

# WATERSHED WATCH

ST. MARY'S RIVER WATERSHED ASSOCIATION  
PO Box 94, St. Mary's City, MD 20686

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FEBRUARY 2007

## LETTER FROM THE PRESIDENT

Dear Friends of the St Mary's River,

I sincerely hope that everyone's New Year is off to a great start! While it has often felt more like spring (I planted onions and peas on January 15<sup>th</sup>), I'm sure that Ol'Man Winter isn't through with us yet.

I'm very pleased to announce that the St. Mary's River Watershed Association will join with the St. Mary's College Center for the Study of Democracy and the College's Environmental Studies Program to co-host an important symposium on the health of the Chesapeake Bay, "Finding a Balance: Growth and the Environment in the Chesapeake Bay Region".

The symposium will be held at the Cole Cinema on Saturday, March 3rd, from 8:30 am until 3:00 pm. The day will feature a morning panel entitled, "Doing Development Right: Sustainable Growth for Maryland", and an afternoon panel, "Protecting the Chesapeake Bay in the 21<sup>st</sup> Century". Those invited to participate

on the panels include Senator Bernie Fowler, longtime champion for the Patuxent River and Chesapeake Bay; Frank Chaney, Chairman of Chaney Enterprises; Dennis Canavan, Director of the St Mary's County Department of Land Use and Growth Planning; County Commissioner President Jack Russell, Delegate Tony O'Donnell; Angus Phillips, Outdoor Writer for the Washington Post, David O'Neill, Executive Director of the Chesapeake Bay Trust, and Dr. Howard Ernst, Visiting Associate Professor of Political Science at St. Mary's College and author of *Chesapeake Bay Blues: Science, Politics, and the Struggle to Save the Bay*.

The day will include a special tribute to Senator Fowler and two keynote addresses. "The Chesapeake Bay: The Responsibility of the Scientist" will be given by SMRWA vice president, and St. Mary's College Steven Muller Distinguished Professor of Science, Dr. Robert Paul.

In the 1980's the states

bordering the Chesapeake Bay, the District of Columbia, the Chesapeake Bay Commission, and the U.S. Environmental Protection Agency signed historic agreements that established the Chesapeake Bay Program partnership to protect and restore the Chesapeake Bay's ecosystem. This pledge was renewed in the year 2000, but there are signs that the goals may be unattainable and that political will may not be strong enough to protect our nation's largest estuary.

For more than three decades, scientists have led the effort to clean the Bay by providing scientific evidence to decision-makers, and they have influenced policy. Yet, scientists are often reluctant to exercise their power in public and further influence practices that might enable managers to be more effective. Dr. Paul's keynote will present our current understanding of the Bay's health and will explore the relationship that scientists play in influencing public policy.

[CONTINUED ON PAGE EIGHT]



Joe Anderson

### SPECIAL POINTS OF INTEREST:

- *Green Building Forum Saturday, Feb. 24 from 9 AM until 1 PM at the Forrest Technology Center - Sponsored by the St. Mary's County Commission on the Environment, St. Mary's River Watershed Association, and the Potomac River Association*
- *Finding a Balance: Growth and the Environment in the Chesapeake Bay - Symposium - Saturday, March 3 from 8:30 AM until 3:00 PM at Cole Cinema, St. Mary's College of Maryland*
- *We are now located on the web! Check us out at [www.smrwa.org](http://www.smrwa.org)*

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Bay Health Symposium —SAVE THE DATE—Saturday, March 3 from 8:30 - 3:00

