

REPORTER



G. Coat

Volunteers remove trash, including a junked car, on a Rock Creek tributary in Rockville, Md. Most of the car was removed, and plans were made to retrieve the rest, along with a refrigerator. ICPRB co-sponsored the site.

They Took Out the Trash

The 16th annual Potomac River Watershed Cleanup, held at 162 sites throughout the watershed on a cool, moist April 3rd morning, was a great success, with more than 3,600 volunteers collecting more than 161 tons of trash in about three hours. The annual event is organized by the Alice Ferguson Foundation, which runs the Hard Bargain Farm environmental education facility in Accokeek, Md.

"Litter may not be the most threatening pollutant in the Potomac, but it's one everyone can do something about. We all need to work for a trash-free Potomac," noted Tracy Bowen, executive director of the Alice Ferguson Foundation. The ICPRB, one of many participating agencies, has partnered with the foundation in supporting the cleanup effort for most of its 16 years, providing publicity, materials, and identifying new cleanup sites and volunteers.

The cleanup saved basin governments about \$250,000 in cleanup costs, noted

the foundation's Cleanup Coordinator Wende Pearson. "This event was once again a rousing success largely due to the time and commitment of our volunteers, sponsors, and local officials," Pearson said. "Volunteers and partner organizations contributed 10,536 volunteer hours toward trash collection and many more for planning, coordinating, and trash pickup. These are hours that local agencies would have had to spend to accomplish the same task," Pearson said.

The eyesore of trashy shorelines is more than just an aesthetic problem, Bowen added. "Few people understand both the financial and health implications of littering. Trash endangers the lives of fish and other animals, provides breeding grounds for mosquitoes that carry West Nile virus, and decreases property values and tourism," she said. Bowen noted that the jurisdictions currently spend plenty on roadside litter pickup, including about \$7.5 million in Maryland, \$6 million in Virginia, and more than \$1 million in West Virginia.

Our mission is to enhance, protect and conserve the water and associated land resources of the Potomac River and its tributaries through regional and interstate cooperation.

ICPRB COMMISSIONERS

DISTRICT OF COLUMBIA: **Theodore J. Gordon**, **Vincent R. Nathan**, Alternate; **Hamid Karimi***, **Anne D. Snodgrass**, Alternate; **Lloyd Preslar**

MARYLAND: **Gov. Robert L. Ehrlich, Jr.**, **Robert M. Summers**, Alternate; **James H. Gilford***, **Minnie Pohlmann**, Alternate; **George H. Shoemaker**, **John Parran Bowling**, Alternate

PENNSYLVANIA: **Rep. Stephen R. Maitland**, **Rep. Bob Bastian**, Alternate; **Cathleen C. Myers**, **John C. Booser**, Alternate; **William I. Plank***, **Roger C. Steele**, Alternate

VIRGINIA: **Robert G. Burnley**, **Michael D. Clower**, Alternate; **Gloria Taylor Fisher***, **Andrew H. Macdonald**, Alternate; **Del. Robert G. Marshall**, **Del. Marian Van Landingham**, Alternate

WEST VIRGINIA: **Marten R. Jenkins, Jr.**, **Phyllis M. Cole**, Alternate; **Del. Harold K. Michael**; **Stephanie R. Timmermeyer**, **William D. Brannon***, Alternate;

UNITED STATES: **J. Winston Porter***, **Frederick R. Eames**, Alternate; **George Reiger**; **Jane G. Witheridge**

*Executive Committee Member

The ICPRB Officers:

J. Winston Porter, Chairman
Gloria Taylor Fisher, Vice Chairman
Joseph K. Hoffman, Executive Director
Robert L. Bolle, General Counsel

Commissioners and their alternates are appointed by the state's governors, the mayor of the District of Columbia, and the President of the United States.



A trash bag awaits pickup in Anacostia Park. C. Dalpra

Much of the trash collected was recyclable. About 30 percent (about five tons by weight) of the bagged trash was recyclable plastic bottles. These bottles, put back in the waste stream, could become fleece clothing, park benches, plastic bags, or other useful items.

The massive amount of recyclables left as trash was not lost on the volunteers who cleaned a site sponsored by ICPRB and the City of Rockville along a small tributary to Rock Creek. About 30 volunteers attacked a wooded area near the Halpine View Apartments apparently used as a party spot. The group, which included staff and residents from the apartment building, picked up about 80 bags of trash, about 50 of which were filled with glass and plastic bottles and cans.

