



The Rivanna Conservation Society is dedicated to safeguarding the ecological, scenic, recreational and historic resources of the Rivanna River watershed.

## Board of Directors

Angus Murdoch: President, Tatyanna Patten: Vice President, Tim SanJule : Secretary, Jim Cato: Treasurer  
Morgan Butler, Daniel Krasnegor, Karen Norman, Leon Szeptycki  
Roberta (Robbi) Savage: Executive Director  
Tanner Council: Program Coordinator, Evans Martin/Melanie Britt: Newsletter, Kris Parker: Illustrations

"The human race is challenged more than ever before to demonstrate our mastery - not over nature but of ourselves."

- Rachel Carson (1907-1964)

## Executive Director's Message

by Robbi Savage

2010 is a big year for the Rivanna. The Rivanna Conservation Society is celebrating its 20th Birthday and our community is commemorating the 40th Anniversary of Virginia's Scenic River Program. RCS is delighted to be facilitating this Year of the Rivanna, (see [www.yearoftherivanna.org](http://www.yearoftherivanna.org) for the calendar of watershed events). Minnie Lee McGehee and James Murray will serve as Honorary Co-Chairs, with Steve Pence (one of the RCS founders) and Marvin Moss (former chair of Fluvanna County's Board of Supervisors) serving as co-chairs of the Rivanna Scenic River Steering Committee. The State Department of

Conservation and Recreation indicates that the Rivanna River has had three separate scenic designations, 1975, 1988 and 2009, but Betty McGehee has a different take on things.

In a letter to RCS Ms. McGehee says that "The Rivanna River was the first river in the state designated a Scenic River under the then new program created by the General Assembly. That was in 1964. It was Minnie Lee McGehee of Palmyra, a member of the local historical society, who had worked for years to bring the present condition and the future of the Rivanna to the notice of the public, who learned about the new program. She appeared before a committee of the General Assembly, and with the help of Delegate James Murray of Albemarle, the Rivanna River in Fluvanna from Union Mills to the James River at Columbia was so designated. McGehee then served on the Scenic River Board for some 25 years.

In a few years, through the efforts of Mr. and Mrs. James Murray, the Rivanna Scenic River designation was given to the river from the upper edge of Fluvanna to the Woolen Mills. Then in 2001 through the efforts of the Thomas Jefferson Re-

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## Upcoming Brown Bag Events January 2010 - December 2010

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### March 2010 Brown Bag

**March 18, 2010**

Steve Williams, Executive Director,  
TJ Planning District Commission  
Subject: Watershed Planning for the  
Rivanna River

### April 2010 Brown Bag

**April 15, 2010**

Dave Norris, Mayor of Charlottesville  
Subject: Managing the Water Resources of  
Charlottesville

### May 2010 Brown Bag

**May 20, 2010**

Chris Webster, Principal, Schnabel Engineering  
Subject: Status of the Community's Water  
Supply Study

### June 2010 Brown Bag

**June 17, 2010**

Rick Parrish, Senior Attorney,  
Southern Environmental Law Center  
Subject: The Rivanna and the Role it Will Play  
in the Baywide TMDL

### July 2010 Brown Bag

**July 15, 2010**

Barbara Hutchinson, Executive Director,  
Charlottesville/Albemarle Airport  
Subject: Transportation and the Environment-  
Accomplishing Community Goals

**August 1, 2010** TBA

**September 16, 2010** TBA

**October 21, 2010** TBA

**November 18, 2010** TBA

**December 18, 2010** TBA

### About the RCS Brown Bag Events

RCS Third Thursday Brown Bag

Date: The Third Thursday of each month

Time: 12:00pm to 1pm

Location:

Jefferson-Madison Regional Library  
201 E. Market Street  
Charlottesville, VA 22902

#### Questions?

Please e-mail Robbi Savage, at  
[exec@rivannariver.org](mailto:exec@rivannariver.org) or  
call 434 97 RIVER (434 977 4837)

#### RCS Office Location:

108 5th Street SE, Suite 206  
Charlottesville, VA 22902

#### Mailing Address:

P.O. Box 1501  
Charlottesville, VA 22902-1501

Fax: 815-846-0917

Website: [www.rivannariver.org](http://www.rivannariver.org)

RCS Blog: <http://rivannariver.wordpress.com/>



## Upcoming RCS Events January 2010 - December 2010

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### Events Upcoming in 2010

#### March 14

Banff Mountain Film Festival at  
Paramount Theatre 4:00pm

#### March 15

Banff Mountain Film Festival at  
Paramount Theatre 7:00pm

#### March 24

Year of the Rivanna Presentation at  
The Design Center 12:00pm

#### April 10, 11, 17

Rivanna River Sojourn - see page 17

#### April 18

Earth Day Celebrations at  
The Charlottesville Pavillion

#### May 8

Rivanna River Regatta

#### June 5

National Trails Day at Riverview Park

#### June 5

Clean the Bay Day

#### September 18

RCS Annual Meeting

#### September 25

Annual Rivanna River Clean Up

#### October 2

Old Farm Day in Fluvanna

#### October (date TBA)

Teacher Watershed Summit

#### October (date TBA)

Youth Watershed Summit

#### October 10-17

World Water Monitoring Day/Week

See Third Thursday Brown Bag Schedule  
on previous page. For more information  
log on to [www.rivannariver.org](http://www.rivannariver.org) or call  
434-97-RIVER

### Board of Directors Meetings

6:00pm – 8:00pm

Location: Albemarle County Building  
401 McIntire Road, Charlottesville, VA 22902

