Award

The plants perpetuated this winning streak as they routinely earned awards for operations excellence and outstanding compliance with their environmental permits. Over this decade, HRSD earned more than 100 awards on state, regional, national and international levels.

CUBS and HRUBS Introduced

By fall 1992, HRSD was servicing 365,000 active accounts, and its outdated billing system was reaching capacity. A new, more versatile Customer Utility Billing System (CUBS) was introduced. Another new initiative, which provided billing and payment processing at no cost to participating localities, soon followed. The Hampton Roads Utility Billing Service (HRUBS) prepared consolidated bills for water, wastewater treatment and other municipal services, making it easier for the customers who had only one bill to pay.

Operations Challenge national champions in 1996 were Team HRSD members (kneeling) Mike Harris, Paul Cubilla, (standing) George Gregory, Donnie Cagle and Wesley Warren.

Pollution Prevention and Pretreatment Excellence

As part of its mission, HRSD closely monitored wastewater coming into its plants from businesses to ensure that industrial discharges did not affect the treatment process, and to be sure effluent discharged into local waters did not contain heavy metals and other toxins. HRSD enforced the Clean Water Act by issuing strict permits, overseeing compliance and issuing fines.

HRSD's Industrial Waste Division (IWD) instituted an awards program to acknowledge businesses with excellent compliance records and to motivate others to comply. The first recognition event, held in 1994, was funded with fines collected from violators.

The event would grow through the decade as these awards became prized indications of a firm's commitment to environmental protection. The Pollution Prevention (P2) awards were added in 1995 to recognize businesses for reducing all forms of pollution: air, water and solid waste.

HRSD received EPA's 1995 National Pretreatment Excellence Award, an honor presented to the "best run, large size program" in the country. IWD was recognized not only for enforcing regulations but for its many innovative programs. In other efforts to prevent pollution, in 1996 HRSD partnered with the Virginia Department of Health in a boater education program created to help keep waterways clean by reducing overboard sewage discharge from recreational vessels.

Governor Douglas Wilder (right) presents one of Virginia's first Environmental Excellence Awards to David Waltrip, Director of Treatment, for HRSD's development of the VIP Process.

Recycling Initiatives

Committed to the beneficial recycling of the biosolids generated each day as a byproduct of the treatment process, HRSD entered into an innovative partnership to save money and meet the demand for its popular compost product. Environmental Solutions Incorporated (ESI) began production of Nutri-Green® Compost for HRSD in 1996, which paved the way for closing the Peninsula Composting Facility. ESI also used ash generated at HRSD facilities to produce construction materials and ornamental animal sculptures known as "Bio-Critters."

More Expansions, Renovations and Innovations

General Manager Jim Borberg discusses operations with department directors Donnie Wheeler, Water Quality; David Waltrip, Treatment; and Ed Romm, Engineering.

A new 17-mile pipeline constructed between Smithfield and the Nansemond Plant allowed the town to become part of HRSD's regional wastewater treatment network on July 10, 1996. This was the first step toward restoring the Pagan River, which was closed to shellfish harvesting in the 1970s.

The end of the six-year, $48 million project to expand the Nansemond Plant to 30 MGD was celebrated with a dedication ceremony on May 28, 1998. The upgrade included the addition of the VIP process, another of HRSD's voluntary efforts to help reduce nutrients entering the Chesapeake Bay.

In 1998, the U.S. Army turned over operation of its 1.1 MGD Ft. Eustis Plant to HRSD until a new force main and pump station could be constructed to connect the post to the HRSD system.

Stepping Up to Serve Small Communities

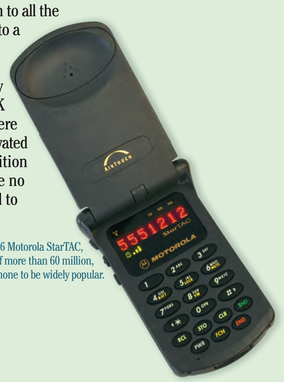
Motivated by its commitment to protect Virginia's waterways, HRSD established a Small Communities Division to operate and maintain collection systems and treatment plants in rural localities. Following a comprehensive feasibility study and three years of planning, HRSD assumed responsibility for four systems on July 1, 1999: King William County, Mathews County and the towns of Urbanna and West Point.

With the addition of King and Queen County in 2000, HRSD served a rural area of 819.4 square miles and was responsible for operating and maintaining 32.44 miles of pipe, 21 pump stations and four small treatment plants with design flow capacities that ranged from 0.025 MGD to 0.6 MGD.

HRSD Y2K Ready

As the Year 2000 approached, there was considerable anxiety worldwide about what would happen to all the computer systems when we turned not just to a new century, but to a new millennium.

Beginning in 1997, HRSD began aggressively testing its equipment and systems for Y2K readiness. On December 31, while others were celebrating, emergency generators were activated prior to midnight to ensure a smooth transition if a power failure occurred. But there were no major Y2K issues, and HRSD looked ahead to the next century.



The 1996 Motorola StarTAC, with sales of more than 60 million, was the first mobile phone to be widely popular.