

Scientist says growth and climate put water supply in peril

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Prince Frederick, MD – For a community surrounded on three sides by water, Calvert County has a lot to worry about, water-wise as it looks to the future.

“We tend to think things are hunky dory with water,” said Dr. Albert Tucker, a scientist who is president of the Chesapeake Environmental Protection Association’s (CEPA) Board of Trustees. Two big factors—residential growth and climate—are having adverse impacts on the region’s drinking water, Tucker told the Calvert County Planning Commission. “It’s going to hit us pretty hard, especially in this region,” he said.

Tucker’s presentation, “Future of Drinking Water,” was presented during the commission’s Wednesday, July 15 meeting.

Current data shows that the Chesapeake Bay region’s aquifers are in constant decline, dropping two to four feet per year, said Tucker, who explained the decline is due to population growth. Additionally, Maryland experiences droughts every one to two decades. Drought-like conditions between 1998 and 2002 prompted severe water use curtailment, building restrictions and fish kills, the CEPA report stated.

Calvert County depends primarily on the Aquia Aquifer, which supplies 90 percent of its drinking water. The study shows the Aquia has been in decline since 1982.

While Calvert’s residential growth during that period has been significant, growth control mechanisms have been implemented. The county’s population is projected to grow 14 percent before reaching the mandated buildout threshold. However, neighboring Charles County, also reliant on Aquia, has not applied the brakes to residential growth and is currently expected to expand by a rate of 50 percent.

“Charles County is under severe water stress right now,” said Tucker.

In addition to supply and climate, another concern was raised during the 1990s when levels of arsenic were found in the Aquia Aquifer’s Lower Calvert-St. Mary’s segment. The Maryland Department of the Environment switched major users in the area to the Magothy Aquifer. According to CEPA’s data, the arsenic was produced by erosion of natural deposits plus runoff from orchards, and glass and electronics production wastes.

During the question and answer segment that followed Tucker’s overview of the CEPA report, planning commission member Robert Reed asked if scientists had any concerns about the estimated high use of water at Dominion Cove Point’s liquefaction unit, which is currently under consideration. Opponents of the project have stated that approximately 375,000 gallons of water will be drawn per day by Dominion once the liquefaction unit becomes operational. Dominion has estimated that their plan calls for using 250,000 gallons per day from the Lower Patapsco Aquifer, primarily to generate steam. The water that does not evaporate will be recycled. Dominion officials have state that no new wells will have to be dug and no water from the Chesapeake Bay will be used.

Tucker told the planning commission he thinks Dominion’s 250,000 gallons per day figure is an over-estimate. He added that nearby Calvert Cliffs Nuclear Power Plant will remain a much larger consumer of aquifer water than Dominion Cove Point.

Tucker stated it is critical for Maryland officials to determine the sustainable yield of all the region’s aquifers. “We need to have a statewide plan,” he said.

More information about the “Future of Drinking Water” study can be found on CEPA’s web site at www.cepaonline.org

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