"I was appalled at the amount of beer bottles and cans," noted site coordinator and ICPRB staff member Steve Saari. "People picked up until about 1 p.m., and we only got about half the site clean," he said. The group also collected mattresses, swing set parts, tires, and most of a junked car. "The volunteers were frustrated by the amount of trash, and that the people that littered the area will likely continue to do so. The apartment staff has worked with the police to try to reduce the dumping with little success. "The volunteers want this place cleaned up," Saari said. "We will try to schedule some more cleanup days during the summer." Co-sponsoring the site also is one of many steps being taken to fulfill another ICPRB goal: establishment of a citizens watershed group (or groups) in the Rock Creek watershed.

Similar scenarios played out in each of the Potomac basin jurisdictions (Maryland, Pennsylvania, Virginia, Washington, D.C., and West Virginia) that day. In all, the effort removed more than 108,500 plastic bottles, 4,139 balls, 1,228 tires (15 tons), 42 blue 50-gallon barrels, a ping-pong table, a scooter, 10 bicycles, 6 boat engines, eight mattresses, 15 refrigerators, 10 freezers, 10 dryers, two microwave ovens, two televisions, six shopping carts, and

numerous automobile and computer parts. Some volunteers were rewarded by finding collector's items, including a 1940s-era milk bottle from Chevy Chase Dairy, a 1941 nickel, and an antique Barbie doll. A 1989 check for \$50 written to the Internal Revenue Service also was recovered. It can only be hoped that the payment was straightened out long ago.

Questions about the cleanup, or ideas for new cleanup sites can be sent to the Alice Ferguson Foundation at (301) 292-6665, or email at potomaccleanup@fergusonfoundation.org. People interested in joining a Rock Creek watershed group should contact Steve Saari at (301) 984-1908 ext. 103, or email him at ssaari@icprb.org.

Plenty to Go Around

Local Volunteers Help Foundation in Month-Long Cleanup of Potomac, Anacostia



C. Dalpra

Chris Fenderson, with Living Lands and Waters crew, helms one of the workboats past the trash barge tied up along the Anacostia River. The barge served as a floating recycling center, complete with an on-board front-end loader.

Living Lands and Waters, an Illinois-based nonprofit that has cleaned the Mississippi River and its tributaries for years, lent its expertise and equipment to clean up the metropolitan-area Potomac and Anacostia rivers in April.

The Capital River Relief campaign ran from April 1-24, and using a fleet of 30-foot workboats, the crew from Living Lands and Waters and many local volunteers filled a 140-foot barge with trash taken from the shorelines. The project ended with the crew separating recyclable items from the mountain of trash on the barge. In all, the effort removed 50 tons of debris from the area, including more than 3,000 bags of trash, 896 tires, 25 barrels, 12 shopping carts, seven refrigerators, six messages in bottles, three water heaters, and a mannequin hand.

Living Lands and Waters, led by Chad Pregracke, is supported by corporations led by Koch Industries, and has worked to clean up the Mississippi and other midwest rivers for a number of years. Pregracke was taken with the idea of bringing his crew here after seeing the river from the window of an airliner landing at National Airport a few years ago and noting the amount of trash along the shoreline.

Pregracke and crew enlisted the help of area environmental groups and businesses in the area. Doug Siglin, of the Chesapeake Bay Foundation's Anacostia office, organized a board of partners to help plan the effort. The ICPRB served as a member of the advisory board. The coalition of groups and businesses helped provide a steady stream of volunteers, who scoured the shorelines of the two rivers from Dyke Marsh through much of the District, and most of the tidal Anacostia River.

In addition to cleaning up a lot of shoreline, the effort brought much attention to the river and the need to keep it clean. The project also helped to shine a light on the other river cleanups and other efforts happening to restore the river.

Both Chad and his crew were appalled at the amount of trash on the shoreline. "This is really one of the dirtiest rivers we have been on," said Chris Fenderson, who has been a member of the Living Lands and Waters crew for about a year. "There is so much trash along the shore," said Katia Pregracke, Chad's sister-in-law. "I really haven't seen anything as bad as this," she added. Chad and his crew were unsure why the problem is so bad in Washington. Some possibilities discussed included the tidal

nature of Washington's rivers, which can cause concentrated amounts of trash to pile in upper tidal areas where the current weakens. Industrial or military shorelines



Watching the River Flow

February flow of the Potomac River continued the above-normal pattern, followed by a March rate just below normal, according to the U.S. Geological Survey (USGS).

