

 **MARYLAND DEPARTMENT OF THE ENVIRONMENT**  
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Martin O'Malley  
Governor

Shari T. Wilson  
Secretary

Anthony G. Brown  
Lieutenant Governor

Robert M. Summers, Ph.D.  
Deputy Secretary

November 28, 2007

Francis Jack Russell, President  
Board of County Commissioners  
for St. Mary's County, Maryland  
P.O. Box 653 Governmental Center  
23115 Leonard Hall Drive  
Leonardtown MD 20650

Dear Commissioner Russell:

Thank you for your correspondence regarding the use of water from the Aquia aquifer. I appreciate the opportunity to respond to you regarding this important matter.

Your letter and the letter to Senator Dyson raises a number of questions concerning how the Maryland Department of the Environment (MDE) will manage use of water from the Aquia and other confined aquifers in light of dropping water levels in the confined portions of these aquifers. The letter specifically raises concerns about the application of the 80% management criteria in Anne Arundel County.

The application of the 80% management criterion, from a permitting perspective, is made in the region of the withdrawal as described in Maryland's regulations governing Water Appropriation and Use. The region in Anne Arundel County, that has experienced water level declines, are just down dip of the aquifer outcrop areas and are not in the region of St. Mary's County withdrawals.

The Department believes that in the portion of confined aquifers near the outcrop areas a management strategy that does not refer to the 80% management criteria may be more appropriate. As stated in the conclusion of the Southern Maryland Study in the *2004 Governor's Advisory Report*, an important issue requiring follow up is: "An evaluation of the appropriateness of the 80% management level in aquifers in close proximity to their recharge areas. This management strategy may be too restrictive in certain areas and may result in unwarranted limits in water withdrawals."



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Your letter specifically referred to a 2002 Maryland Geological Survey (MGS) report on the Aquia aquifer in Anne Arundel County. The data in the MGS report clearly shows that water level declines below the 80% management criteria are not a recent phenomenon. The report copies plots of well hydrographs that show that water levels in the Aquia aquifer in updip areas have been below the top of the aquifer for several decades at different locations. We are not aware of any environmental harm or damage to the aquifer or other users as a consequence of this exceedance in the 80% management levels near the outcrop areas. It should be noted that the original amount of available drawdown in the updip areas of the Aquia aquifer that have exceeded the 80% level is generally less than twenty (20) feet.

We are reviewing a proposed study plan created in coordination with the MGS and USGS to develop a rational method for managing water resources in updip aquifer areas. Please be assured that we are committed to ensuring the long-term sustainability of our valuable water resources for the beneficial use of Maryland's citizens and protection of healthy aquatic ecosystems.

Your letter indicated that St. Mary's County's plan is to utilize the Patapsco aquifer for new large developments and major users. We are supportive of this strategy. Ongoing water level monitoring will demonstrate the impacts of this local policy decision. We will carefully track the water level changes and ensure that the withdrawals from the Patapsco aquifer are sustainable.

We are very encouraged that St. Mary's County is committed to water conservation as was indicated in your letter. It is State policy to promote water conservation including the investment in cost-effective measures that improve the efficiency with which water is used, treated, stored and transmitted in Maryland. We are supportive of reusing treated effluent for non-potable uses, such as for irrigation and non-contact cooling water. Public water systems are required to conduct annual water audits and implement programs to reduce the water loss to less than 10% of total water produced. Accurate monitoring and testing and repair of water distribution systems are key components of reducing water losses. Auditing large users and implementing local ordinances to maximize the efficiency of summertime outdoor water use are also encouraged. Some jurisdictions have been effective at limiting summertime peaks in demand through local ordinances that restrict time of day for lawn watering and/or designate odd/even days for watering in accordance with customers' street addresses. Jurisdictions also subsidize the installation of low flow fixtures and promote less dependence on potable water for outdoor uses through the sale of rain barrels to collect roof top runoff. Implementing public education through a variety of methods increases consumer awareness of the importance of conservation and can also result in a reduction of water use. Taken all together, the benefits of increased efficiency in water use reduce the impacts on natural resources and extend the useful life of capital investments in water system capacity. Please let us know of your experience and effective practices that St. Mary's County is implementing so that we can share these with other jurisdictions in Maryland.

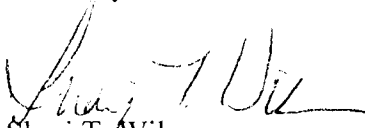


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The Department has informed local governments throughout Maryland of the importance of preparing Water Supply Capacity Management Plans. Such plans are very useful for ensuring that commitments for new growth do not exceed a jurisdiction's water resource allocation. Guidelines for preparing these plans are located on MDE's website. We encourage the County to expeditiously complete such plans for Lexington Park and other St. Mary's County Metropolitan Commission public systems, so that responsible decisions are made concerning developing sufficient water supply capacity, prior to approving additional demand on the system.

Thank you again for your letter. If I may be of further assistance, please contact me or Mr. Jay G. Sakai, Director of Water Management Administration, at 410-537-3567, toll-free 800-633-6101, by mail at 1800 Washington Boulevard, Baltimore, Maryland 21230 or by e-mail at [jsakai@mde.state.md.us](mailto:jsakai@mde.state.md.us).

Sincerely,



Shari T. Wilson  
Secretary

cc: Senator Roy P. Dyson  
Delegate John L. Bohanan, Jr.  
William Icenhower, M.D., MPH, St. Mary's Co. Health Officer  
Delegate Anthony J. O'Donnell  
Mr. John W. Savich, Adm. St. Mary's County  
Delegate John F. Wood, Jr.  
Mr. John B. Wheeler, Chair, St. Mary's County Water Policy Task Force  
and Commission on the Environment  
Commissioner Kenneth R. Dement  
Commissioner Lawrence D. Jarboe, Commissioner  
Commissioner Thomas A. Mattingly, Sr.  
Commissioner Daniel H. Raley  
Mr. Jay G. Sakai, Director of Water Management Administration  
Ms. Heather Barthel, Director of Legislation and Policy