#### Meeting Dates:

April 8, 2010

June 10, 2010

August 12, 2010

October 14, 2010

December 9, 2010

### Related Organizations Meetings

#### Rivanna River Basin Commission (6-8pm)

April 22, July 22, October 21

Room 235 of the Albemarle County Office  
Building - McIntire (COB-McIntire)  
(434) 975-0224

#### Rivanna River Basin Commission Technical Advisory Committee (9am-noon)

May 18, September 21, November 16  
(434) 975-0224

#### Thomas Jefferson Planning District Commission (7pm)

February 4, March 4, April 1, May 6, June 3,  
401 East Water Street, Charlottesville, VA 22902  
(434) 979-7310

#### Thomas Jefferson Soil and Water Conservation District Board of Directors

January 27, February 24,  
706G Forest Street, Charlottesville, VA 22903  
(434) 975-0224



gional Planning District Commission, the Rivanna River was again recognized – a new designation by the National Trust for Historic Preservation: the Rivanna River was named an American Treasure, the only river so designated in the United States. It was recognized by the Save American Treasures Program, a public-private partnership of the White House Millennium Council and the National Trust for Historic Preservation. The Rivanna River thus joins the company of the Star-Spangled Banner, the Washington Monument and Fort McHenry.

In 2001 McGehee and the Fluvanna Historical Society published a book on the Rivanna: MR. JEFFERSON'S RIVER, with 110 pages and over 100 pictures (Note – this book is for sale for \$18.00 and is available from Historical Society Archives in Palmyra and the UVA Bookstore)."

Ms. McGehee concludes by saying that "It was a banner day when the Rivanna Conservation Society was formed (1991) in Fluvanna County by a group of enthusiastic young men, and again when Albemarle County joined forces. RCS is now a necessary and powerful organization and is conducting a good fight to preserve the Rivanna River."

Note: In 2009 RCS worked with a number of organizations to secure Scenic River designation for the final segment of the Rivanna at Woolen Mills, so virtually the entire river is now designated as scenic.

For more information log on to [www.yearoftherivanna.org](http://www.yearoftherivanna.org) and see page 18.

## RCS and TeensGIVE – A Team that Works

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TeensGIVE and RCS are teaming up this fall for another round of water monitoring at Meadow Creek Park in Charlottesville. TeensGIVE is a City of Charlottesville program that provides service learning opportunities for kids 9-18. TeensGIVE works with a wide spectrum of local youth to offer education, personal enrichment and seeks solutions to a wide range of social issues. In 2009, four events were hosted with just over 20 students each time. This made for action packed mornings as we spread out along the impaired Meadow Creek. RCS encouraged the Walker Upper Elementary School students to take more than just water samples. Specifically we direct their attention to the natural beauty tucked away in the middle of urban Charlottesville and the not-so-natural disturbances of pipelines, sedimentation and erosion that characterize the Creek. And, after taking several samples, groups of students and team leaders rush back to the picnic tables to discuss their findings and form opinions about this particular water body. Then it's back to the bus and back to school, a prospect often garnering disappointed groans from the students, many of whom had never visited the park. But perhaps the students' reluctance to leave the woods and banks of the Creek - and that complimentary desire to return - is more important than all the pH readings our kits could take.

The coordination between TeensGIVE program coordinator Misty Graves and RCS staff has been superb and we look forward to many more of these exciting opportunities in 2010.



# EXPERIENCE THE RIVANNA

The Rivanna Conservation Society (RCS), Blue Ridge Mountain Sports (BRMS) and their partners are hosting a professionally guided, family friendly paddle along the beautiful Rivanna River. The entire length of the Rivanna will be paddled over the 3 day event. You may choose to participate in all or a combination of the three "legs" of the Sojourn.

## 1<sup>ST</sup> LEG April 10

Base of South Fork Rivanna River to Milton/Shadwell with lunch at Darden Towle (13.0 miles)

## 2<sup>ND</sup> LEG April 11

Milton/Shadwell to Palmyra with lunch at Crofton (16.5 Miles)

## 3<sup>RD</sup> LEG April 17

Palmyra to Columbia with lunch location TBA (16.0 Miles)



**VISIT [WWW.RIVANNARIVER.ORG](http://WWW.RIVANNARIVER.ORG) FOR MORE INFO**

Rivanna Conservation Society: 434.97-RIVER, [rivannasojourn@live.com](mailto:rivannasojourn@live.com) • Blue Ridge Mountain Sports: 434.977.4400, [john@brms.com](mailto:john@brms.com)

## Volunteers Needed for Trail Maintenance Day

**Sunday, April 11, 2010, 9am-11am**  
Sponsored by the Friends of Scheier

After this long, hard, winter...Come help us clean up the trails at The Scheier Natural Area. Please bring gloves and muscle power! Pizza and drinks provided for workers...everyone invited... Bring the kids and enjoy a spring day in the woods.

**SCHEIER NATURAL AREA**  
917 LONG ACRE ROAD  
Palmyra, VA 22963

RSVP to Jackie Brown (so we have enough food)  
(434) 286-4966 or jacquebrown@embarqmail.com  
For more information contact RCS (434) 97-RIVER

## Airport Buffer Planting Day

The Rivanna Conservation Society, the Charlottesville-Albemarle Regional Airport, the Alliance for the Chesapeake Bay, the County of Albemarle, the VA Department of the Forestry and the Department of Recreation and Conservation joined together to sponsor the Airport Buffer Planting Day.

The event, held on Sunday November 15, 2009, brought more than 150 volunteers to the airport to plant trees that will buffer the pollution from draining into the stream.

Between the volunteers and the professional foresters, more than 2700 trees were planted on just over 7 acres of land. And, in addition to the sense of accomplishment, all participants received an Airport Buffer Planting t-shirt, RCS river map and other materials and gifts provided by the airport and RCS.