*Finding a Balance: Growth and the Environment in the Chesapeake Bay*

## Oyster Project Update

By Roger Stone

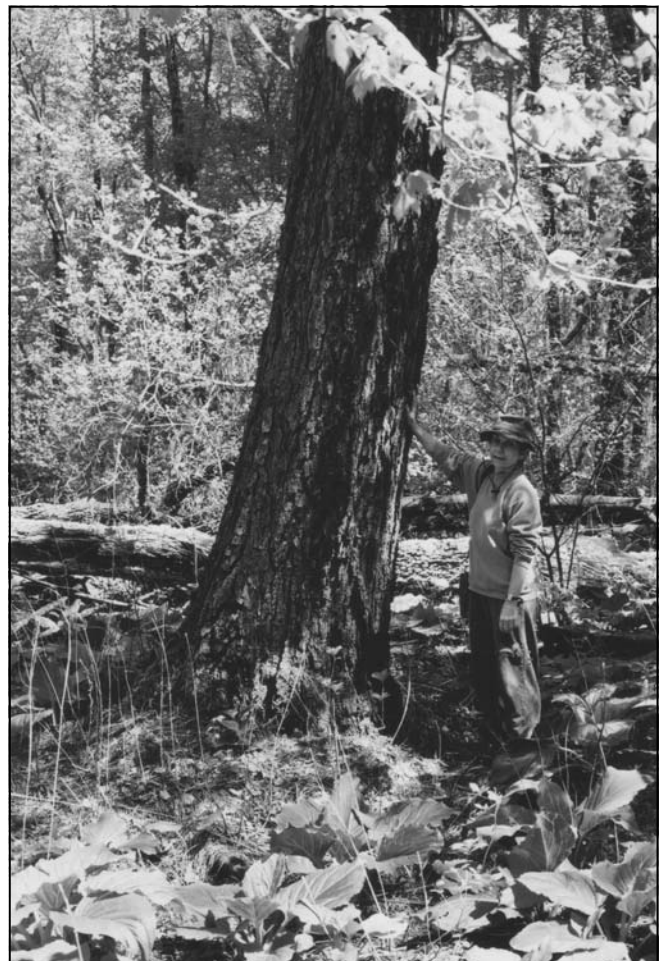
During the winter, when the river water temperature dips to 40 degrees F or less, oysters become inactive. So there is currently not much to be done about the oyster-bearing floats that SMRWA has set out at privately owned docks along the river, or those held in tanks at the Chesapeake Bay Field Lab (CBFL) on St. George Island, except to check that they are secure and in place.

Come spring, St. Mary's College of Maryland students under the supervision of Research Associate Henry Bush and Technical Adviser Bob Paul will begin recording the size of the oysters and their effects on biodiversity and water quality. This work will continue through the summer and into the fall, when we hope we will have good news to report about our innovative oyster aquaculture experiment. (see the November 2006 newsletter for Bob's explanation of how it works)

But while our oysters are snoozing, there has been plenty for me to do in my capacity as Project Director. We have completed the paperwork necessary to begin the flow of funds from the project's principal benefactor, the National Fish and Wildlife Foundation (NFWF), and have received their first installment of \$12,150. We are working on a technical paper called a "Quality Assurance Project Plan," required by the U.S. Environmental Protection Agency whose funds NFWF distributes under its Chesapeake Bay Small Watersheds program. And I have begun the process of assembling materials for the video which we are pledged to produce at the end of our experiment. In this regard, we would welcome help from anyone out there who owns and knows how to use Apple's Final Cut Pro video editing software.

We express our warm thanks to CBFL and to the owners of the docks who have volunteered to act as hosts for the oyster floats. They are: Gary and Linda Williams; Peter and Susan Messitte; Tim and Karen Nutter; Captain and Mrs. Russell Crenshaw Jr.; Doug and Cynthia Gardiner; Doug and Robin Cook; Mr. and Mrs. Richard Timbie; John and Gail Harmon; Mr. and Mrs. Robert Maddox; and Elmer and Johnie Brown.

Stay tuned—we'll have plenty more to report come spring.



A SMRWA member stands next to one of the larger oak specimens still standing next to the Hilton Run. Photo by Bob Lewis.

## An Economist's Thoughts about Preserving the St. Mary's River Watershed

By P. Joan Poor

I'd like to share with you my perspective as an environmental economist, on preserving the St. Mary's River Watershed. Like most economists, I thrive on data analysis; searching for significant relationships between human activity and the quality of the natural environment.

When I arrived at St. Mary's College of Maryland some six years ago, I was intrigued and excited about the St. Mary's River Project because it was creating a huge spatial data set of water quality data that spanned a number of years. Having done lake water quality research at the University of Maine, I was excited about using my economics toolbox to investigate water quality data for an entire watershed. Living on this peninsula known as St. Mary's County, it does not take long to realize that the local culture and its residents are intertwined with water – not only for its harvests of oysters and blue crab, but for its scenic beauty. Preserving this beauty for future generations is important. The logical conclusion that an environmental economist would draw, is that people who reside within the St. Mary's River Watershed (and beyond) place great value in maintaining water quality.