Provisional data collected near Washington, D.C., for February showed the river's flow at an average of about 16.2 billion gallons per day (bgd), 156 percent of the historical average of 10.4 bgd. Daily extremes ranged from a low of about 3.2 bgd on February 1 to a high of about 42.2 bgd on February 8. Water withdrawn for drinking use averaged about 400 million gallons per day (mgd), about eight percent more than in February 2003. Freshwater inflow to the Chesapeake Bay averaged about 66.8 bgd, 91 percent of the historical average. The Potomac contributed about 33 percent of the total.

Below normal precipitation in March resulted in average flows of about 13.6 bgd, slightly lower than the normal of about 15.5 bgd, or 88 percent of the normal flow. Flows ranged from a low of about 7.7 bgd on March 31 to a high of about 25.5 bgd on March 8. Water withdrawn for drinking use averaged about 374 mgd, about two percent more than March 2003. Inflow to the Chesapeake Bay averaged about 94.2 bgd. The Potomac contributed about 18 percent of the total.

The USGS has been collecting streamflow data for over 100 years. Streamflow and groundwater data are used to assess water conditions and can be used to predict the potential for flooding and drought, as well as for recreational purposes. Stream gages are chronically underfunded and many are in danger of being shut down. The ICPRB sponsors several stream and groundwater gages important to its work.

without public access don't have public constituencies to care for them. What was agreed on was that people need a better understanding of the effects of dumping and littering, even when it occurs far from the side of a stream.

In any case, Pregracke and crew were even more impressed by the number of volunteers who came out to help, ranging from interested citizens, U.S. Coast Guard personnel, Potomac Electric Power Company employees, congressional staff, environmental groups, local, state, and regional elected officials, and celebrities, including winners of the "Survivor" TV series and the Washington Redskins Cheerleaders.

"We couldn't have done any of this without the unified efforts of local conservation groups, government officials, sponsors, and volunteers," Pregracke said. "It was nice to come to D.C. and feel so much support. There are people here who really care about the rivers and they will continue to work to improve conditions so everyone can enjoy them."

Pregracke hopes to return to Washington for future cleanups. For more information on the campaign, visit www.capitalriverrelief.org.

Bay Partner's Strategies Guide River Initiatives

The Potomac basin jurisdictions are completing draft plans to address nutrient and sediment reduction goals set under the Chesapeake Bay Program tributary strategies. These strategies guide bay restoration and by implication, efforts to restore the Potomac, the bay's second-largest tributary.

The Chesapeake 2000 agreement set nutrient and sediment reduction goals, along with a cap to be maintained regardless of growth and development. The agreement calls for reaching the goals by 2010. Since the Chesapeake 2000 agreement, the jurisdictions have used data on nutrient loads, assessments to identify nutrient sources, and involved stakeholders groups to develop plans to meet the agreement's voluntary goals. The goals are designed to achieve a level of water quality that will support the bay's living resources and protect human health.

Because meeting the goals will be very expensive and change lifestyles and practices in the bay and local watersheds, the jurisdictions all sought much public input, with some putting together "teams" to bring the public into the process. Strong

public support for the goals is crucial for the restoration's success, which will require changes in public environmental practices and billions of dollars in new funding. The voluntary, cooperative agreements are driven by the possibility of a bay-wide total maximum daily load (TMDL) plan for the bay watershed. If voluntary goals are not met, the TMDL would enforce mandatory reductions that could be more difficult to meet than the Chesapeake 2000 goals.

None of the jurisdiction's tributary strategies are final. In general, each of the strategies are undergoing a review by the Chesapeake Bay Program, along with further opportunities for public comment and refinement. The review centers on running the jurisdictions' tributary strategy plans through the bay program's massive watershed model to assure that the reductions will be met. Most of the state managers of the strategies felt that changes to the numbers noted in the draft plans are likely to be minor.

Maryland

The state recently released an executive summary of its statewide tributary strategy, which would meet its nutrient and sediment cap goals. The state will soon release details of the strategy, which is based on 10 sub-watersheds covering the state. "We are processing results of the [bay program] model runs," noted Jamie Baxter of the Maryland Department of Natural Resources, that will help target efforts in specific basins. The Potomac watershed contains three of the ten basins (lower, middle, and upper Potomac) in Maryland's strategy. Stakeholder meetings through the summer will guide production of detailed plans for each sub-watershed. Statewide, Maryland is committed to reducing nitrogen by 37.25 million pounds per year (a 35-percent reduction), and phosphorus by 2.92 million pounds (a 25-percent reduction). The estimated cost of the plan is about \$13.6 billion dollars. The plan focuses on reducing sewage treatment plant and septic field loadings through a fee placed on residents, agricultural best management practices, and programs to reduce stormwater impacts. Maryland has relied on its citizen tributary teams to guide the development of the strategy.