### PARTNERS:

Minnie Lee McGhee, Honorary Co-Chair  
James B. Murray, Honorary Co-Chair  
Marvin Moss, Co-Chair  
Steve Pence, Co-Chair  
Robbi Savage, Project Coordinator

Alliance for the Chesapeake Bay  
Alliance for Community Choice in Transportation  
Albemarle/Charlottesville Airport  
Albemarle/Charlottesville 4-H  
Albemarle County  
Blue Ridge Mountain Sports  
Chesapeake Bay Foundation  
City of Charlottesville

Fluvanna County  
Fluvanna Historical Society  
Fluvanna Heritage Trail Foundation  
Greene County  
Ivy Creek Foundation  
Lewis & Clark Exploration Center  
Middle James Roundtable  
Piedmont Environmental Council

Public Policy Virginia  
Rivanna Conservation Society  
Rivanna Garden Club  
Rivanna River Basin Commission  
Rivanna Trails Foundation  
Rivanna Water & Sewer Authority  
Southern Environmental Law Center

StreamWatch  
The Nature Conservancy in Virginia  
Thomas Jefferson Planning District Commission  
Thomas Jefferson Soil and Water Conservation District  
Wild Virginia

**CHECK OUT:**  
**[WWW.YEAROFTHERIVANNA.ORG](http://WWW.YEAROFTHERIVANNA.ORG)**



## The Bread and Water Project

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RCS is embarking on its second year of its new fundraising project. RCS is partnering with area restaurants for its Bread and Water Project. Introduced by board member Dan Krasnegor, this project asks a different restaurant each month to donate 10% of total sales from a given shift (lunch or dinner) to the RCS. On the other side of the arrangement, RCS alerts the press and does its best to pack the house. This results in what has been called a “win-win-win.” The restaurant benefits from positive press, new customers and increased sales. RCS benefits from the monies earned and increased participation and camaraderie among the membership. Finally, the Rivanna River benefits by increased awareness and support for its protection.

River advocate and Maya restaurant owner kicked off the project of by generously hosting RCS for four Wednesdays in June. Dan Epstein, long time ally to RCS and co-owner of Eppie’s restaurant on the Downtown Mall followed by offering to donate 10% of their famous “line-out-the-door” lunches in July. In August, Barracks Road delicacy spot HotCakes hosted dinner and a complimentary wine tasting paired with delectable canapés. Felinis’ #9 hosted RCS for both lunch and dinner in September. In October we gathered at The Box on the Downtown Mall and in November we met at the Orzo kitchen and Wine Bar. RCS will be publishing its new list of restaurants shortly and we ask for your participation. Please stop in and “tell ‘em RCS sent you.”

## Two Additional River Kiosks Added to Rivanna River Trail

by Tim SanJule

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This past summer RCS constructed two additional informational kiosks near the Rivanna River. The first kiosk, which was completed in June, is located on the west bank of the river in Charlottesville’s Riverview Park. The second, completed in July, is on the east bank near the site of the former Woolen Mills Dam along the Albemarle County Greenway. Both serve as display boards for River and River Trail related educational materials.

These kiosks are constructed from locally harvested Eastern Red Cedar with re-cycled Western Cedar roofing shingles. Volunteer labor played a large role in their construction and material funding was generated by the Woolen Mills River Restoration project.

These kiosks compliment the four informational kiosks that the RCS built along the Rivanna River as a part of the Rivanna River Water Trail in 2003. These kiosks are found on the east bank at Darden Towe Park, on the east bank at Milton (Randolph’s Mill Rd.), on the east bank at Crofton and on the west bank at Palmyra.

Please stop by for a look the next time you’re on the River! They look great and you might just learn a thing or two!

## Youth Education at Oakland School

RCS and Oakland School have partnered for a second year of environmental education. Oakland School offers private, customized education for students with learning difficulties such as dyslexia, ADHD, Asperger's Syndrome and other challenges. Working closely with Oakland educator Jamie Cato, the RCS Program Coordinator leads a brief lecture and hands-on activities once every three weeks with Cato's "Concepts Course." Every student at Oakland takes this class over the course of the year and RCS has the privilege of seeing and working with every student in a meaningful way over this time. The theme for the 2008 Concepts Course was "Water," culminating in a visit from RCS staff to discuss the local Rivanna River Watershed and conduct water-monitoring with samples taken from the Rivanna. "Wildlife" is the 2009 Concepts Course theme. In the final week of the program, once again RCS staff will visit the classroom to discuss environmental threats to wildlife and demonstrate macroinvertebrate water monitoring. The program this year has been lively to say the least. Working with many of the same students from 2008 and building on the lessons of the previous year has resulted in deeper engagement and interest in these important water quality issues.



## Urban Places Rural Spaces

RCS had a month long residency at the Urban Spaces Rural Places exhibit at the Charlottesville Community Design Center. The exhibit sought to reflect the complimentary contrasts of city and country living in the Charlottesville/Albemarle area with an emphasis on conservation and "green living." RCS Board member Jim Cato and Program Coordinator Tanner Council designed and constructed "The Living Watershed" for this event.

Somewhere between a diorama and a water fountain, "The Living Watershed" is a loose interpretation of the Rivanna River watershed with creeks and rivers running over a landscape replete with representations of the many and varied land uses in our watershed. Water flows from the tops of the foothills of the Blue Ridge past fly fishermen and a pristine forest, through the South Fork Rivanna Reservoir, growing fields and cow pastures, a golf course and construction site, and, of course, a town complete with houses and a dog park. The water then drains into "the James." Underneath of the exhibit, the water it is caught and sent back to the foothills for a perpetual flow.