Luckily, the water quality monitoring undertaken as part of the St. Mary's River Project presented me with the data I needed to statistically investigate whether water quality (in terms of lower levels of pollutants) was indeed valued positively by the homeowners within the watershed. Remember that there are many competing uses within our watershed, some of which include commercial and residential development, recreational uses, ecological habitat, and flood control. We must be careful however, because some of these uses can impair the qual-

ity of the watershed by accelerating run-off. Impervious surfaces such as roadways and roof-tops act to carry more pollutants into local streams and rivers. With this in mind, I set out to investigate the values that homeowners within the watershed place on water quality.

With the help of one of my students at the College and data from the St. Mary's River Project, I undertook an investigation which uses an economic methodology that considers residential property sales and statistically estimates the value that homeowners in the watershed place on the various attributes of their properties. Some attributes included in the study were whether the property has a garage, the number of stories a house has, whether the house has a fireplace, the home's square footage, the lot acreage, whether the property is a waterfront lot or adjacent to a waterfront lot. We also used the water quality monitoring data to determine if properties located in closer proximity to monitoring stations with higher levels of dissolved inorganic nitrogen and total suspended solids – two indicators of impaired water quality – would be valued less. Essentially, using about 1,400 residential property

*... people are willing to pay more in terms of residential property values to live in healthy watersheds.*

[CONTINUED ON PAGE 4—SEE THOUGHTS]



Lesser Canadian geese wading in the chilly waters of St. Mary's River.  
Photo by Richard Holden.

## Green Forum: Sustainable Building Today for a Greener St. Mary's Tomorrow

### PUBLIC INVITED

The St. Mary's County Commission on the Environment is hosting a forum to highlight green building techniques to encourage a wider use in public buildings and residential settings. Speakers from St. Mary's College, the St. Mary's Public Schools, SMECO, and MetCom will discuss how they are incorporating the principles of green building in recent projects and how these impact life in St. Mary's County. Green vendors will be available to explain how individuals can adopt green habits. Light refreshments will be served.

Saturday, February 24

9:00 AM to 1:00 PM

Forrest Career and Technology Center

**FREE ADMISSION**

Co-sponsored by the Potomac River Association and the St. Mary's River Watershed Association.



Private dock in Horseshoe Bend. Photo by Richard Holden.

### [THOUGHTS—FROM PAGE 3]

sales from June 1999 through May 2003 from within the St. Mary's River Watershed, we analyzed the average selling prices to estimate the values of the individual attributes for the average home sold within the watershed.

As one would expect, the presence of a garage was valued at about \$12,000; a fireplace was worth about \$10,000; an additional square foot of living space was worth an estimated \$162; and a waterfront property was worth an additional \$130,000. All of these values are what economists call statistically significant. What was even more interesting from an environmental perspective however, were the significant relationships for the water quality variables. For our sample we found that for every one milligram per liter increase in total suspended solids, the average property's value declined by \$1,086 and for a one milligram per liter increase in dissolved inorganic nitrogen, the average property's value declined by \$17,642. These statistical results verified what most residents in the St. Mary's River Watershed intuitively understand, that people place value on preserving the water quality within their watershed.

What does all this mean in a public policy context? It supports the notion that people are willing to pay more in terms of residential property values to live in healthy watersheds. We could also conclude that if we don't look after the health of our watershed, residential property values could drop, and of course with falling property values comes smaller local property tax base. It is therefore important that local officials carefully plan development activities within our watershed, not just because our local residents value preserving the quality of our watershed, but because our local economy benefits from maintaining the quality of our local environment.

[Editor's Note: The complete research study is forthcoming in the peer reviewed journal *Ecological Economics*, and is co-authored by P. Joan Poor, Keri L. Pessagno and Robert W. Paul.]

## How to save money with better lighting

By Frank Allen

About a year ago, a SMECO newsletter made a claim that more efficient lighting will have little impact on the average homeowner's utility bill. Here comes the rebuttal (although I will admit that improved house insulation and more efficient appliances do provide higher savings).

