CHESAPEAKE BAY PROGRAM AND WATER RESOURCES UPDATES
September 2024

Chesapeake Bay Program

Local leaders continue to play a key role in Bay restoration
Chesapeake Bay Program
The Chesapeake Bay Program's Local Leadership Workgroup conducted a biannual survey in 2022 and 2024 to assess the knowledge and capacity of local officials on water resource issues, regulations and conservation actions. Results showed that for officials representing mid-size and large communities (10,000 - 99,999 residents and 100,000+ residents) there was a slight decrease in the uncertainty that officials have around federal rules and regulations related to water resources. Results also showed a slight decrease in uncertainty among officials who've served 2-3 years, 3-5 years and 6-10 years.

Brook trout resurgence in the Potomac headwaters is a beacon of hope
Chesapeake Bay Program
Brook trout—a striking, colorful fish that is native to the eastern U.S.—faces severe threats throughout the Chesapeake Bay watershed as pollution, deforestation and climate change rattles their freshwater habitat. But in the headwaters of the Potomac River, the species is seeing a resurgence.

In search of a true river monster
Chesapeake Bay Program
The Atlantic sturgeon is slowly recovering in Virginia. About 10 miles downstream from Richmond is a stretch of the James River that quietly bends into a series of dramatic looping oxbows. One afternoon, during the first week of fall, Dr. Matt Balazik piloted his small research boat to the first of these curves. He passed a towering coal plant and forested riverbanks before cutting his motor and preparing his net to try to catch some prehistoric giants that visit these tidal waters.

Water Quality, Wastewater and Stormwater

Protect Local Waterways
Chesapeake Bay Program
The Bay Program has a new website dedicated to the *Local Government Guide to the Chesapeake Bay*, developed in consult with the Local Leadership Work Group and LGAC. *Protect Local Waterways* has factsheets, presentations, and case studies on issues that matter to local governments such as *Capitalizing on the Benefits of Trees*, *Stormwater Resilience*, *Building the Workforce, Keys to Community Buy-in for the Environment* and *Understanding and Supporting Your Agricultural Allies.* Modules on these topics and more are on www.protectlocalwaterways.org/

Video Series: Collaboration in Action
EPISODE 1: Restoring the Anacostia
In this inaugural episode, join COG Executive Director Clark Mercer as he takes viewers behind the scenes of the regional partnership focused on restoring the Anacostia Watershed. This work has led to major improvements for local streams, the river, and even the Chesapeake Bay – it's all connected! It has also made it possible for us to hold major events like the Festival del Rio Anacostia to connect and educate local communities on the progress being made and additional work ahead.

[Five Hispanic leaders fighting for cleaner water in D.C. and beyond]
Chesapeake Bay Program
Hispanic leaders working within the Chesapeake Bay region are diversifying the environmental industry. The environmental field has historically been dominated by White men, greatly limiting the voices and perspectives within the industry. While plenty of work remains to better diversify the environmental industry, a growing number of Hispanic leaders are taking the helm of some of the most influential organizations in the country, including right here in the Chesapeake Bay watershed. With the Hispanic population being one of the fastest growing demographics in the country, it is critical to have these leaders included in all facets of Bay restoration.

Drinking Water, Water Supply and Drought

[Loudoun Water bolsters drinking water supply with reservoirs, ongoing quarry project]
WTOP
With most of the D.C. area dependent on the Potomac River, and an ongoing study to seek an alternative to D.C.'s drinking water supply, Loudoun County, Virginia, is taking steps to make sure it doesn't get caught short. The Washington Aqueduct, which treats raw water from the Potomac River, to provide drinking water to D.C., Arlington County and the City of Falls Church, has no backup water source or storage. WSSC Water and Fairfax Water have alternative sources, in the Patuxent River and Occoquan Reservoir, respectively.

[COG's Water Supply and Drought Report for November]
As part of the Metropolitan Washington Water Supply and Drought Awareness Response Plan, COG issues monthly drought reports from May- October. Precipitation, groundwater, and streamflow levels are reviewed as well as recent forecasts for the region.

[ICPRB's Water Supply Outlook for November]
Due to the persistent dry conditions, the publication period for the Water Supply Outlook has been extended into November, even though the ICPRB's Low-Flow Outlook model does not cover this month. The Potomac basin upstream of Washington, D.C., received 0.8 inches of rain in October, which is 2.2 inches below normal. Streamflow is currently below normal. Groundwater levels are below normal in many observation wells in the basin.

[Officials extend Drought Watch for DC region]
MWCOG
Metropolitan Washington remains under a Drought Watch, following several months of low rainfall with dry conditions expected to continue throughout the fall and winter months. The Drought Watch was enacted in July by the Metropolitan Washington Council of Governments (COG). Area city and county managers were advised today that officials on COG's Drought Coordination Technical Committee met last week and recommended keeping the region under the Drought Watch.

[D.C. just hit 21 days without rain as drought concerns return]
Washington Post
With a forecast for clear skies and dry weather through at least the next week, Washington is poised to clinch one of its longest streaks without measurable rain on record. The rainless streak hit 21 days Wednesday and will probably become one of the 10 longest ever observed.

Climate and Energy

[A bottle of water per email: the hidden environmental costs of using AI chatbots]
Washington Post

Chatbots use an immense amount of power to respond to user questions, and simply keeping the bot's servers cool enough to function in data centers takes a toll on the environment. While the exact burden is nearly impossible to quantify, The Washington Post worked with researchers at the University of California, Riverside to understand how much water and power OpenAI's ChatGPT, using the GPT-4 language model released in March 2023, consumes to write the average 100-word email.

As data centers for AI strain the power grid, bills rise for everyday customers
Washington Post
Consumers in some regions of the country are facing higher electric bills due to a boom in tech companies building data centers that guzzle power and force expensive infrastructure upgrades. Companies such as Google and Amazon have ramped up construction of new data centers as they race to compete in artificial intelligence. The facilities' extraordinary demand for electricity to power and cool computers inside can drive up the price local utilities pay for energy and require significant improvements to electric grid transmission systems.

PFAS

Predictions of groundwater PFAS occurrence at drinking water supply depths in the United States
Science
Forever chemicals such as per- and polyfluoroalkyl substances (PFAS) are potential hazards for the environment and human health. The detection of PFAS in groundwater is particularly concerning, especially for drinking water sources. Tokranov *et al*. compiled a large database of US groundwater observations as the basis for a model to estimate the probability of PFAS contamination based on well depth. The data come from a range of well types, including those for observation, domestic tap water, and public water supply. The model highlights that about 80 million people in the conterminous US rely on groundwater with detectable amounts of PFAS before treatment.

Fairfax Water faces huge bill to comply with new EPA chemical removal mandate
FFXNow
Officials at Fairfax Water are bracing for one-time and ongoing costs that could approach a half-billion dollars over the next decade to comply with new federal environmental regulations. Unless workarounds are found, most of the costs of addressing the looming impact of chemicals known as PFAS will be borne by its customers, the agency's head told the Board of Supervisors' Environment Committee on Tuesday (Oct. 29).

Food, Forestry and Agriculture

Food, Fiber and the Female Farmer
WETA
Viewers are introduced to six extraordinary female farmers unified in carrying the torch of justice for Mother Earth, her fields and the people they serve. A circular growth pattern filled with colorful rays of light reaching out towards environmental sustainability, food justice, land stewardship, and operational productivity. All the while, cultivating AGRICULTURE one acre at a time.

Upcoming Meetings and Events

CBPC: January 15th
FARM: December 13th

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