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...providing advice on "how to pay" for environmental protection

Financing the Cleanup of the Chesapeake Bay

By Jack Greer, Maryland EFC

More than twenty years ago the federal government joined with the jurisdictions of the Bay region to sign the historic Chesapeake Bay Agreement of 1983. Since that time the signatories have directed a region-wide Chesapeake Bay Program, which receives $20 million a year through the U.S. Environmental Protection Agency. Despite ambitious efforts to detail the environmental threats facing the Bay, and ongoing programs that draw on an elaborate system of multi-jurisdictional committees and technical experts, key indicators of Bay health have not improved. Underwater grasses remain at a third of their historic abundance, oyster and crab populations are down, and low oxygen zones still plague large areas of the Bay.

Confronting the reality that twenty years of restoration efforts have not significantly reversed the decline of the Chesapeake Bay, the nation's largest estuary, in December 2003 the Chesapeake Executive Council created a panel of experts to recommend financing strategies for making Bay restoration a reality.

Forming the Blue Ribbon Panel

To address the current stalemate in the clean-up effort, the Chesapeake Executive Council, comprised of the governors of the Bay states (Virginia, Maryland and Pennsylvania), the mayor of the District of Columbia, the chair of the Chesapeake Bay Commission and the head of the Environmental Protection Agency sought a select group of experts from business, government and conservation to form a Blue Ribbon Panel on the Chesapeake Bay Watershed. These included former Virginia Governor Gerald L. Baliles, who chaired the Panel, as well as former Governor (and former Secretary of the Interior) Bruce Babbitt, Mr. Jim Purdue, of Purdue *continued on page 2*

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Farms, Mr. Will Baker, President of the Chesapeake Bay Foundation and other leaders, including both current and former representatives from federal, state and local governments.

The Bay Program chose the Environmental Finance Center (EFC) in Region 3, located at the University of Maryland, to provide background, facilitation and synthesis, and to assist with the preparation of the final report.

The Chesapeake Bay Watershed Blue Ribbon Finance Panel heard from a range of experts about the challenges currently facing the Chesapeake Bay. The Panel learned that:

- Nutrient and phosphorus levels — from waste treatment plants, storm water runoff, agricultural operations and even air deposition — all remain too high and continue to damage the Bay.
- A range of actions set forth by the Bay jurisdictions will require billions of dollars, with current estimates based on those "Tributary Strategies" reaching nearly $30 billion.
- No current mechanisms exist for effectively directing large sums of money to the most critical areas.

As Panel Chair Baliles made clear, business as usual will not succeed in cleaning up the Chesapeake Bay.

After months of deliberation, the Panel released a set of recommendations, chief among them the establishment of a new region wide financing mechanism, the Chesapeake Bay Financing Authority.

The Financing Authority would give loans and grants, directed at actions deemed most important for the reduction of nutrient and sediment pollution, regardless of geography. This would allow the targeting of funds toward the most effective restoration activities, across jurisdictional lines. The Panel recommended that the federal and state governments capitalize the Financing Authority in the same manner as State Revolving Funds (SRF) across the country, with an 80/20 federal-state split. Noting that the Bay is not only regional but a national treasure, the recommendation called for the federal government to capitalize the Authority over the next six years with $12 billion and for the states to match this with $3 billion.

The Blue Ribbon Panel made it clear that it did not favor policies that could erode the viability of agriculture in the watershed, especially the small family farm. Trends show that when agricultural lands are lost, they are usually lost to development, a change that brings additional burdens in terms of transportation and infrastructure costs, an increase in impervious surfaces, and radical alteration of natural hydrology. By offering mostly loans and some grants, the Financing Authority would:

- Recoup most of its outlay, thereby assuring its sustainability over the long term.
- Take advantage of creative financing and leveraging strategies that have been tried and tested by SRF's around the country.
- Employ a mix of loans and grants where necessary to help farmers or cash–strapped urban areas implement best management practices.
- Use a coordinated funding and financing approach to urge cooperative implementation efforts across jurisdictional boundaries.
- Create a vehicle for the collection of revenue streams, perhaps along the lines of the recent Maryland sewer surcharge or other creative revenue generation techniques.

As well as the call for a new Chesapeake Bay Financing Authority, there are nearly two dozen "Supplementary Recommendations" presented in the Panel's final report. These include increasing and improving existing agriculture cost-share programs, exploring possibilities for point-to-point trading among wastewater treatment facilities, and offering selected tax incentives or disincentives (including a tax on lawn and garden fertilizer).