Much like an Enviro-scape, this exhibit is a teaching tool and may be used to demonstrate how pollutants move from the land into our streams with the aid of some household powders and a spray-bottle to simulate pollutants and rain, respectively. "The Living Watershed" has been a hit with local classrooms and will be an asset in the RCS educational toolkit for years to come.

The Living Watershed is currently on display at the Charlottesville Community Design Center and will be there the entire month of March.



## History of the Rivanna River and The Rivanna Conservation Society

by Steve Pence, Co-Founder, RCS

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As I reflect on the RCS 20th Anniversary, I like to think that the Rivanna River of today is healing, on its way back to what was here before Columbus. I know this river is much more like the pre-Columbian Rivanna than the abused river of 150 years ago. Most of the restoration of this river system comes from benign neglect of the industrial revolution allowed. This is ironic, in that the greatest threats to the Rivanna results from the same industrial revolution.

I have trouble imagining the insults that past land uses have caused to my favorite river. I get caught up in the “wish they had not done this and that” mind set. Really, all things considered, we are all fortunate that history played out the way it did. I mean, here we are actually living in a time and place where we can take the time to utilize the available tools to actively protect the Rivanna, and not just hope for the best.

The colonist had to accumulate enough wealth to grow a country. This was done by clearing the forest, growing the crops needed for export and creating a transportation system. The transportation system is a crucial element that is above and beyond the reach of even the most industrious individual. Simple dirt roads could not support the movement of heavy loads of wheat, tobacco and other agricultural products coming from the farms to the markets and ports. All season, all weather roads would be a huge investment in infrastructure. The growing colonies of the young nation had to depend on the river system as an expedient and reasonably safe method of transporting heavy cargo.

As row crops replaced forests, the soil erosion that resulted from the early farming enterprises would have been amazing. These farming activities had to feed the families and produce the yields to generate wealth. Farms also had to grow the feed for the farm labor. The initial productivity of the flat river bottoms next to land was soon either washed away or carried away in the agricultural products. For the farming enterprise to grow in scope, an exponential rate of conversion from forest to crop had to occur. The initially high yields dropped off in the best soils, less productive lands were brought into production, which took more time to farm to produce even less in yields and took more effort to move to the riparian transportation system. The cumulative impact to land use was that only the steepest, rockiest, poorest lands were left as forests. The impact to the river was high levels of turbidity from all the soil erosion, higher water temperature with no shade from trees, and more runoff during storm events.

Following along with these changes to the landscape, the river itself was being “improved” for navigation. The first improvements did not significantly change the river. Groups of rocks were arranged to make wing dams. These structures only created a shift in the current and perhaps as much as an extra inch of draft for the double hulled dugout canoes and early batteau used in the beginning.

Early industrialists built dams across the entire river to power mills to grind flour and saw lumber. Laws required mill owners to build locks to allow passage for the canoes and batteau traffic. The

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best sites for these dams took advantage of the fast flow caused by sudden drops in the river bed and natural stable narrows in the river channel. The resulting mill ponds had the benefit of submerging the worst of the unavoidable hazards to the early river commerce. Apparently, business for these mills was profitable and these entrepreneurs reinvested in their business by raising and strengthening the mill dams. In some cases the mill ponds were raised enough to submerge mill dams upstream from their improvement. With the formation of the Rivanna Navigation Company the priority in the structures on the Rivanna and in the use of the water shifted from privilege of the mill to the rights of the transportation.

As the land was being changed from forest to farm, the river was changed from a free flowing stream to a series of mill ponds. The “slack water navigation” resulting from these mill ponds allowed boats that were 93 feet long and 14 feet wide to carrying 50 tons to move up and down the Rivanna almost as far as Charlottesville. The last improvements by the Rivanna Navigation Company were approved in 1850 to bring the navigation structures up to the standards of the James River and Kanawha Canal Company.

Twenty years later the nation was coming to grips with reconstruction and the beginnings of the industrial revolution the Civil War helped create. Within the Rivanna watershed large tracts of farmland were turning back into forestland. Many of the men who left the farm and went to war never came back to the farm. Steam engines begin to replace muscle power. The marginal farmlands went from fallow to stands of southern yellow pine.

The emergence of the railroads that allowed shipping to go in more direct routes with fewer risks eclipsed the slack water navigation. Just one of the ironies of this age was the last paying freight for the Rivanna Navigation Company was transporting material to build the railroad system in the Charlottesville area. By 1908, the Rivanna Navigation Company and the improvements authorized in 1850 had been abandoned. Floods, some of which may have been in the class caused by Agnes and Camille, tore apart the dams

There was no motivation to establish or plant forests. There were no efforts made to remove the dams. This benign neglect of the land allowed the river begin to “heal”. As a forester I have always believed the axiom, “trees are the answer”. The first 3/4th’s of the 20th century sure was the answer for the Rivanna. Acres of land in forest continued to increase. By any measure of a rivers’ health, the healthiest reaches of a river are surrounded by forest.

The internal combustion engine completely transformed the local farmstead from being dependent on one kind of horsepower at the beginning of the century to another kind of horsepower right after World War II. The great wars and the undeclared military actions that have followed continued to provide abandoned farms. The vast majority of forestland in the Rivanna watershed exists because the land was “abandoned”.

When I started my career with the Virginia Division of Forestry there was a change in why land was growing trees. The reasons landowners had for owning forests had begun to shift. A few landowners were growing trees on purpose. These landowners actually paid for tree seedlings and paid to have the seedlings planted. Over my ca-

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reer the number of landowners investing in growing trees in a given year has tripled and the number of acres planted have increased ten fold.