Pennsylvania

Pennsylvania's cap of 71.9 million pounds of nitrogen represents a reduction goal of 37.3 million pounds from 2002 levels. The phosphorus cap for the state of 2.47 million pounds will require a reduction of 1.11 million pounds from the 2002 load. The sediment cap of 0.995 million tons will require a reduction of 116,000 tons from the 2002 load. Pennsylvania's draft strategy is undergoing modeling runs by the bay program to check load reduction numbers. The strategy will focus on agricultural best

management practices, wastewater treatment, and urban lands management practices, noted Kerry Chipppo, with the Department of Environmental Protection. After verification, the strategy will be reviewed by the public and stakeholders. After considering reviews, the state will produce a revised strategy scheduled to be completed by the end of the year. The strategy will include a market-based trading system based on a nutrient credit registry.

Virginia

The commonwealth has completed drafts that are under review by the bay program, and being refined through stakeholders and the public. The plan meets reduction goals, at an estimated cost of \$3.2 billion, and focuses on nutrient management in agricultural and urban areas. Virginia's portion of the bay watershed includes a part of the Potomac and the Shenandoah River, the Potomac's largest tributary. In the Potomac/Shenandoah, nitrogen loads must be reduced to 12.84 million pounds per year, down from a 2002 level of 22.8 million pounds. Phosphorus must be reduced from 1.96 million pounds (2002) to 1.4 million. The sediment allocation is 617,000 tons per year, down from 720,000 in 2002. Estimated cost of full implementation for the Potomac/Shenandoah is about \$1.17 billion.

Marc Aveni, Virginia Department of Conservation and Recreation's Potomac watershed manager, stressed the strong public involvement effort used to develop the strategy, and noted that the relationships forged during the process will help in implementing the strategy. "The process has really engaged the stakeholders," Aveni said. "We haven't just gotten citizen input—there has been great networking." Having everyone know each other will help the process when specific projects are implemented within the watershed, he noted. Aveni acknowledges that money will be the major challenge to implementing the plan, which will "clearly cost more money than we have." Like other state officials, Aveni is looking forward to action by a blue-ribbon panel created by the Chesapeake Executive Council under the bay program to identify new sources of funds for implementation. In the meantime, Aveni said that implementation will focus on efforts that will provide the most reduction for the least money. He noted that Virginia had reduced nutrient loads through urban and agriculture best management practices and will continue to expand use of these relatively less-expensive efforts. "There are lots of things we can do right now," to reduce nutrient loadings, Aveni said. He added that these practices also address local water quality concerns, and will be a continuing part of the nutrient reduction process.

West Virginia

All of the state's Chesapeake Bay watershed lies within the Potomac basin. West Virginia is committed to reducing its nitrogen load to 4.75 million pounds (a reduction of 33 percent), and phosphorus to 0.37 million pounds (a reduction of 35 percent) from 2002 levels. Sediment load under the commitment will drop from 0.41 to 0.34 million tons per year. Its draft strategy document estimates a total cost of about \$231.6 million. Jennifer Pauer, West Virginia Department of Environmental Protection tributary strategy facilitator, noted that the plan was a working document guided by stakeholder meetings. West Virginia's strategy includes restoration and preservation of natural areas, urban stormwater management, and revising permitting to require improved wastewater treatment, and agricultural and forestry best management practices. Implicit in all of the plans, the report notes is that "the activities required to meet the Cap loads will not occur if funding is not secured." Pauer said that the state, through its agencies, will

continue work through the plan to identify areas that will produce the greatest reduction for the money.

Washington, D.C.

The District has completed its draft strategy, which currently is being reviewed by stakeholders, noted Hamid Karimi, program manager for the Health Department's Watershed Protection Division. It will be released publicly after the review. The strategy focuses on "use of urban best management practices and on maintaining the progress at the Blue Plains regional wastewater treatment plant," in reducing the Districts point-source nutrient loads, Karimi said.

All of the representatives queried for the article were excited about implementing the strategies that collectively restore the bay to health, and were equally concerned about what has always been the biggest problem in the bay cleanup—funding. That problem has not abated, and many eyes are looking to the blue ribbon financial panel to help lead the cleanup to the next step.

