In the United States, 40% of mercury emissions come from coal-fired power plants. Sadly, the Miller Steam Plant, which lies on the banks of Village Creek and the Locust Fork of the Black Warrior River, was America’s fourth dirtiest coal-fired plant in 2003 in terms of pounds of mercury released annually. Adding insult to injury, according to the Alabama Power Company’s own reports, the majority of the energy produced at Miller goes to Florida, not Alabama! Emissions from its smokestacks condense, fall to the earth and are eventually deposited into the Black Warrior River and local tributaries. Along the route, microorganisms convert mercury to the highly poisonous methylmercury. The toxin bioaccumulates up the food chain, concentrating initially in the tissues of fish and shellfish and building up successively in the flesh of fish, birds and mammals who prey on smaller species.

Mercury’s ecological consequences follow the Black Warrior’s path towards Mobile Bay, spoiling the catches of recreational fishermen and ultimately tainting the Gulf of Mexico’s lucrative fisheries. When citizens eat fish with elevated mercury content, the toxin collects in their bloodstream. A July 2005 report from the Centers for Disease Control estimates that 1 in 10 women of childbearing age in the United States has mercury concentrations in her blood high enough to cause risk to a developing fetus. Prenatal and infant exposure to the neurotoxin can result in deafness, blindness, cerebral palsy and permanent IQ loss. In older children and adults, mercury poisoning disrupts blood pressure regulation, leads to immune system deficiencies, and damages the nervous system.

If citizens cut their consumption of mercury-heavy fish, levels of mercury in their blood will fall after several months. And yet, as the fishing industry and physicians would emphasize, mercury is bad, fish are good. Fish are a rich source of protein, omega-3 fatty acids, vitamins and minerals. Alabamians will miss these benefits if they avoid eating fish due to well-founded mercury concerns.

Contamination in the Black Warrior River watershed puts countless subsistence fishermen at risk, penalizes Alabama’s farm fisheries, and damages the Gulf fishing industry. But these damages can be reduced. The Environmental Protection Agency (EPA) has implemented very weak regulations on industrial mercury emissions. In fact, its regulations do not require coal-burning industries to adopt any of the technological advancements that are available today and that can significantly reduce mercury discharges. Moreover, the EPA’s cap and trade policy, which enables facilities that release more mercury to buy emissions permits from cleaner plants, often results in unequal pollution burdens among different states. Consequently, Alabama suffers from a disproportionate concentration of mercury — in 2003 Alabama ranked sixth worst in America in terms of pounds of the toxin emitted annually! (See table on page 2).  

Continued on Page 2...
Alabama can also provide better information on mercury to its citizens. The state conducts mercury testing and the Department of Public Health releases fish consumption advisories every year. However, the state’s fish advisory program cannot monitor all of Alabama’s 77,000 miles of rivers and streams. Though the Alabama Department of Environmental Management (ADEM) collects at least six fish of each species from some watersheds every five years, funding and practical constraints prevent the government agency from assessing many streams and providing complete data to citizens.

Moreover, Alabama’s standard for safety is less stringent than the standard used by most of our neighboring states. Though the Food and Drug Administration (FDA) and the EPA agree that mercury in fish threatens human health, the agencies’ guidelines on mercury are currently incongruous. The FDA regulates the sale of fish and limits mercury to 1 part per million (ppm) in fish tissue, the standard that Alabama uses in creating its fish advisories. The EPA issues guidelines for total consumption of mercury that will ensure human health and safety. Unfortunately, if Alabamians continue to eat as much fish as data suggests, and if we limit intake of fish based only on the FDA’s 1ppm guideline, we will far exceed the EPA’s reference dose for safe dietary mercury intake per day. The shortcomings of the FDA guideline in protecting citizens from a higher blood level of mercury than is deemed safe by the EPA has led many of our neighboring states to use a .5 ppm standard for issuing fish advisories.

At the request of Alabama Environmental Management Commission’s vice-chairman Pat Byington, Dr. Robyn Arnold researched fish advisories for polychlorinated biphenyls (PCBs) and mercury (Hg). Based on Dr. Arnold’s findings, Byington and the Commission’s chairman, Scott Phillips, report that, “Our state is using the FDA guidelines, while nearly all of our neighboring Southern states are using the more stringent EPA guidelines for mercury.” In fact, only Alabama and Tennessee among Southeastern states have not yet based fish consumption advisories on EPA’s more stringent guidelines. But Alabama is moving forward on some fronts. Commissioner Byington reports that ADEM has made a financial commitment to improving advisories by building a new lab that includes redesigned areas for fish tissue testing.