All these recommendations, as well as the 44-page report, *Saving a National Treasure: Financing the Clean-up of the Chesapeake Bay* can be found on the web site of the Chesapeake Bay Program (www.chesapeakebay.net) and the University of Maryland EFC (www.efc.umd.edu). Also on the web are background materials prepared for the Panel, including several matrices of financing alternatives.

The governors of the Bay states and other regional leaders are now considering the Panel's recommendations and are expected to set in motion plans to outline precisely how a Chesapeake Bay Financing Authority could be set up and how it might function.

EFAB Releases Two Reports

In January 2005, EFAB released two advisories to the Agency for consideration and comment:

Innovations in Watershed Financing: There is potential for maximizing available financing for watershed management by informing and training watershed managers, coordinators, and others to overcome the multiple financing challenges they face in getting coordinated projects underway. This letter presents the Board's advice on innovative ways to build the capacity of watershed organizations by developing and implementing finance strategies to obtain and leverage funding.

Useful Life Financing of Environmental Facilities: This report examines the advantages and disadvantages of amortizing bonds issued for environmental facilities over longer periods of time. The recommendation would extend the loans to match the useful life of such facilities, as opposed to the more typical practice of amortizing debt over periods much shorter than the useful life. The Board believes this this report is timely and pertinent to the financial climate that is challenging communities nationwide and encourages EPA to support this concept and distribute the paper widely.

Missouri's Energy Loan Program
By Larry Archer, Missouri Department of Natural Resources

When a late spring hail storm rolled through north-central Missouri in May, it left behind broken shingles, dented car hoods and significant damage to the 102 year old Grundy County Courthouse in Trenton, MO. "It damaged the roof, broke 16 windows, dented gutters, air conditioners and more," said Grundy County Presiding Commissioner Kenneth Roberts. The total cost of the damage was estimated at $143,000. For officials in this rural community of 6,200, the storm damage represented a potentially significant drain on the county budget. It was then that county officials remembered a letter they had received months earlier from the Missouri Department of Natural Resources (MDNR). The letter promoted the department's Energy Loan Program, which offered a funding avenue to help replace all of the building's 82 windows—broken or not—with energy-efficient windows.

Working with the department's Energy Center, the county secured a $40,000 low-interest loan to fund the upgrade. The county will use the estimated $3,300 in annual energy savings to repay the loan.

Since 1989, the department has made almost 400 such energy loans totaling nearly $60 million to local governments, school districts, colleges and universities. The projects funded by the loans have resulted in estimated cumulative energy savings of $62 million.

"This program works well for us on several levels," said Steve Mahfood, former director of the Department of Natural Resources. "We get to support energy efficiency and conservation, and the communities save significantly on their energy costs."

After the loan is repaid, the continuing energy cost savings can be placed toward whatever priorities local officials choose, Mahfood said. "In 2001 it became clear that the demand for these loans was soon going to exceed the funds available. In tight budget times, we needed to look at creative alternatives to provide more loans without general revenue from the State, so we asked the Environmental Improvement and Energy Resources Authority (EIERA) to work with the Energy Center to develop a new financing structure."

The result was a bond financed program, the first of its kind in the nation to be used for energy efficiency projects, that would allow existing funds to provide twice as many loans as the previous direct loan program. The EIERA, having financed nearly $5 billion Environmental projects over the years, structured the new Energy Efficiency Leveraged Loan Program using a pooled financing reserve fund model that has received an Aa2 Rating from Moody's Investors Services.

The two agencies have worked hard to make the leveraged program seamless to the borrowers. MDNR originates the loans and provides funds for construction. Once construction is complete, the loans are assigned to EIERA which issues bonds, the proceeds of which reimburse MDNR for the construction outlays. The borrowers make repayments to a trustee bank that uses the repayments to pay off the EIERA bonds. Additional security is provided by MDNR placing an amount equal to 50% of the bonds outstanding in a reserve fund securing the bonds in case of default. As the bonds mature, reserves are released back to MDNR to be loaned for new construction.

"In the leveraged program, rather than having the entire loan amount tied up until repaid, now only the reserve amount, or 50% of the loan, is tied up. This allows the other 50% to be reloaned to projects that could not have been funded otherwise," said Mahfood. "Leveraging these dollars helps us provide energy savings to more communities than we could before and energy savings provide stimulus in other areas as well."

In addition to lowering energy costs, the windows will extend the life of the building and contribute to the general economic health of Trenton's downtown commercial area. As they had in the early days of such communities, courthouses remain an important part of the economic environmental of small-town commercial districts, according to Mark Miles, director of the department's State Historic Preservation Office.