We replaced two of our high use lighting fixtures several years ago. The first was the overhead light in the dining room. The old fixture was an eight-bulb chandelier with dimmer switch (total 320 watts). The new fixture has three compact fluorescent bulbs (total 45 watts). Thus the new fixture uses 275 less watts than the old one. Monthly savings, assuming 4 hours a night use and cost per kilowatt hour based on my most recent SMECO bill of 12.5 cents/kilowatt hour, is \$4.12. Our kitchen was lighted with two overhead fluorescent fixtures (total 160 watts). We kept the fixture, although we almost never use it. Our new suspended light fixture has one compact fluorescent bulb and provides better light for our needs. Assuming 3 hours nightly use we save \$1.63 each month with the new fixture. These two fixtures cut our electric bill by \$69 a year. I think you see how you can really cut your light bill if you go around the house and install the new fluorescent bulbs whenever the old bulbs burn out.

There is the complaint that these bulbs are expensive. These bulbs now cost about \$3.50. Let's say that these 15

watt bulbs are \$2.75 more costly per bulb than the old 60 watt ones; how long does it take to break even on cost? If we assume 3 hour a night usage, the new bulb saves (at 12.5 cent per kilowatt hour) just over 50 cents a month. Payback is in about 5 1/2 months. As a bonus, the new bulbs last far longer than the old ones.

I was never fond of the old fluores-



cents – bad light spectrum and flicker. The new ones do take a fraction of a second to come on and several seconds to come to full light output. However I think they give more pleasant light, and light that is easier on the eyes, than incandescent bulbs.

Outdoor lighting is another area

where a consumer can really save money. Many outdoor “security” lights have mercury vapor bulbs (186 watts). If they are on only at night they cost \$8.37 each month (plus rental fees if they are owned by SMECO). Double that if they operate 24 hours a day. If you really want to keep these bulbs, I highly recommend you get a day/night switch so you don't light the outdoors during the day. Better yet, I suggest a lower wattage fixture, with a design to funnel the light where you need it – your neighbors will really thank you for not lighting their bedrooms at night.

Even more cost saving is to install a fixture with a combination day/night/motion sensor with manual over-ride. You can make these stay on if you are working outside or expect company. Otherwise they stay off except when there is a disturbance at

night. These units can cost pennies a month to operate.

Bottom line, improved light design can save you some real money on your utility bill and provide better lighting as a bonus. Note that if you are using less lighting watts, you need a lower air conditioning load in the summer.

Editor's Note: Highly efficient compact fluorescent bulbs are widely available at local hardware stores. For those of you who enjoy online purchasing, I recommend 1000BULBS.com. I have been purchasing replacement bulbs by the case from them for several years now and they are competitively priced.

## Developer invites conservation groups to discuss 717-home development

By Joe Anderson

A 717-home housing project being planned within the St. Mary's River watershed, St. Mary's Crossing, is currently in the county's planning process.

The 250-acre project will be located on St. Andrew's Church Road, north of Indian Bridge Road. That such a project is being planned here is no surprise. After all, the fact that the St. Mary's River flows through the Lexington Park Development District and will be impacted by development is the major reason why the St. Mary's River Watershed Association was formed.

On the bright side, we have been invited to sit down with the developers and the leaders of the Potomac River Association to provide input early in the planning stage. An important aspect of our mission, we hope this cooperative approach will lead to the construction of watershed friendly project. We'll keep you posted as this development moves forward.



Great Blue Heron peruses the morning breakfast menu along the tidal Fishers Creek. Photo courtesy of St. Mary's College of Maryland.