Whitings Neck Residents Work to Curb Potomac Bank Erosion

Homeowners in Whitings Neck, W.Va., work hard to keep the community's 4,000 feet of shoreline from eroding into the Potomac River. In the 40 years of documented assessments and probably beginning long before then, flooding from heavy rains, along with more-recent increased wave action from recreational boaters have turned the Whitings Neck riverbank into sediment. Several times over the past two years, residents who run the Potomac Riverbank Conservation Project (PRCP) have organized work days to plant trees, shrubs, and willow stakes and install rolled cedar cuttings to control severe bank erosion. Whitings Neck is a small Berkeley County community tucked into one of the Potomac's meanders between Big Slackwater and Opequon Junction, near Lock 41.

With grant assistance from the West Virginia Conservation Agency and technical assistance from Rebecca MacLeod, district conservationist for the U.S. Department of Agriculture's Natural Resources Conservation Service, and cooperation from Potomac Headwaters Resource Conservation and Development, U.S. Fish and Wildlife Service, and Eastern Panhandle Conservation District, PRCP took charge of the erosion problem. PRCP has installed 120 feet of rolled cedar cuttings and planted trees to cover another 100 feet of shoreline. Of the 4,000 feet of

shoreline, about 500 feet is severely eroded, requiring immediate attention.

After determining that stone rip-rap was not an option because of the steep banks and the cost, cedar rolls were pursued as an inexpensive solution. Cedar rolls are bound cedar trees used to stabilize stream banks and capture sediment from the river. Initially, the group purchased ready-made cedar rolls to place in some of their worst erosion spots. After taking the time to make their own, they found their homemade cedar rolls cheaper and just as effective. Betty Beckley, PRCP leader, said "For older



J. Dotson

PRCP volunteers prepare a cedar roll for placement on a severely eroding river bank.

people, the work is really hard. Making the rolls is the difficult part.” The group has managed to complete three 40-foot sections of cedar rolls for the worst spots.

Members of the PRCP have participated in every step from planning to installation. The shoreline was divided into eight 500-foot sections to prioritize work. The two sections on common property will be completed first. Individual homeowners with access to the river have been approached about completing the bank stabilization. “Most people are really eager to have something done,” said Beckley.

The project has gained support and momentum from the community and local officials. A Whittings Neck farmer has donated cedar trees for the project. West Virginia Delegate John Overington rolled up his sleeves and put in a good day’s work. The group participates in the whole process from identifying the perfect trees for the job to cutting and netting the trees. After the cedars are relocated to Whittings Neck, they are bound together and mounted into the banks with wire.

In addition to the bank restoration, the PRCP volunteers also have planted willow stakes in hopes that the roots will quickly grow and stabilize the floodplain. Even with heavy rain and high water, the seedlings had a 60% survival rate, on a par with most restoration plantings.

Heavy rains and high waters have hindered the group’s access to the river’s banks to complete more work. However, after only two years of being installed, the cedar rolls in the worst section have

already collected about six inches of sediment.

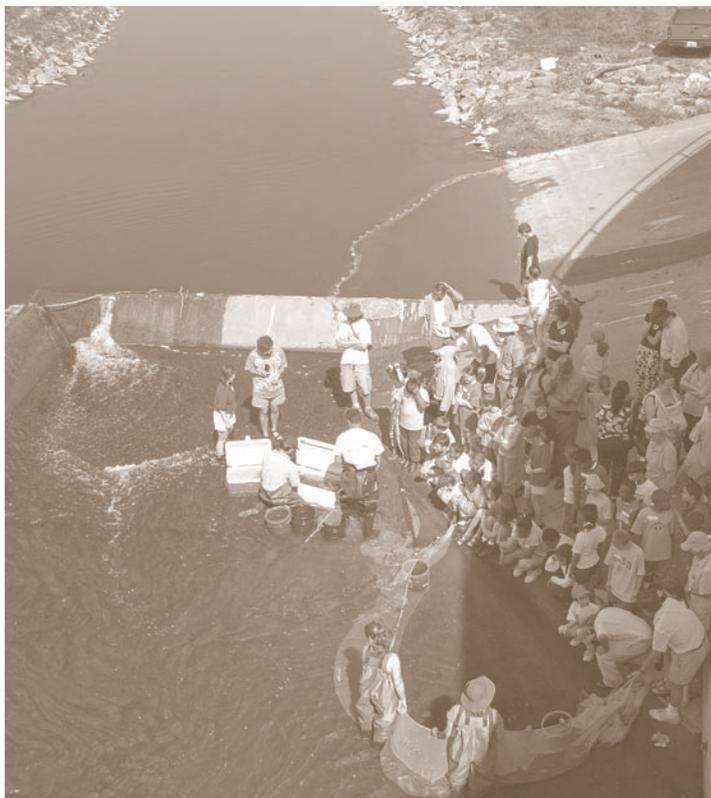
The PRCP is a testament to the value of strong partnerships. Federal and state agencies brought technical assistance to a local group trying to save their piece of the Potomac and all will continue to work through this simple and efficient design for success.