Meanwhile, Black Warrior Riverkeeper (BWR) recently decided at a 2005 strategic planning session that the organization will create specific, active policies for mercury testing and education. After testing 10 fish last year at UNC-Asheville’s Environmental Quality Institute through the Waterkeeper Alliance’s national mercury campaign, BWR has written several grants to foundations, requesting funds for an increased volume of fish tissue tests. BWR will follow state protocols in its testing and will consult partner groups with mercury expertise, such as Mobile Baykeeper, Waterkeeper Alliance, and Southern Environmental Law Center. In the meantime, citizens should contact BWR if they would like more mercury information. You can also order a $25 personal mercury testing kit from Waterkeeper Alliance through the “Take Action” page of Black Warrior Riverkeeper’s website: [website link]

Rebecca Pass graduated Princeton University in 2002 and is currently pursuing a career in Environmental Health and Medicine. An Alabama native, Rebecca grew up canoeing and hiking along Alabama’s beautiful rivers with her family.
The appeal filed by Black Warrior Riverkeeper of the consent order between Alabama Department of Environmental Management (ADEM) and Vulcan Materials will be scheduled for a hearing in the near future. The appeal asks the Environmental Management Commission to decide whether ADEM must follow statutory law which would require ADEM to develop a procedure for assessing civil penalties, clearly setting out the rationale for the amounts of penalties. Under ADEM’s current scheme, penalty amounts often result from secret negotiations between ADEM and the violator. Black Warrior Riverkeeper contends that Alabama’s law and the Clean Water Act require a process transparent to and reviewable by the public.

Note the change in Fivemile Creek’s water quality after Vulcan’s discharge. © Nelson Brooke (March 10, 2004)

Discharges from Vulcan Materials’ Bessemer Quarry, which allegedly had 465 CWA violations at Fivemile Creek. Left: (March 10, 2004) Right: (July 28, 2005) © Nelson Brooke

Donaldson Correctional Facility in Jefferson County had an alleged 1,060 CWA violations and was discharging sewage for nine years into Big Branch of Valley Creek. Black Warrior Riverkeeper, the Alabama Attorney General’s Office, and the Department of Corrections are negotiating a final settlement of the lawsuit. Under the terms of the settlement, Donaldson has contracted with NOVUS Utility Services to improve and operate the plant. Most of the improvements, such as a new surge basin (see right) are already in operation and NOVUS reports that discharge violations have ceased.

Following Black Warrior Riverkeeper’s notice to file suit for 1,060 alleged CWA violations, a new 100,000 gallon surge basin (foreground) was installed at Donaldson WWTP. © Nelson Brooke (November 15, 2005)

After Black Warrior Riverkeeper filed notice of intent to sue East Walker County Sewer Authority under the Clean Water Act, ADEM filed a lawsuit against the wastewater treatment plant for their alleged 4,473 CWA violations. Discharges pollute the Mulberry Fork of the Black Warrior River. This action is still pending.

4,473 Alleged CWA Violations East Walker Co. Wastewater Treatment Plant © Nelson Brooke 2005

Black Warrior Riverkeeper has filed a notice of intent to sue the Cordova Wastewater Treatment plant in Walker County for an alleged 518 violations of the Clean Water Act. Cordova’s discharges pollute the Mulberry Fork of the Black Warrior River. Further action is pending.

Cordova Wastewater Treatment Plant © Nelson Brooke (Nov. 29, 2005)
In 1925, the Birmingham Park and Recreation Board published the Olmsted Brothers’ *A Park System for Birmingham*. According to the Birmingham Historical Society’s director, Marjorie White, Olmsted Brothers was America’s greatest park planning company. Its founder, Frederick Law Olmsted, designed Central Park, Biltmore Estate, Prospect Park, and the U. S. Capitol’s grounds. In 1924, his son Frederick Law Olmsted, Jr. recommended creating several parks in Birmingham, providing recreation and scenery for citizens, and storm water drainage for creeks.