But in the late 1980's the economic viability of growing trees was being threatened by a number of factors. Residential subdivision of the land as a competing land use was, and is, the major problem. Land became too expensive to purchase to make the profits investors expected. And prescription burns and smoke management are not compatible with residential neighborhoods. Logging is noisy, generally unattractive, and again not compatible with people. More than once after notifying adjacent landowners there will be an aerial application of herbicides I noted this forest practice is not always people friendly.

I began to see forestry and by extension forestland being threatened by a new shift in land use. Where clearing forests to create farmland might reduce the amount of forest in the short term, benign neglect or good forest management can always make a new forest. Residential neighborhoods are not going back to forest. In fact, the

growing phenomenon of "not in back yard" implied the growing restrictions on timber harvest and forest management within sight and hearing of residential neighborhoods will only increase.

I thought briefly of moving away from these social pressures that I saw as a danger to my profession. However, I had found the Rivanna. The remains of the last improvements by the Rivanna Navigation Company made most canoe trips on the River seem like I was living a National Geographic nature history movie. And I grew to love the communities that made up Fluvanna County.

The training I had from the Virginia Department of Forestry and my own situational awareness told me there really was not anywhere to run and it was time to "do something". The first likely tool that could help "do something" seemed to be permanent conservation easements. However, the organizations that were holding the easements favored either no timber harvests or the forest management schedule had to be specifically detailed in the conservation easement with no chance for amendment.

There were others who felt the same way. We saw two options. We could change the way other organizations wrote their permanent conservation easements or we could create our own land trust and create conservation easements where farming and forestry activities were based on 5-10 year plans created by an accredited third party. We found out that a land trust must be in existence in Virginia for 5 years in order to hold a permanent conservation easement.

We decided to do both. Over the course of several months we formed a working group that became the first board of directors and named ourselves The Rivanna Conservation Society. Aside

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## Rain Barrels For Sale

### Commonwealth H2O

325 Greenbrier Drive  
Charlottesville, VA 22901

434.975.4426  
www.h-two-o.com

**Helping To Protect The Environment  
& The Rivanna River  
Through Water  
Conservation**

Recycled Barrels From  
The Great American  
Rain Barrel Company

Please make  
checks payable to  
"The Rivanna Conservation Society"



**Rivanna Conservation Society**



from conservation easements we dedicated ourselves to 1) provide science based information for the political decision makers (local, regional and state), 2) provide education about the Rivanna to the community and the schools, 3) engage the community in organized river cleanups, and 4) provide recreational trips on the Rivanna. Now all we had to do was change the thinking of an arm of the Commonwealth of Virginia. The Virginia Outdoors Foundation held the majority of the permanent conservation easements in Central Virginia and we focused our attention on this state agency. Their executive staff actually understood what we wanted and before we had a chance to accept our first easement they had changed the way they wrote easements, allowing RCS to go about the rest of its mission.

We were very fortunate to find and use the Land Trust Alliance (LTA). LTA provided us with some generic information, a lot of one-on-one information and provided scholarship money so the President, Vice President and Secretary/Treasurer could attend a Land Trust Alliance Rally in Waterville Valley, New Hampshire. From this we were able to write our Articles of Incorporation and by-laws. The networking and discussions from the rally made it very clear that RCS would need to have some paid staff members if we really hoped to succeed. And, one of our biggest projects to date is the breaching of the Woolen Mills Dam in 2007.

Before our first year anniversary RCS had provided a study to the Fluvanna County Board of Supervisors concerning the impacts of sand dredging from the Rivanna River. This paper listed seven rare and endangered species that could be harmed by the proposed sand dredging opera-

tion. One fresh water mussel, the James River Spiny Mussel, is not known to be in any other river system. The Fluvanna Board of Supervisors did turn down that request and has held firm to that decision to subsequent requests from other potential dredging operations.

The good working relationship we developed with the Fluvanna County Board of Supervisors in this early endeavor helped us later when Howard Scheier left his one hundred acre property to RCS in his will. The Fluvanna Board of Supervisors was unanimous in our special use permit to open the property to public use and in our request to have the property exempted from real estate taxes.

For more information about the history of the Rivanna River you should read Mr. Jefferson's River by Minnie Lee McGehee and William E. Trout III. For more information about the Rivanna Conservation Society please visit [www.rivannariver.org](http://www.rivannariver.org).



Rivanna Batteau

## Reducing Damage From Stormwater Runoff

In 2006 the James River Association invited the Rivanna Conservation Society (RCS) to conduct a watershed wide review of the stormwater codes and ordinances in central Virginia. RCS contacted the UVA Environmental Law and Conservation Clinic to request pro-bono legal assistance. RCS and UVA determined that:

An in-depth analysis of current development codes and ordinances for stormwater in the City of Charlottesville and the Counties of Albemarle, Fluvanna and Greene would be the focus of the project The Southern Environmental Law Center (SELC) joined the team in 2007, as a part of its Charlottesville/Albemarle Project.

This triad of environmental and conservation organizations has been working for 3 years to develop recommendations for the Rivanna Watershed, based on the Codes & Ordinance Worksheet (COW) developed by the Center for Watershed Protection (CWP).