For more information on how your organization can restore your piece of the Potomac, visit ICPRB’s watershed organization webpage at www.potomacriver.org/get_involved/local-orgs.htm.

Sign On for the Potomac River Sojourn

The Potomac Sojourn brings Potomac enthusiasts together to enjoy nature and build lasting friendships. The public is invited to join ICPRB, the Alliance for the Chesapeake Bay, and several partner organizations on the canoe/kayak trip from **Cumberland, Md., to Williamsport, Md., from July 9-17**. Along the route, participants will glimpse the many faces of the river, enjoy a relaxing paddle down the nation’s river, and learn much in the process.

Each day, speakers from various organizations will hold discussions about



C. Dalpra

Squeezin’ Season

Students from Sligo Elementary School and Piney Branch Middle School visit the Northwest Branch of the Anacostia, where staff from ICPRB, the Washington Metropolitan Council of Governments, and Potomac Crossing Consultants captured river herring for a multi-year restoration project. The students watched as herring were captured and the restoration team squeezed eggs and milt from the fish. Students took some of the fertilized eggs back to the classroom, where they will watch the eggs hatch and then return the fry to upstream reaches with blockages that restrict migration. The blockages are being systematically removed. Fifteen area schools participate in the project, which this year has stocked about 1.9-million river herring in Anacostia tributaries.

the resources of the Potomac, with opportunities to learn hands-on about trees, birds, fish, water quality, and other related topics. In past years, the sojourn has brought together children, teenagers, and adults to treasure this precious resource. Sojourners can paddle the whole route, or

join in for just a day or two.

If you would like to participate in this year's sojourn, contact Steve Saari at 301.984.1908 x103, or via email at ssaari@icprb.org. Trip details will be posted on the ICPRB website at www.potomacriver.org.

Potomac River Swim, June 5



Join environmental groups for a picnic at Point Lookout State Park to cheer in the swimmers who will stroke their way more than 7.5 miles across the Potomac River to raise consciousness and money for river restoration. The annual Potomac River Swim for the Environment is growing in popularity as a distance swim event and has become one of the major distance swim events in the region.

could begin arriving at the bathing beach at Point Lookout State Park in about three hours or less. Each swimmer is accompanied on the crossing by safety kayakers, and power boats are stationed along the way.

The June 5 event, which takes swimmers from Hull Neck, Va., across the river to Point Lookout State Park in Maryland, provides a challenging distance swim for the participants while raising awareness about the river as well as funds for several Potomac environmental groups including the Interstate Commission on the Potomac River Basin.

The public is invited to attend the event, and help cheer the tired swimmers to the shore. To learn more about the event, or volunteer to help on shore or on the water, contact swim organizer Cheryl Wagner at (202) 387-2361 or via email to cherylw@crosslink.net.

Swimmers will leave the Virginia shore about 9 a.m., and with favorable conditions,

Non-Profit Org.
U.S. Postage
PAID
Rockville, MD
Permit No. 800



Potomac Basin

REPORTER

**Editors: Curtis M. Dalpra
Jennifer K. Dotson**

Published six times a year by the Interstate Commission on the Potomac River Basin, Suite 300, 6110 Executive Blvd., Rockville, MD 20852. (301) 984-1908.

(ISSN 1072-8627)

**E-Mail: info@icprb.org
Internet: <http://www.potomacriver.org>**

Joseph K. Hoffman, Executive Director

This publication does not necessarily reflect official Commission policies. Funds for the *Reporter* are provided by the U.S. Environmental Protection Agency and the signatory bodies to ICPRB: District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia.

Interstate Commission on the Potomac River Basin
Suite 300
6110 Executive Blvd.
Rockville, Maryland 20852

Address Service Requested

Printed on recycled paper with soy-based ink

March/April 2004