With similar motives, many organizations and public officials have been working to establish a park system for the greater Birmingham area which finally revisits a great deal of Olmsted Brothers’ suggestions. Eighty years in waiting, the Olmsted Plan is surfacing, with particular benefit for the Black Warrior River watershed. A collection of planned, new, and expanding greenways will provide the Black Warrior River basin with improved water quality, flood mitigation, recreation, raised property values, and scenery. On November 7, good news for the Black Warrior permeated the presentations at the ‘Re-Envisioning the Olmsted Plan’ workshop. Here are some highlights for the Black Warrior River watershed, in the order presented at the workshop:

~Kathy Freeland, executive director of Ruffner Mountain Nature Center, discussed the considerable benefits of the vast urban park she oversees. Straddling the Cahaba and Black Warrior Rivers’ basins, Ruffner consists of 1,011 acres (with another 500 acres soon to be added), 11 miles of trails, and environmental education since 1979. Soon Ruffner will have Leadership in Energy and Environmental Design (LEED) certified “green buildings” and expanded education programs.

~Wendy Allen Jackson, executive director of the Black Warrior Cahaba Rivers Land Trust, is helping finalize plans for another park which will rival Ruffner Mountain in size while similarly straddling the Cahaba and Black Warrior Rivers’ watersheds. This 1,108 acre linear park along Red Mountain’s crest will be 4.5 miles long and potentially connected to Ruffner. The day after this workshop, the Jefferson County Commission voted to approve spending $7 million to help create the park. Assistance for this project has been provided by U. S. Steel (the current landowner), Hugh Kaul Foundation, and the Friends of Red Mountain Park. If the park is completed, Birmingham will have the most urban open space per capita among American cities!

~Renee Kemp-Rotan, administrative assistant to Birmingham’s Mayor Kincaid, highlighted proposals for Railroad Reservation Park. This currently vacant piece of urban land covers 15 acres from 14th to 18th street. New Amtrak and Greyhound stations would provide elevated viewing and entrances to Ruffner. The day after this workshop, the Jefferson County Commission voted to approve spending $7 million to help create the park. Assistance for this project has been provided by U. S. Steel (the current landowner), Hugh Kaul Foundation, and the Friends of Red Mountain Park. If the park is completed, Birmingham will have the most urban open space per capita among American cities!

~John Gordon, representing Wiser Company, presented the multifaceted Valley Creek Trail. This linear park will provide a crucial greenway for Valley Creek, a tributary of the Black Warrior. It will protect water quality, and provide opportunities for exercise, transportation, and environmental education.

~Randy Tipton, a geologist for USInfrastructure, previewed a proposed 13.5 mile Village Creek/Bayview Lake-Old Edgewater Mine trail system, located on a tributary of the Black Warrior River (see photo on the left). He explained that along with the common benefits of greenways, this one will have a unique environmental and educational component: one can easily view the effects of acid mine drainage on the nearby Mulga Creek, which drains into Village Creek downstream of Bayview Lake.

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Black Warrior Paddling Adventures, Part I: Latecki’s Favorite River

On October 6 at the Moundville Native American Festival, which takes place annually along the Black Warrior River at Moundville Archaeological Park, Black Warrior Riverkeeper staff spent the day with renowned canoeist John Latecki. Riverkeeper and Latecki talked to many festival-goers about canoeing, river ecology, and John’s recent canoe tour of the Black Warrior River. According to his website, www.fightingms.org: “John Latecki, Jr. is paddling 30,000 miles over the next four to five years to raise awareness for Multiple Sclerosis. John’s sister Julie has MS and is the reason behind such an undertaking. His trip started out July 31, 2004 in Cleveland, Ohio and after paddling 360 miles up and back down the Black Warrior River, John is now paddling the Tombigbee River in route to the Alabama River. John has paddled, as of November 2nd, over 4,250 miles and been gone over 15 months. John’s trip is going to be long enough to break a Guinness World Record.” He is collaborating with The Myelin Repair Foundation, www.myelinrepair.org, to increase MS research.

A master canoeist from Ohio, John began his Alabama paddling adventure in Mobile on August 5th. As he told our staff and many others at the festival, “I loved how diverse the landscape and wildlife was on the Black Warrior. At Mile Marker 278 I saw a mountain lion for the first time in my life! Of all 4,200 miles of rivers I’ve canoed [on this MS tour], the Black Warrior was my favorite because of the abundant wildlife.” Riverkeeper Nelson Brooke helped John navigate up the Black Warrior. We are glad John enjoyed the beautiful Black Warrior River while paddling hard for his worthy cause!
Here is a chronological summary of just a few of the many activities that Nelson Brooke, your Black Warrior Riverkeeper, performed recently as watchdog and spokesman of the Black Warrior River watershed. To report pollution to Nelson, please call our office at (205)458-0095 or e-mail: nbrooke@blackwarriorriver.org. For more information, visit www.BlackWarriorRiver.org

Aug 30: Inspected a new bridge construction site over Turkey Creek on Hwy. 79. I called Jefferson County Environmental Services to report maintenance problems at a sewer near Tapawingo Springs, known habitat of the endangered vermilion and watercress darters. Visited Self Creek in-between Highway 75 and Highway 79 where the proposed Northern Beltline highway will culvert the creek. Five Mile Creek’s water was clear, yet full of rubble, while Village Creek was murky.