THE COW MODEL ORDINANCE INCLUDED 28 PRINCIPLES IN 4 AREAS:

- Residential Streets and Parking Lots
- Lot Development
- Conservation of Natural Areas
- Stormwater and Erosion Control

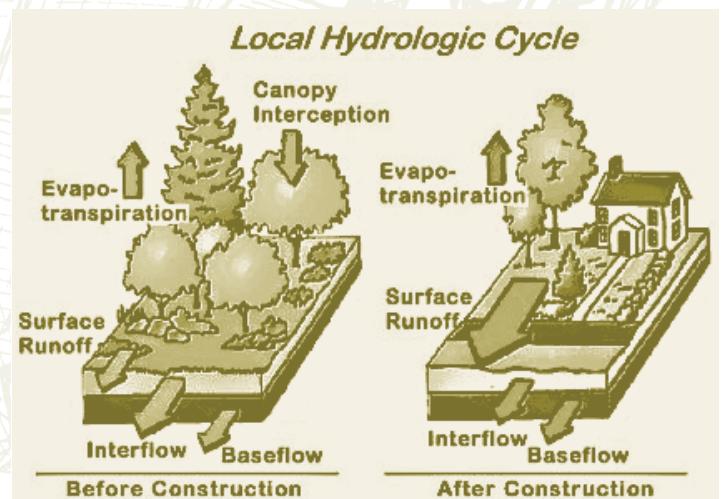
THE RIVANNA RIVER BASIN ALLOCATION

- Albemarle - 65 %
- Charlottesville - 50 %
- Fluvanna - 40 %
- Greene - 36 %
- Fractional percentages of Louisa, Nelson and Orange Counties.

Rivanna River Study by the Virginia Department of Environmental Quality

Aquatic life impairment:

- 11-mile stretch of Rivanna is impaired, beginning at confluence of north and south forks.
- Sedimentation is the most likely cause of the impairment.
- Largest source of that sediment (44%) is from streambank erosion caused by higher stream flows.



DAMAGE FROM RUNOFF

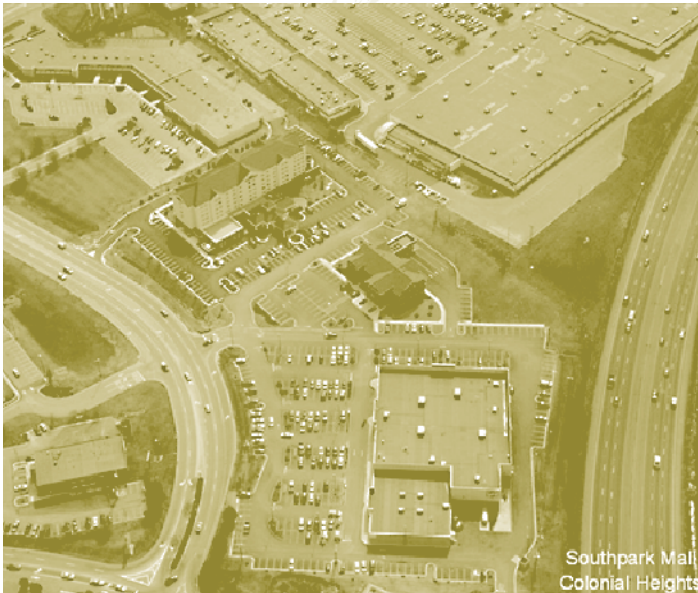
- Higher water treatment costs:
- Sediment in reservoirs.
- Using treated drinking water for every use.
- Depletion of groundwater supplies.
- Abnormal stream flows: flood or trickle.





## STREETS & DRIVEWAYS

- Streets typically account for roughly half of the impervious cover in the overall road network of traditional neighborhoods.
- Driveways generally account for another twenty to thirty percent, and cul-de-sacs and other turn-arounds represent approximately seven percent.



## BENEFITS OF REDUCING RUNOFF

- Protect local streams and rivers from:
  - Erosion of streams
  - Influx of pollutants
- Reduce water treatment costs:
  - Less sediment in reservoirs.
- More recycled rainwater instead of treated drinking water.
- Replenish groundwater supplies.
- Protect and restore stream flows

## STORMWATER CODES AND ORDINANCES

Our analysis and recommendations address only stormwater from “new development,” though we recognize that agricultural runoff and other pollution sources are important issues in the Rivanna

watershed. Recommendations were developed for Charlottesville, Albemarle, Fluvanna and Greene Counties.

## CENTRAL THEMES

1. Reduce impervious surfaces.
2. Promote on-site infiltration and low impact development features.
3. Limit erosion from construction sites.

## STATUS REPORT

Final reports for the City of Charlottesville and the County of Albemarle have been issued and presented to the governing officials, including the City Council, the Board of Supervisors and the Planning Commissions.

Charlottesville - We presented our report to the City of Charlottesville Planning Commission and City Council in the spring of 2008. The City Council asked that we work with County staff to draft ordinance language.

Recommendations include:

1. Amend City Code provisions to reduce impervious surface.
2. Promote on-site infiltration and low impact development features.
3. Limit erosion from construction sites.
4. Update and expand City's stormwater manual.
5. Explore new initiatives to enhance stream buffers.

Albemarle County - We presented our report to the Albemarle County Board of Supervisors (BoS) in August, 2008. We were invited by the BoS to work with County staff to draft ordinance language. 20 recommendations were cut down

continued on page 15



to 5 priorities. Of the 5 ordinances - One was unanimously adopted by the BoS - One was incorporated into the operating manual - Three are currently before the Planning Commission.

Recommendations include:

1. Reduce minimum parking requirement for office buildings.
2. Require stronger stormwater protections when exceeding parking maximums.
3. Enhance landscaped areas in new parking lots.
4. Establish outer limit on how long construction sites may be left destabilized.
5. Augment agreements-in-lieu of Erosion & Sedimentation plans.

Final reports for the counties of Fluvanna and Greene are printed and RCS will be making presentations to the municipalities in March and April.