"In many cases the courthouse is the single most architecturally significant building in a community, and they are usually in the downtown area," Miles said. "By promoting preservation of these buildings, we hope it can be a spark to stimulate downtown preservation and economic revitalization."

In fact, a recent study conducted by Rutgers University estimated that historic preservation in Missouri contributes slightly more that $ 1 billion annually to the gross state product and generates nearly 28, 000 jobs.

Roberts hopes the window replacement in Grundy county is the start of improvements financed through the Energy Loan Program. Once the window loan is repaid, the county would like to use the same program to help fund the purchase of high-efficiency heating and air conditioning systems to replace the building's current boiler and radiator heating and window-unit air conditioning systems.

Privatization of Non-Core Activities
By Billy G. Turner, Columbus Water Works

In response to a 1991 Presidential executive order the Department of Defense is required to privatize non-core activities. A major non-core area is utilities, i.e. water, sewer, electric & gas. While it was probably assumed that most privatization would occur via transfer to private companies, it is an important area for public utilities to consider. Recently, Columbus Water Works (CWW) completed arrangements to assume ownership and operation of all water and wastewater services for Fort Benning (F.B.) GA , Home of the Infantry. The contract is for 50 years with a value of $722 million. CWW plans call for initially operating the existing CWW system, thereby eliminating the deteriorating base treatment plants. The DOD estimated a $1.4 million per year savings via the contract. EFAB member Billy Turner is the President of CWW and retired board member George Raftelis served as financial advisor to CWW during contract negotiations.

Members Corner

EPA's Acting Administrator Stephen Johnson recently appointed five new members to EFAB

Julie Belaga is currently Co-Chair of the Connecticut League of Conservation Voters, an organization that supports environmentally-friendly elected officials in Connecticut. She served as EPA's Region 1 Administrator from 1989— 1993, responsible for oversight of federal legislation for the six New England states. She serves on the Board of National Audubon CT and the Connecticut Fund for the Environment.

John J. Boland is an engineer and an economist, specializing in public utility finance and management, water and energy resources, and environmental economics. He is currently Professor Emeritus at the Johns Hopkins University after more than thirty years in the Department of Geography and Environmental Engineering. He holds a Bachelor of Electrical Engineering, Master of Science (governmental administration) and doctor of Philosophy (environmental economics) degrees. He is a registered professional engineer. In his spare time, John likes to travel.

Jennifer L. Hernandez chairs Beveridge and Diamond's Project Development Practice Group and is ranked by clients and peers as one of California's top ten environmental lawyers. A San Francisco native, Ms. Hernandez was a Presidential appointee to the Presidio Trust and serves on several boards including the California League of Conservation Voters and California Center for Land Recycling. Jennifer and her husband are avid National Park visitors, having visited more than 30 just last year. Their six year old son Brian has earned "junior ranger" badges at more than a dozen of these parks.

Helen M. Sahi is Director of the Environmental Services Department at Bank of America in Hartford, CT. She is responsible for environmental issues as they relate to risk management, credit risk, and environmental policy. In addition, she is responsible for assisting public policy in fulfillment of the bank's environmental commitment. Ms. Sahi is the chairperson for the United Nations Environmental Program—Financial Institutions Initiative and is the Past President of the Environmental Bankers Association.

Justin Wilson is currently a member of Waller Lansden Dortch and Davis and Adjunct Professor of Law at Vanderbilt Law School. He formerly served as Deputy to the Governor of Tennessee for Policy and served as Commissioner of the Tennessee department of Environment and Conservation. Justin and his wife have four sons. He skis, hikes, and goes to aerobics classes. Tennessee's only linear state park is named the Justin P. Wilson Cumberland Trail State Park after him because of his conservation efforts in Tennessee.

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Comments, suggestions or articles are welcome.

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Upcoming Events

2005 Information Management & Technology
AWWA/WEF/Conference and Exposition/Center, CO/April 17-20, 2005

2005 Joint Residuals and Bio-Solids Conference
WEF/AWWA/KY-TN WEA/Nashville, TN/April 17-20, 2005

National Clean Water Policy Forum/Marriott Metro Center
WEF/AMSA/Washington, DC/May 03-04, 2005

2005 CIFA Federal Policy Conference/Wyndham Hotel
Washington, DC/May 12-13, 2005

EPA Community Involvement Conference and Training
Buffalo, NY/July 12-15, 2005

2005 Watershed Management Conference
EPA/ASCE/Reston, VA/July 19-22, 2005

EFAB Summer Meeting
San Francisco, CA/August 15-16, 2005