Aug 31: Hiked Dry Creek, a tributary of Turkey Creek. The creek will be destroyed by the Northern Beltline above Hilldale Farm Lake. The Alabama Department of Transportation plans to use the lake as a sediment pond to catch all the sedimentation from construction activities. This beautiful creek needs to be protected.

Sept 7: Went to the Alabama Department of Environmental Management (ADEM) for a file review on Sloss Industries Corporation, owned by Jim Walter Industries of Tampa, FL. After Sloss polluted Five Mile Creek with excessive amounts of cyanide for years, ADEM finally issued a Consent Order in 2002 that required Sloss to deliver $2 million worth of land along Five Mile Creek to a land trust. Sloss’ file contained documents admitting not only their failure to gain up the land but also the fact that Sloss was knowingly trying to hand over polluted property with a flawed environmental survey.

Sept 22: Performed my monthly Alabama Water Watch water test on a tributary of Valley Creek in Powderly (SW Birmingham). If you would like to test your own creek, check out www.alabamawaterwatch.org, for more information.

Oct 6: Responded to a citizen complaint about pollution at Hawkins Recreation Center in Roebuck, which is next to the creek flowing out of Roebuck Springs, home to the endangered watercress darter. I documented mud and oil running off the parking lot into the creek and notified the ADEM Birmingham Field Office. I then drove by the Birmingham International Airport’s expansion project to document violations that I knew would be occurring. The street was covered with sticky orange clay/mud. Sediment-filled runoff was running down all gutters and into storm drains, ultimately polluting Village Creek.

Oct 7: Along with master canoeist John Latecki spoke to children and adults about the Black Warrior at the Moundville Native American Festival. I highly recommend going to Moundville for the annual festival, or anytime to see the Moundville Archaeological Park and Museum situated next to the Black Warrior. For more information check out www.moundville.ua.edu/guide.html

Oct 18: Went to Tuscaloosa for SouthWings’ Alabama Aerial Monitoring Workshop. SouthWings teamed up with Hurricane Creekkeeper John Wathen to put on this event, which drew some 35 people from across Alabama and the southeast together for a strategy session on how to address environmental issues from the air. We have been working with SouthWings pilots for years to get aerial photographs and a bird’s eye view of pollution sources.

Oct 24: Responded to a citizen complaint in Hanceville by investigating an ongoing sewage discharge into Mud Creek from the Hanceville wastewater treatment plant. The creek was in awful shape, the water looking a dark brownish-red color. Mud Creek flows into the Mulberry Fork upstream of the Birmingham Canoe Club’s Annual Mulberry Fork Canoe & Kayak Race site.

Oct 26: Busted Birmingham Hide & Tallow while canoeing down Valley Creek. Birmingham Hide & Tallow is a dog food plant that works with used restaurant oil and animal parts. As their discharge pipe began spewing out grey-black liquid, an oily sheen covered the entire surface of the creek. The stench was nearly unbearable. I was able to get photos and video of this as it occurred. I reported the illegal discharge to ADEM immediately. An ADEM inspector arrived within two hours and tested the discharge. The pH ended up being 13.28, which can be classified as a hazardous material. We are pursuing further action.

Nov 11: Patrolled Hurricane Creek in Tuscaloosa County via canoe with John Wathen, Hurricane Creekkeeper.

Nov 15: Surveyed improvements at the updated wastewater treatment plant at Donaldson Correctional Facility with Chris Matthews of Alabama Utility Services, the outside contractor working to fix the plant. Hopefully flow issues at Donaldson due to overcrowding will no longer send pollution into Big Branch and Valley Creek. Our “Legal Docket” will provide updates.