#### Fluvanna County

1. Promote Better Design and Layout of New Development Sites
2. Promote On-Site Infiltration and Encourage Low-Impact Development Techniques
3. Limit Erosion from Construction Sites
4. Implement a Buffers Ordinance

#### Greene County

1. Promote better design and layout of new development sites.
2. Actively encourage low-impact development techniques.
3. Limit sediment-laden runoff from construction sites.
4. Promote riparian protection on pasture land.
5. Increase protection of buffers.

## PARKING SPACE REDUCTIONS

Require that an appropriate percentage of parking spaces within large parking lots be designed



to “compact” dimensions can reduce the size of the parking lot while accommodating the same number of vehicles. It can also increase the space available within the lot for LID stormwater management practices.

1 acre lot + 1 inch rain = 27,000 gallons runoff

- Lower mandated minimum number of spaces for offices (County)
- Combine shorter parking spaces with more landscaping, LID (County)
- If exceed maximum number spaces, use more landscaping, LID (City, County)

## TIME LIMITS ON RE-VEGATATION ON DENUDED AREAS

There are big loopholes in the Virginia State Statute that allow construction sites to be clear cut and left destabilized, which can result in significant erosion and sedimentation.

VA Legislative Language - “[S]tabilization shall be applied... within seven days after final grade



is reached... Temporary soil stabilization shall be applied...to denuded areas that...will remain dormant for longer than 30 days. Permanent stabilization shall be applied to areas that are to be left dormant for more than one year.” 4 Va. Admin. Code 50-30-40(1)



## SUMMARY

All reports and recommendations have been issued and RCS, SELC and the UVA Environmental Law and Conservation Clinic will be meeting with the Boards of Supervisors, government staff and City Council members to develop implementation plans. The first phase of this project is complete. Now the work of changing the codes and ordinances begins.

## CONTACTS:

### RIVANNA CONSERVATION SOCIETY

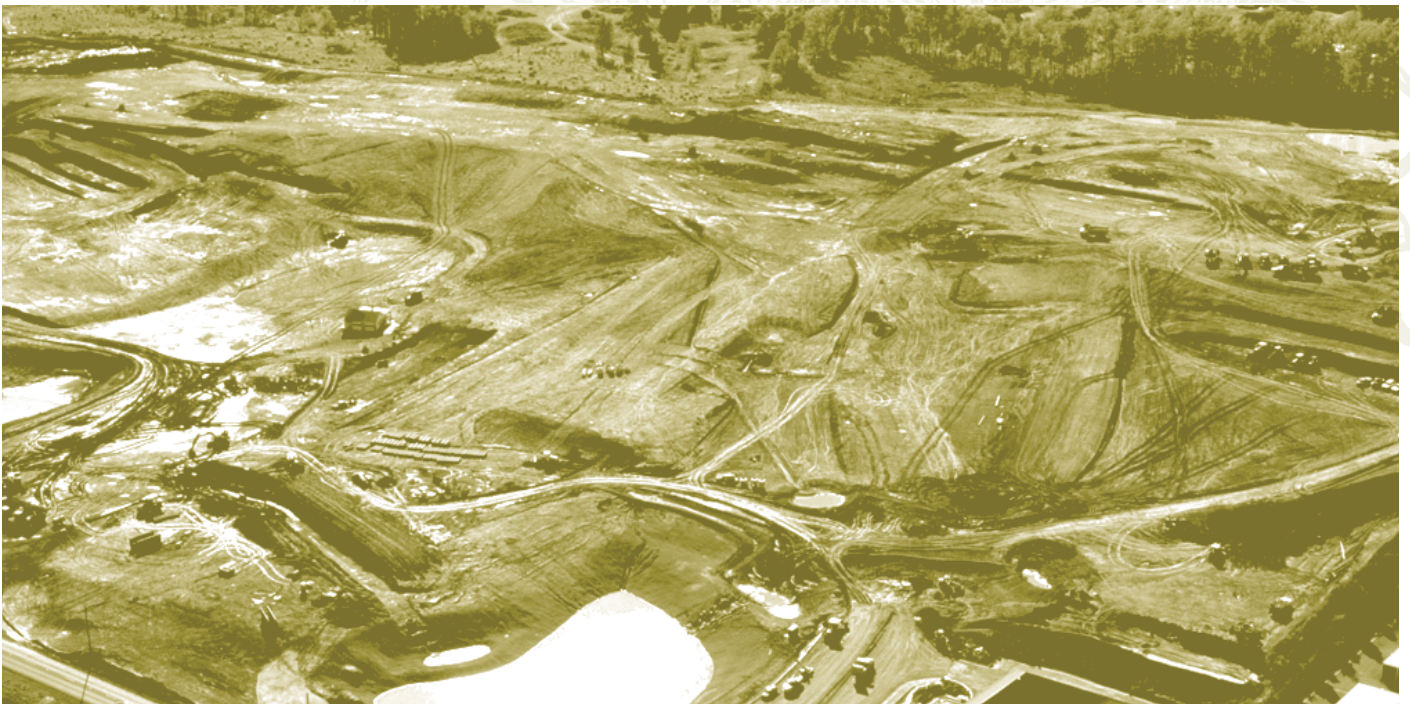
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434.97-RIVER (434.977.4837)

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### UVA ENVIRONMENTAL LAW & CONSERVATION CLINIC

Leon Szeptycki [ls9u@virginia.edu](mailto:ls9u@virginia.edu)  
434.924.3825



## Youth Education at C.A.M.P!

The Charlottesville/Albemarle is My Place! (C.A.M.P!) program was held for a second successful year in a row this past August. C.A.M.P! is a week long day camp for 6-8 Graders from the City and County and takes them all around the City and County for field trips and adventures in local environmental resources.

