

ST. MARY'S COUNTY GOVERNMENT
BOARD OF COUNTY
COMMISSIONERS



Thomas F. McKay, President
Kenneth R. Dement, Commissioner
Lawrence D. Jarboe, Commissioner
Thomas A. Mattingly, Sr., Commissioner
Daniel H. Raley, Commissioner

January 17, 2006

The Honorable Roy P. Dyson
Southern Maryland Representative,
State Water Resources Management Advisory Committee
215 James Senate Office Building
Annapolis, MD 21401

- Re:
- a. *DNR/MGS Administrative Report, Water-Supply Potential of the Coastal Plain Aquifers in Calvert, Charles, and St. Mary's Counties, Maryland, with Emphasis on the Upper Patapsco and Lower Patapsco Aquifers, June 2005*
 - b. *Report by the State Advisory Committee on the Management and Protection of the State's Water Resources, May 28, 2004*
 - c. *MGS Report, Simulated Changes in Water Levels of the Aquia Aquifer Using Revised Water-Use Projections to 2025 for Calvert and St. Mary's Counties, Maryland, 2002*
 - d. *MGS Report of Investigation No. 64, Hydrology, Model Simulation, and Water-Supply Potential of the Aquia and Piney Point-Nanjemoy Aquifers in Calvert and St. Mary's Counties, Maryland, 1997*

Dear Senator Dyson:

Roy,

We were briefed recently on the contents and findings of the referenced state reports concerning our water resources. Prompted by this briefing, we believe there is a need for follow-up action and that the State Water Resources Management Advisory Committee is in an excellent position to insure that our actions and requests for assistance receive appropriate attention and priority. As the Southern Maryland representative to the State Water Resources Management Advisory Committee, we request that you bring our concerns, observations, and requests for action, which are listed in priority order below, to the attention of the Committee and its chairman for their consideration and response:

- 1. Use of the Patapsco Aquifer.** We believe that St. Mary's County will reach Management Levels in the Aquia and Piney Point Aquifers not long after the 2030 time frame in the Lexington Park, Leonardtown & Charlotte Hall areas unless the Patapsco Aquifer is more extensively used. Heavier reliance on the Patapsco by all municipal & all other major users can provide private well users with more available water from the Aquia & Piney Point; and will halt and may perhaps reverse the water level declines in both that have occurred over the past 60 years. In the Lexington Park area, our Metropolitan Commission started, in 2000, to use the Patapsco to relieve stress on the Aquia and to conform to the new allowable Federal Arsenic drinking water standards. The leveling of the decline in potentiometric surfaces in our test wells and improved water quality indicates the change is having the desired effect. We have informal indications from MDE that heavier use of the Patapsco is acceptable. Therefore, the Board of County Commissioners proposes to require that new or replacement wells be drilled into the Patapsco wherever it is feasible from an engineering standpoint to do so. This requirement would apply to all wells installed by our water and sewer authority, the Metropolitan Commission; to all major users; and to new rural subdivisions with 25 units or more that are served by a public water system. We are aware that some requests for water appropriation permits can come directly to the The Maryland Department of the Environment (MDE) without passing

through our County's governmental planning process. We further recognize that directing an applicant to use a specific aquifer is a State prerogative; but we feel that heavier use of the Patapsco is a sound, proactive approach to managing our County's water supplies.

We ask the State Water Resources Management Advisory Committee to confirm support for this proposed requirement, and, where major user appropriations permits come directly to MDE that we are afforded an opportunity to comment on the aquifer to be used before the permit is issued.

- 2. Recycled Water and Other Conservation Measures.** We recognize that St. Mary's County needs to do more to conserve our aquifer water. Currently they provide all our drinking water, but they are also used to water lawns, golf courses, athletic fields, commercial landscaping and to meet other industrial operational needs. Use of recycled greywater could significantly reduce the use of valuable potable drinking water for uses for which non-potable water is adequate. New techniques now result in WWTP effluent more pure and contaminant-free than many public water sources, so we believe the state should consider potential for filtration and reuse of effluent to meet both potable and non-potable water needs. We are aware that the County is in a position to encourage or require other conservation steps. Consequently, we are also directing that our Commission on the Environment investigate the full range of other water conservation methods and report back on those that offer high payback potential either with or without use of incentives.

We ask that the Committee address restrictions that limit water conservation options by identifying state and local regulatory changes needed and by initiating legislation necessary to make greywater systems and recycled wastewater both legal and encouraged in Maryland.