Nov 29: Executed an aerial flight with SouthWings volunteer pilot Bob Kuehlthau. We took the following route: Birmingham > Village Creek, Bankhead Lock & Dam > Holt Lock & Dam > Oliver Lock & Dam > Tuscaloosa > Moundville > Selden Lock & Dam > junction with the Tombigbee River at Demopolis > Lake Tuscaloosa and the North River > Mulberry Fork > Horse Creek > Burnt Cane Creek > Locust Fork > Five Mile Creek > Birmingham. I photographed a great deal of the Black Warrior River watershed on this flight. In the process we discovered 9 major reportable polluters, many of which probably would have gone unnoticed if not for this flight.
About Black Warrior Riverkeeper

The Mission of Black Warrior Riverkeeper, Inc. (BWR) is to protect and restore the Black Warrior River and its tributaries. BWR is a 501(c)(3) tax-exempt non-profit organization that serves the needs of over 1.1 million people throughout sixteen counties in the heart of Alabama. Monitoring the river and holding industry accountable for their discharged pollutants has made BWR an important proponent of clean water and public health throughout the watershed. Founded in 2001 by Birmingham citizens, its three full-time employees include Nelson Brooke—Riverkeeper (patrolman and spokesman), Charles Scribner—Director of Development, and David Whiteside—Interim Executive Director. BWR also benefits greatly from the services of its in-house Chief Prosecuting Attorney, Mark Martin. Black Warrior Riverkeeper is governed by a board of directors and is a proud member of Waterkeeper Alliance and the Nonprofit Resource Center of Alabama.

About Waterkeeper Alliance

The first Riverkeeper patrol boat was launched by fisherman and their friends who mobilized in 1966 to challenge polluters on the Hudson River. That Riverkeeper’s contributions to the Hudson’s amazing recovery has inspired the creation of 157 locally funded and controlled “Waterkeeper” organizations on waterways across the country and the world. Waterkeepers (including Alabama’s Choctawhatchee Riverkeeper, Hurricane Creekkeeper and Mobile Baykeeper) patrol local waterways, respond to citizen complaints, and enforce environmental laws. Waterkeeper Alliance was founded in 2000 to connect and support local Waterkeeper organizations, while allowing them full control over their finances and administrative decisions. The Alliance offers legal, scientific, and administrative advice, provides networking opportunities, and often advocates for issues common to multiple local Waterkeepers (such as mercury pollution — a major issue in the Black Warrior River basin).

Membership Form

Please complete and return to:
Black Warrior Riverkeeper ®
712 37th Street South
Birmingham, AL 35222

NAME(S) (please list everyone in your household so they can all be members!)

____________________________________________________________________________________________________

ADDRESS:___________________________________________________________________________________________

PHONE:_____________________________________________________________________________________________

E-MAIL:_____________________________________________________________________________________________

INTERESTS:_________________________________________________________________________________________

PLEASE CHECK A CATEGORY:

________ Speckled Darter ............................................... $10

________ Redfin Darter ............................................... $25

________ Warrior Darter ............................................... $50

________ Tuscaloosa Darter ........................................... $100

________ Watercress Darter .......................................... $250

________ Vermilion Darter ........................................... $1,000

________ Snapping Turtle ........................................... $5,000

________ Alligator Snapping Turtle ................................ $10,000

________ OTHER (Please List) ...........................................

Black Warrior Riverkeeper, Inc. is a 501(c)(3) tax-exempt charitable organization. Your contribution or membership is tax-deductible to the extent allowed by law. No goods or services of monetary value will be provided in exchange for this contribution.
ACKNOWLEDGMENTS & THANK YOUS

Lauren Whiteside—Our most active volunteer, Lauren is a Birmingham native who works for Southern Progress. Lauren and her friend Teresa Scott frequently help plan events, organize outreach, and even assist with tedious clerical work. While scuba diving enhanced Lauren’s environmental interests, she already had solid community service DNA: her great-uncle Judge Frank Johnson desegregated Alabama, and her brother David co-founded Black Warrior Riverkeeper!

Above: Lauren Whiteside and Robert F. Kennedy, Jr. in Tuscaloosa at the University of Alabama.

Ralph Bronner—Ralph has been a major individual donor to Black Warrior Riverkeeper since 2003. His family’s business, Dr. Bronner’s Magic Soaps, is also an important contributor. If you purchase Dr. Bronner’s Soaps at Red Rain Environmental Store, located in Homewood, AL, 100% of the profits will go to Black Warrior Riverkeeper. Keep an eye out for Dr. Bronner’s Soap packages at our silent auctions, too. (See the calendar on our website: www.blackwarriorriver.org/calendar/htm)

Left: Along with giving environmental lectures, Ralph Bronner enjoys singing to children and adults.

Left: Dr. Bronner’s Soap is made from USDA certified organic ingredients and the bottle is made from recycled material. The soap contains no petrochemicals or synthetic surfactants, which makes it biodegrade easier in water!