### FOUNDING MEMBERS OF THE ST. MARY'S RIVER WATERSHED ASSOCIATION

Gail & John Harmon	Bob & Susan Paul	W.O. Wormwood	Dan Donahue
Raymond de Leon	Gary & Linda Williams	Doris Fischer	Cindy Greb
Tom & Helen Daugherty	Roger & Florence Stone	John Wilson & Nancy Warren	Nell & Merv Hampton
Suzy Henderson	Alice Tetlman & Martin Winnick	Phil and Kate Willette	Carolyn Panuska
Bob Lewis & Merideth Taylor	Nicholson Parker	Frank & Christina Allen	Don & Sharon Thorstenson
George Baroniak	John & Grace Horton	Maryland Bank & Trust Co.	Abigail Meatyard
David Waring	Zack & Julia Messitte	Jordan & Elizabeth Price	Peter & Susan Messitte
Elaine Szymkowiak	Ernest & Paula Willoughby	Kate Fritz	Charles & Kathy Micallef
James & Judy Carr	Gail Ostergaard	Cherry Cove Land Development	Martin H. Dominguez
David & Ann Allen	Fred & Becky Benton	Don & Christina Cropp	Abel M. Dominguez
Hassanali Mehran	David Deaderick	John & Kathleen Fulchiron	Patuxent Partnership
Maureen & Stephen Bernard	Phillip and Phyllis Margoliuss	Merl & Susan Evans	Todd & Lindsey Radolf
Jim Hardin	J. Tyler Bell	Dudley Chase	Raymond & Carla Norris
Jim Smith	John & Julie McAllister	Robert & April Tucker	Sawyer & Myerberg, P. A.
Paul & Nancy McAllister	Curtis & Albina Cooper	Andrew McDonald	Francis & Viki Russell
Joe Anderson & Mary Jane Rowe	Jane O'Brien & James Grube	Gary Hunt	Nancy Rogers
Joan Poor	Tri County Abstract, Inc	Richard Holden	Carolyn & Bryan Siebert
Potomac River Association	Sherry Stanley & John Giusti	Computer Sciences Corporation	Brenda & Robert Elwood
Chesapeake Bay Field Lab	Kate & Martin Sullivan	J. Scott Rickard	Captain Will Gates
R. Bruce & Suellen Keiner	John Hanson Briscoe	Donald Strickland	———TO BE CONTINUED———

### Bay Health Symposium

## *Finding a Balance: Growth and the Environment in the Chesapeake Bay*

Saturday, March 3 from 8:30 AM until 3:00 PM

Cole Cinema in the Student Center, St. Mary's College of Maryland

- Morning Panel: *Doing Development Right: Sustainable Growth for Maryland*
- Afternoon Panel: *Protecting the Chesapeake Bay in the 21<sup>st</sup> Century*
- Special tribute to Senator Bernie Fowler
- Lunch will be provided - Public invited - More Info 301-862-3517 or 240-895-6432

Also invited to participate: Frank Chaney, Chairman of Chaney Enterprises; Denis Canavan, Director of the St Mary's County Department of Land Use and Growth Planning; County Commissioner President Jack Russell, Delegate Tony O'Donnell; Angus Phillips, Outdoor Writer for the Washington Post, David O'Neill, Executive Director of the Chesapeake Bay Trust, and Dr. Howard Ernst, Visiting Associate Professor of Political Science at St. Mary's College and author of *Chesapeake Bay Blues: Science, Politics, and the Struggle to Save the Bay*.

KEYNOTE ADDRESS: *The Chesapeake Bay: The Responsibility of the Scientist*

By Dr. Robert Paul



Photo by Richard Holden.

### I would like to become a member of the SMRWA

Annual Membership Options	Price
<input type="checkbox"/> Individual	\$35.00
<input type="checkbox"/> Family	\$50.00
<input type="checkbox"/> Senior	\$20.00
<input type="checkbox"/> Student/Limited Income	\$10.00
<input type="checkbox"/> Corporate	\$500.00
<input type="checkbox"/> Other	_____

Total: \_\_\_\_\_

Yes, I would like to become an active member/volunteer

Please make checks payable to:  
St. Mary's River Watershed  
Association and mail this form  
along with your check to the  
address below:

PO Box 94  
St. Mary's City, MD 20686

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
Email Address

\_\_\_\_\_  
Phone



**OUR MISSION**

To protect, improve, and promote the well-being of the St. Mary's River Watershed through the collaborative efforts of economic, agricultural, environmental, social, cultural, and political stakeholders in the community.



[CONTINUED FROM PAGE ONE]

Maryland Attorney General Doug Gansler has been invited to deliver the afternoon address. Mr. Gansler has promised to make the restoration of the Chesapeake Bay high on his list of enforcement priorities. I hope that you will be able to join us for what promises to be a memorable, informative, and inspirational day.

Finally, a word about membership. WE NEED YOU! If you have recently renewed your SMRWA membership, thank you, if you haven't yet done so, please consider joining us again, and if you know someone who you think would be interested in helping us to reach our goal of preserving the quality of the St. Mary's River, please encourage them join as well. Your membership dues help us to implement restoration projects for the river, and your participation is critical when political action is required.

Thanks for you support.

Sincerely,

Joe Anderson, President

