

**ACTION ITEM
BOARD OF SUPERVISORS**

DATE February 19, 2008

TO: Board of Supervisors

FROM. Anthony J Romanello, ICMA-CM
County Administrator



ISSUE Water Status Report

RECOMMENDATION N/A

BUDGET IMPACT: N/A

ATTACHMENTS (1)

[1] Memo dtd 2-12-08 [] Reso/Ord/Proc #

[] [] Reso/Ord/Proc #

[] [] Reso/Ord/Proc #

REVIEW: [] County Administrator's Office _____

[] Legal _____

[] Budget _____

[] **Consent Agenda**

[X] **Other Business**

[] **Public Hearing**

[] **Discussion Item**

[] **Presentation**

[] **Unfinished Business**

[] **New Business**

PRESENTATION BY Michael Neuhard
Deputy County Administrator

ELECTION DISTRICT: N/A



County Administrator

Memorandum

TO: Board of Supervisors

FROM: Anthony J Romanello, ICMA CM
County Administrator

SUBJECT: Status of Water Supply

DATE: February 12, 2008

Background

Stafford County has been in drought conditions since last summer. The drought and the higher-than-normal water consumption caused the Stafford County reservoirs to drop to record low levels last year. In response, voluntary water restrictions were placed in effect last July. After the drought became more severe and the reservoir levels continued to decrease, the Board of Supervisors declared a public water emergency on August 21, 2007. The County Administrator implemented mandatory restrictions on September 17, 2007 and increased the level of restrictions on October 8, 2007. The current restrictions prohibit most outdoor usage of water. In addition, conservation of indoor use of water is strongly encouraged.

The restrictions have been successful in decreasing the water consumption. When the restrictions were first placed in effect last September, the typical daily demand decreased from an average of 12 million gallons per day (MGD) to an average of 10.2 MGD. After the restrictions were increased in October, average daily demand dropped to 9.4 MGD.

Present Status

As of February 12, 2008, Abel Lake is full and Smith Lake is 78% full. However, Aquia Creek, the major tributary of Smith Lake is currently flowing at only 5 cubic feet per second (cfs) compared to the median flow for this time of year of 30 cfs. The drought has reduced the groundwater levels, which has reduced the base flow of Aquia Creek and Potomac Creek, the major tributaries of our two reservoirs.

The 90-day forecast is for continued below average rainfall. Based upon statistical analysis, there is more than 50% chance that Smith Lake will not refill this spring.

Our present goal is to do everything possible to refill Smith Lake. The Department of Utilities is presently pumping water from the Abel Lake service area to the Smith Lake service area. This decreases the withdrawals from Smith Lake and will aid in its refilling.

Plan of Action and Recommendations

The Department of Utilities will continue to transfer as much water as practical from the Abel Lake Service area to the Smith Lake Service Area to assist in the refilling of Smith Lake. Should Abel Lake drop below full, we will resume the purchase of water from the City of Fredericksburg.

On a positive note, the reservoirs are refilling. Thus, effective February 19th, I plan to reduce the water restrictions to allow outside water usage with a three (3) gallon or less bucket or with a hose with an automatic shut-off valve. This will allow customers to resume washing cars, watering shrubs, etc.

Should both reservoirs refill this spring, I will lift the mandatory water restrictions. However, if the drought continues and the reservoirs levels fall, mandatory restrictions will remain.