



Saving Water in

Maryland



Maryland's direct access to the Potomac River, Chesapeake Bay, and Atlantic Ocean makes it a haven for water lovers, water sports, and fishing. However, the state's climate, geology, and significant droughts in recent years have highlighted critical freshwater supply issues throughout this Mid-Atlantic state.

Maryland's eastern and southern counties depend upon groundwater aquifers for their public water supplies, while its central and western counties rely heavily on surface water to meet demands.

PROJECTED GROWTH TAXES SUPPLY

From 1970 to 2010, Maryland's population grew by 47 percent. By 2030, the state's population is projected to grow by more than 20 percent, adding approximately 1.2 million new residents, with much of the growth expected to be concentrated in southern Maryland.

As the population grows, it will put increasing pressure on local water supplies. The state draws nearly 1.4 billion gallons of water each day, half of which is used to meet public supply needs. If Maryland reaches its projected population growth, overall water demand is expected to increase nearly 16 percent by 2030, meaning an additional 233 million gallons in daily withdrawals will be needed.

Population growth is already outpacing available water supplies in many Maryland counties, which have imposed temporary water restrictions and occasionally limit or ban outdoor water use to maintain adequate freshwater supplies.

VULNERABLE AQUIFERS

Aquifers—geological formations of porous rock, soil, or sand saturated with ground water—are among Maryland's most vulnerable freshwater resources.

Growing demand increases withdrawals, to the point where water is being pumped at rates faster than the



aquifers can be recharged by annual rainfall and groundwater flow. Recent analyses show Maryland's aquifers declining at an average rate of 1 to 2 feet per year, and projected demand could increase that number to 4 feet. This rising demand could deplete water levels beyond minimum regulatory thresholds and exacerbate water quality concerns, such as saltwater intrusion or pollutant concentrations.

DEVELOPMENTS IN NEED

Water and wastewater infrastructure is critical for new residential and commercial developments, and several expanding Maryland localities are struggling to find safe, accessible, and sustainable water supplies. Because the state will not allow new developments to go forward until adequate water resources are available, counties are considering expensive alternatives, such as searching for undiscovered resources or constructing extensive pipe systems to tap into distant reservoirs.

LOOK FOR THE WATERSENSE LABEL

Tapping into deeper or more remote freshwater resources may provide short-term solutions for Maryland's water issues, but there are less expensive strategies that can contribute to a more sustainable, long-term water supply. Increasing water efficiency across the state can help meet the needs of Maryland's growing population while preserving water supplies for future generations.

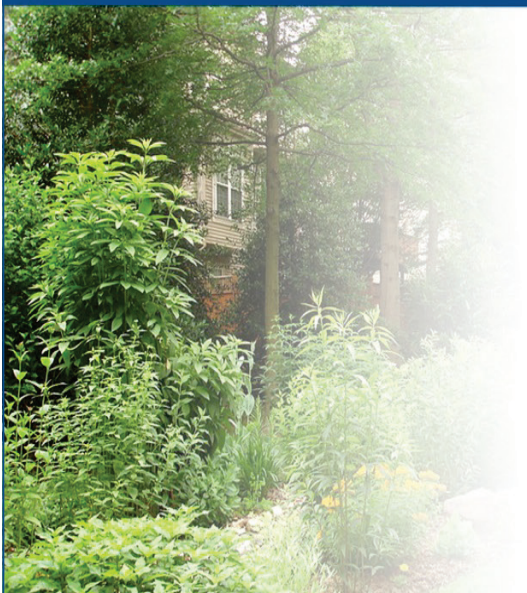
Plumbing and landscape irrigation products that have earned the U.S. Environmental Protection Agency's WaterSense® label, for example, are independently certified to use at least 20 percent less water and perform as well or better than standard models. If half

of the households in Maryland replaced their older, inefficient toilets with WaterSense labeled toilets, the state could save about 12 billion gallons and \$95 million in water and sewer costs per year. That's equivalent to the amount of water needed to supply every household in Howard County, Maryland, for a whole year.

For more information on WaterSense labeled products and new homes, or other water-saving tips, visit www.epa.gov/watersense.



Best Landscapes in the Bay



On average, American homes use at least 30 percent of their water for outdoor purposes, mostly landscape irrigation. To encourage Marylanders to reduce outdoor water use, the Chesapeake Conservation Landscape Council (CCLC) conducts an annual competition for the best water-smart landscapes in the Chesapeake Bay region.

Winning landscapes incorporate CCLC's Eight Essential Elements of Conservation Landscaping, which include the water-efficient principles of planting native and drought-resistant plants, covering soil with mulch, and keeping soil healthy. By watering lawns and gardens more efficiently, Maryland residents can save nearly 60 million gallons of water daily—equivalent to the amount of water needed to fill all of the tanks at the National Aquarium in Baltimore more than 25 times.

(Photo: Courtesy of Bill Nickel and CCLC)