

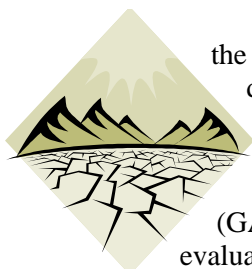
DAAccent...to Local and State Governments



A Publication of **Draper Aden Associates**

August 2003

Future Water Shortages Predicted for State



With the abundance of water the state has received this year, it's difficult to imagine another drought looming in Virginia's future; but that's just what the General Accounting Office (GAO) is doing. Considered the evaluation and investigative arm of Congress, the GAO recently released a report from a study conducted to determine current conditions and future trends for water availability in the U.S. Virginia was one of 18 states named that could expect future shortages.

By polling water managers across the nation, the GAO concluded the need for fresh water is growing and future shortages are likely. Another drought, such as the one the state experienced last year could have severe consequences both economically and environmentally. The report said, in part, that "the nation's capacity for building new dams

and reservoirs to store surface water is limited, and groundwater in many parts of the country is being depleted faster than it can be replenished."

As early as November 2002, rainfall had lessened the severity of last year's drought for Virginia. Governor Mark Warner rescinded parts of Executive Order 33, which placed restrictions on water usage in the state, and the forecast had more precipitation in the foreseeable future.

According to the report, however, water managers in Virginia expect local water shortages over the next decade under drought conditions. These shortages can potentially have a detrimental impact on state and local economies by way of agriculture, tourism, environmental habitat and water quality implications.

There are several ways local and state governments can proactively minimize the challenge of a potential water shortage. One of these ways, and perhaps the most important one, is a Drought

*Continued on back, see **Drought***

Applications Due September 12

VRA's Pooled Loan Bond Program

Applications for the Fall Pool are being accepted now and are due September 12, 2003 for loan closing in mid-December. Eligible projects include water, wastewater, stormwater drainage and solid waste.

The Virginia Resources Authority (VRA) Pooled Loan Bond Program offers competitive interest rates, long-term loans and interim financing for infrastructure projects sought by municipalities in the state.

Results from the most recent VRA's bi-annual state-wide survey indicated that about "one-half of the state's local government and service authorities are familiar with the financing resources available for their infrastructure needs."

*Continued on back, see **VRA***



The Center for Water Security

The Center for Water Security, owned and operated by the University of Wisconsin-Milwaukee, opened in June on the shores of Lake Michigan. Most of its projects deal with early detection and warning of freshwater contamination.

The \$2 million that helped start the center came from federal funding provided by the Department of Defense after the September 11 terrorist attacks. The location is appropriate considering Milwaukee was the sight of a waterborne disease outbreak in 1993 that caused over 100 deaths and hundreds of thousands of reported illnesses.

One of the projects, ongoing at the laboratory, is the use of zebrafish, to detect waterborne biotoxins.

*Continued on back, see **Security***



Draper Aden Associates

Engineering ♦ Surveying ♦ Environmental Services

2206 South Main Street
Blacksburg, Virginia 24060

PRSR STD
US POSTAGE
PAID
MAIL-IT PLUS

Drought....

Preparedness Plan. A Drought Preparedness Plan is a written response to the effects of a drought before it occurs. According to the National Drought Mitigation Center (NDMC), no states had drought plans in the late 1970s. As of April 2003, only nine states *did not* have any kind of drought plan in place.

While all of these plans have been developed on a state level, local governments can take a proactive stance in planning and prepare their own response to drought conditions. While many municipalities did just that this past year for the future, it is important to continue conservation practices in the present.

Virginia's Drought Response Technical Advisory Committee is continuing to develop a state Drought Preparedness Plan. Information on its progress can be accessed at www.deq.state.va.us/info/conservewater.html.

Security....

First generation zebrafish are genetically engineered to "light up" when exposed to varieties of chemicals. These swimming "fireflies" have successfully reacted to E.coli and anthrax in tests.

Other projects include sensing water purity during flow through supply pipes and microscopic animal detection of contamination. The results of these projects will be available to water security agencies throughout the United States.

For more information, go to their web site at www.uwm.edu/Dept/GLWI/cws/. Other sources of information about water security can be found at www.watersecurity.org, sponsored by Haestad Methods and at the American Water Works Association at www.awwa.org.

VRA....

Other results indicated that of those that responded to the survey, the expected level of demand for water infrastructure projects would overwhelm the current financing available. The VRA is vigorously exploring ways to maximize the effectiveness of current resources and arrangements.

For information, go to the VRA web site at www.vra.state.us/finance/bond, or contact Jamie Shield, VRA's Development Officer (jshield@vra.state.va.us) at (804) 644-0310.

Draper Aden Associates provided the prior information as a resource to our readers. We are not responsible for the contents of recommended web sites.

Draper Aden Associates is a full-service engineering, surveying and environmental consulting firm. Services include: civil/utilities engineering; environmental services, geological/hydrogeological services; geotechnical/construction/laboratory; site planning & engineering; solid waste management; surveying; subsurface utility engineering, information management services, GIS and transportation engineering.



Draper Aden Associates

Engineering ♦ Surveying ♦ Environmental Services

Corporate Offices: 2206 South Main Street
Blacksburg, VA 24060
(540) 552-0444
Fax: (540) 552-0291
www.daa.com ♦ daa@daa.com

Blacksburg, VA (540) 552-0444
Charlottesville, VA (434) 295-0700
Hampton Roads, VA (757) 599-9800
Richmond, VA (804) 264-2228
Raleigh/Durham, NC (919) 367-9997