



PROFILES IN REUSE: Mid-Atlantic



The amount of water on Earth does not change—all water has been recycled naturally since the beginning of time.

While nearly 70% of the planet is covered by water, only 2.5% is freshwater, and only 1% is accessible to humans. Water reuse, also known as water recycling, is the process of intentionally capturing wastewater, graywater, stormwater, or saltwater and cleaning it for a designated beneficial freshwater purpose. Common uses for recycled water include drinking, irrigation, industrial processes, groundwater replenishment, and environmental restoration.



WHY INVEST IN WATER REUSE?

While the Mid-Atlantic enjoys abundant water sources, it also faces pressures from population growth, saltwater intrusion, water-hungry industries, and the unpredictable effects of climate change. These factors have the potential to stress water supplies and challenge the resiliency of aging infrastructure. Investment in water reuse can help the Mid-Atlantic build modern, sustainable, and stable communities—ready for families to flourish and businesses to grow. Mid-Atlantic communities and businesses are investing in water reuse to ensure that our residents have safe drinking water supplies, our industries have water to expand and create jobs, our farmers have water to grow food, our environment is protected, and our economic future remains strong and secure.






WATER REUSE IN THE MID-ATLANTIC

Since the 1940s when Baltimore began diverting millions of gallons of recycled water to the Bethlehem Steel plant to be reused for steel production, water reuse has helped the region's communities meet their freshwater needs. During the 1970s, Northern Virginia's booming population and degraded stream water quality led to the creation of the Upper Occoquan Service Authority and the longest operating potable reuse system in the United States. Fast forward to today, communities and businesses in Maryland, Virginia, and the District of Columbia continue to use water reuse as a water management tool helping with aquifer recharge, industrial cooling, and irrigating farm fields, golf courses, and other turf.

THE FUTURE OF REUSE IN THE MID-ATLANTIC

Interest in water reuse is growing in Maryland, Virginia, and Washington, DC, due to a variety of drivers. As communities invest in treatment upgrades to help restore the Chesapeake Bay, water recycling provides a beneficial return for ratepayers' investment. As the region experiences impacts from climate change such as saltwater intrusion in coastal aquifers, water reuse can help restore degraded aquifers. And, as the region's growing population and industrial base increase demand on drought-stricken ground and surface water supplies, water reuse provides a way to develop a safe and diversified water supply.

RECYCLED WATER IS:

-  **COST EFFECTIVE**
Reusing water can provide ratepayers with a return on their investment in meeting stringent nutrient pollution discharge limits (TMDLs).
-  **RESILIENT**
Water reuse programs can help manage costly challenges including stricter water quality requirements and sewer overflows.
-  **ENVIRONMENTALLY SOUND**
Reusing water alleviates pressure on the Mid-Atlantic's freshwater sources and natural systems.
-  **RELIABLE**
Because wastewater is renewable, water reuse is the only sustainable source of freshwater.
-  **SAFE**
Water is purified to meet stringent state and federal water quality standards.

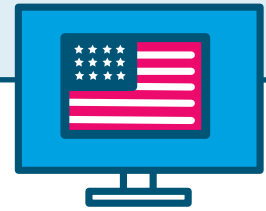
WATER REUSE IN THE MID-ATLANTIC RIDGE TO BAY

POWERING 70% OF GLOBAL INTERNET TRAFFIC



Recycled water provides cooling for Loudoun County, VA's "Data Center Alley" via 20 miles of pipeline. On any given day, most of the internet traffic in the world is processed through facilities in the county.

SERVING OUR COUNTRY



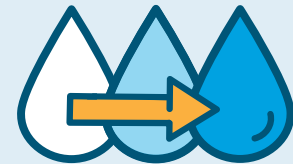
The Little Patuxent Water Reclamation Plant in Howard County, MD, is permitted to provide as much as **five million gallons per day** to cool federal computer service centers.



SAVING \$5M & 1 BILLION GALLONS Per Year

AlexRenew uses its recycled water onsite to clean equipment, heat and cool their facilities, and serve as an educational tool at its Education Center.

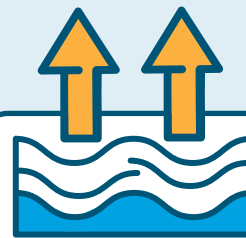
FACING THE FUTURE



Anne Arundel County, MD, plans to replenish local groundwater resources with up to **12 billion gallons of recycled water annually** to fight saltwater intrusion and sinking ground. To implement this plan, the County is working with a Scientific Advisory Council representing leading experts from across the United States.

MAKING HISTORY

The Upper Occoquan Service Authority's potable reuse system has augmented Fairfax County's water supply since 1978. It currently supplies **27 million gallons per day**, contributing up to 90% of flow during drought conditions.



KEEPING THE GROUND UP

Hampton Roads Sanitation District's SWIFT program is conserving local rivers, augmenting its water supply, and countering sinking land by adding up to **one million gallons of recycled water daily** to the Potomac Aquifer. This effort will practically eliminate the District's discharge into the James, Elizabeth, and York Rivers.



About the WaterReuse Association

The WaterReuse Association is the nation's only trade association solely dedicated to advancing laws, policy, funding, and public acceptance of recycled water. WaterReuse represents a coalition of utilities that recycle water, businesses that support the development of recycled water projects, and consumers of recycled water. In addition to supporting members throughout the country, WaterReuse has active local sections in Arizona, California, Colorado, Florida, the Mid-Atlantic, Nevada, New Mexico, Ohio, the Pacific Northwest, South Carolina, and Texas. To learn more, visit www.watereuse.org.