Activities included trips to urban and rural farms, wildlife and forestry walks, and a full afternoon of paddling the South Fork Rivanna Reservoir. As part of the water resource aspect of the program RCS staff led water monitoring for the group at Mint Springs in Crozet. The kids all had a great time hiking around the lake looking for different spots to compare water quality. At the end, each team shared the results of their sampling with the group.

This event is conducted through a partnership between the Virginia Cooperative Extension, VA Dept. of Forestry, Quality Control Council, Thomas Jefferson Soil and Water Conservation District, VA Museum of Natural History, Chesapeake Bay Foundation and RCS.

The program includes transportation and lunch each day and delivers a dense, comprehensive environmental educational experience for students. Please contact the Virginia Cooperative Extension Office and speak to LoriAnne Barnett (434.872.4580) for information about the 2010 C.A.M.P!

## Virginia Garden Club Field Trip

RCS facilitated the November 5, 2009 Virginia Garden Club field trip at Woolen Mills. To help make the walking tour more personal, RCS invited former Charlottesville Mayor Kay Slaughter and Bill Emory, Charlottesville Planning Commission and Woolen Mills Historical Society to share their knowledge of community (both live in Woolen Mills neighborhood) with the Garden Club members who came from all over the state to attend their annual meeting.

### RIVANNA RIVER SOJOURN PLANNED FOR APRIL

RCS is once again partnering with Blue Ridge Mountain Sports to host the Third Annual Rivanna River Sojourn. This year, in honor of the 40th Anniversary of the Scenic River Program, we will float the entire river, starting in Charlottesville at the Rt. 29 Bridge and ending at the confluence with the James River at Columbia, VA.

This "full float" will take place over three days and two weekends. Paddlers can join us for the entire paddle or pick certain segments. Here is the schedule.

April 10, 2010 Put in- Rt. 29 Bridge below the dam  
Lunch at Darden Towe  
Pull out- Shadwell

April 11, 2010 Put in- Shadwell  
Lunch- Crofton (DGIF Launch)  
Pull out - Palmyra  
(DGIF launch at Rt. 15 and 53)

April 17, 2010 Put in- Palmyra  
(DGIF launch at Rt. 15 and 53)  
Lunch - TBA  
Pull out - Columbia (DGIF Launch)

To register log on to our website: [www.rivannariver.org](http://www.rivannariver.org)  
Email us at [rcs@rivannariver.org](mailto:rcs@rivannariver.org) or call us at  
Phone: 434 97-RIVER (434 977-4837)



## Virginia Scenic Rivers Program

Virginia Scenic Rivers Program's intent is to identify, designate and help protect rivers and streams that possess outstanding scenic, recreational, historic and natural characteristics of statewide significance for future generations. This program is managed by the state and should not be confused with the federal Department of the Interior's Wild and Scenic Rivers Program. One of the program's strengths is the partnership forged between citizens, local governments and the state. This partnership begins in the evaluation phase and continues through and after the designation process.

Scenic river designations result from initiatives from partnerships of local groups, local governments, state agencies and the Virginia General Assembly. In addition to existing designated state scenic rivers, other river segments have been deemed worthy of further study. See Virginia Outdoors Plan Chapter VII-F, pages 152-160, for more detail.

The program's focus is on enhancing the conservation of scenic rivers and their corridors. State and federal agencies must take into consideration how projects and programs affect state scenic rivers. DCR is ready to help localities and the Virginia Scenic River Board develop planning tools for use by localities to enhance the conservation and protection of scenic river corridors. That said, the given locality ultimately decides what to institute.

The program's enabling legislation is the Virginia Scenic Rivers Act of 1970, §10.1-400. Within the legislation, the Virginia Scenic Rivers Board was created to promote and enhance the program. Board members from across Virginia discuss issues and make recommendations on the stew-

ardship of existing scenic rivers and expansion of the program with other eligible river segments. For more detail, see [http://www.dcr.virginia.gov/recreational\\_planning/srmain.shtml](http://www.dcr.virginia.gov/recreational_planning/srmain.shtml)

### BENEFITS OF DESIGNATION

- Provides opportunities to consider scenic and other resources in planning and design.
- Focuses Federal Energy Regulation Commission (FERC) reviews of hydro or related project proposals.
- Encourages closer review of projects and proposals by state agencies and localities.
- Requires General Assembly authorization for dams.
- Provides for continued existing appropriate riparian land uses.
- Allows for project review and monitoring of designated river segments by governor-appointed Virginia Scenic River Board.
- Provides framework for appointment of a local Scenic River Advisory Committee.
- Provides eligibility for land use tax considerations, if locally adopted.

## Rain Barrels For Sale

**Eltzroth & Thompson  
Greenhouse**

**1686 Monacan Trail Road  
Charlottesville, VA 22903  
(434) 295-2488**

***Helping To Protect The Environment  
& The Rivanna River  
Through Water  
Conservation***

Recycled Barrels From  
The Great American  
Rain Barrel Company

Please make  
checks payable to  
"The Rivanna Conservation Society"





TeensGIVE



Teachers' Summit



Youth Summit



Third Thursday  
Brown Bag



Governors' School



VA Water Resources Conference (RCS Exec. Director Speaking)



Rivanna Conservation Society  
PO Box 1501  
Charlottesville, VA 22902  
Return Service Requested

Non-Profit Org.  
U.S. Postage Paid  
Charlottesville, VA  
Permit No. 758

RIVANNA  
CONSERVATION  
SOCIETY



The date above your name is the date of your last contribution. Please consider renewing your membership if more than a year has passed.

The Rivanna Conservation Society (434)97-RIVER [www.rivannariver.org](http://www.rivannariver.org)

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society**

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