- 3. Aquifer Recharge Areas.** In all the studies referenced above, little is said about the Aquifer outcrop areas that re-supply the Aquia, Piney Point and Patapsco. We believe it is important to know whether actions and land use changes initiated by our neighbors to the north and west of us are likely to damage, interrupt or pollute the water which flows to us from there. It could be that other's actions of which we are unaware could mitigate or invalidate the proactive actions we are proposing here.

We ask that your Committee place a priority on investigation of this aspect of our water resources and initiate appropriate action if negative impacts appear likely.

- 4. Management Levels.** Clarification is needed on exactly what happens when Management Levels are reached at a withdrawal point in an aquifer. It is unclear whether all well drilling permits will cease or whether only those permits for major users extracting greater than 10,000 gallons per day will end. Additionally, the geographic extent where permits will be denied needs to be clearly spelled out, so that the area where drilling is no longer be permitted is clearly defined. This is needed not only for the benefit of individual owners/developers but also for county comprehensive sewer and water service planning purposes.

We ask that you insure that such clarification is accomplished as soon as possible.

- 5. Alternate Drinking Water Sources.** Despite expanded water conservation and recycling efforts, eventually, our County will be confronted with exploring other sources of water. Desalination may be a feasible option for the concentrated areas of development found in Lexington Park & Leonardtown. Additionally, the Patuxent Aquifer may offer potential, but has never been investigated. We do not have the resources or technical expertise to examine the feasibility of either of these possibilities.

We request that your Committee place a high priority on studying potential for use of, desalination plants and the Patuxent Aquifer in Southern Maryland.

6. Private Well Usage Data. In our County, private domestic wells account for an estimated 30-50 percent of all the water consumed. Currently, we have no definitive data on daily consumption from these wells yet assumptions about consumption were included in the referenced studies. We strongly believe statistically valid analysis of water withdrawal rates from private domestic wells is needed. A Private Well Usage initiative should be undertaken so that hard data is accumulated and available. Several years ago, an estimate of an effort to gather data by metering private domestic wells in our County showed that it could be accomplished for less than \$50,000.

We ask you to propose a study of water withdrawal rates from private domestic wells and, if significant differences between the findings and the assumptions used in the water supply reports exist, that appropriate reevaluation of the water supply reports be initiated.

7. Observation Well Monitoring. We understand that FY'06 funding has been promised for this important project, but that out-year funds are still uncertain. Well monitoring provides essential data for use in future forecasting. Monitoring, in the spring and fall as a minimum, is absolutely essential and must be continued.

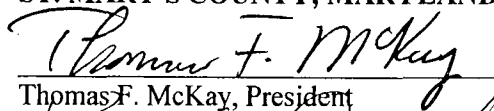
We ask that you to pursue adequate funding so that this crucial data collection effort is not jeopardized.

To facilitate long range planning, we would support additional initiatives to obtain an estimate of the total volume of water each of our aquifers can safely provide. As these initiatives unfold, we ask to participate in developing the parameters, assumptions and policy decisions essential to their successful execution.

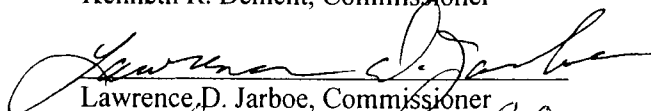
We recognize that actions St. Mary's County takes regarding the aquifers has broader implications in the Southern Maryland Tri-County area and perhaps elsewhere. We have therefore provided our sister counties and appropriate state agencies with copies of this correspondence. We solicit your comments and reaction to all the items outlined above. We especially look forward to your reply to items 1-6 above, and remain available to provide any additional information or assistance you may desire.

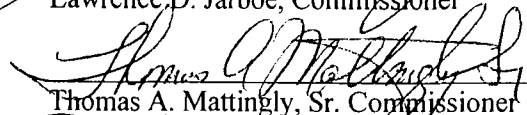
Sincerely,

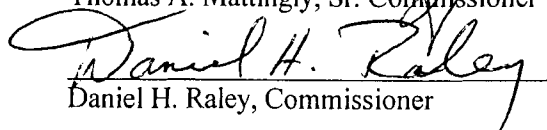
**BOARD OF COUNTY COMMISSIONERS
ST. MARY'S COUNTY, MARYLAND**


Thomas F. McKay, President


Kenneth R. Dement, Commissioner


Lawrence D. Jarboe, Commissioner


Thomas A. Mattingly, Sr. Commissioner


Daniel H. Raley, Commissioner