

# CREEK VOICE



A PUBLICATION OF THE RICHLAND CREEK WATERSHED ALLIANCE | NASHVILLE, TENNESSEE

## Richland Creek and Reostone Quarry

By Steve Swartz

On May 2nd, 2010, Richland Creek surged past the 20 foot official flood stage mark as recorded at the measuring station beneath the Charlotte Pike bridge after Nashville received more than 18 inches of rain over a two day period. Flood waters devastated many of the low lying areas along the creek including homes on Delray Drive and businesses in the Richland Creek Shopping Center adjacent to the measuring station.

At the same time, downstream, floodwaters found their way into a subsurface fault or crack in the limestone underlayment of the Richland Creek bed and began to wash rock and soil into the adjacent deep pit belonging to Reostone Quarry. With the hydraulic mining power of an Alaskan gold dredge, the creek scoured out the fault and created a massive waterfall into the quarry which quickly filled with water. In the process, the water demolished a portion of the west bank of Richland Creek.

On June 14th, 2010 the U.S. Army Corps of Engineers (USACE) Nashville District published a Public Notice (Number 10-17) to inform the public that the Reostone Quarry, through their parent company, the Rogers Group, had requested a permit to relocate a portion of Richland Creek as a result of the flood May 1 – 2.



The waterfall created by Richland Creek cascading into the Reostone Quarry on May 2nd, 2010. Channel 5 Television photo.

The Richland Creek Watershed Alliance (RCWA) reviewed the Reostone request and quickly identified problems with the proposal. The initial proposal called for a major shift of the creek bed to the east on land owned by the State of Tennessee. It would have resulted in bypassing more

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## What's all the flow about?

By Monette Rebecca

It is about the amount of water flowing in a stream channel everyday and the variability of that quantity throughout all the seasons of the year. It is about the Tennessee Wildlife Resources Agency conducting instream flow research to protect aquatic habitat and fish diversity for Tennessee streams and rivers. It is about the importance for the public to become informed participants in the decision making process for instream flow protection.

The Richland Creek Watershed Alliance, in collaboration with the wildlife agency's Instream Flow Program, is

participating in a Richland Creek flow study. Instream flow studies have five riverine components; hydrology, biology, water quality, geomorphology and connectivity and such studies require time, money and staff resources to conduct and complete.

The Tennessee Wildlife Resources Agency (TWRA) uses the data collected to write prescriptions from each study and submits these recommendations to the Tennessee Department of Environment and Conservation (TDEC). The TWRA has the responsibility to protect aquatic wildlife, habitat and diversity but lacks regulatory

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than 1,000 linear feet of the historic creek bed and, as it was a short, straight channel replacing a naturally winding course, it would have caused accelerated flow jeopardizing the downstream creek banks. While the Reostone initial proposal, the short, most direct route, made sense for Rogers Group, it was not in the best interest of the Richland Creek.

The RCWA formed a working group under the leadership of Executive Director Monette Rebecca to petition the Corps of Engineers for a public hearing on the Reostone initial proposal. Appeals were made to our legislators and to Nashville television stations and newspapers to draw attention to the need for a public hearing. The Tennessean and WSMV Channel 4 were particularly supportive in publicizing RCWA's call for a hearing from the first days of our campaign. Among our legislators, Senator Doug Henry, Representative Gary Odom, and Metro Council members Holleman, Evans and Baker were instrumental in helping RCWA bring an alternative plan to public attention.

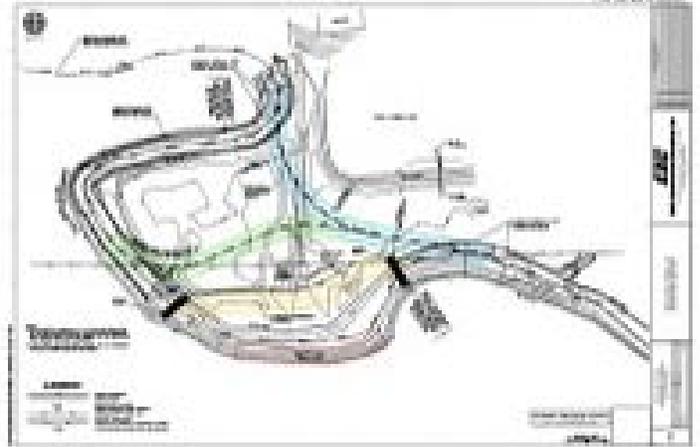
RCWA received an invitation to a private meeting hosted by Director of Water Pollution Control, Paul Davis, of the Tennessee Department of Environment and Conservation (TDEC) on the 30th of June which brought together TDEC, Metro Water, US Army Corps of Engineers, Tennessee Wildlife Resource Agency, Harpeth River Watershed Association, the Rogers Group and their two design consultant teams.

On July 1st, three members of the RCWA committee attended the Storm Water Management Committee (SWMC) meeting which heard the variance request by the Rogers Group. The RCWA attendees made presentations before the committee which suggested the Rogers Group plan could be much improved by utilizing a more westerly, longer, and more expensive route but one which would greatly benefit the creek and water quality.

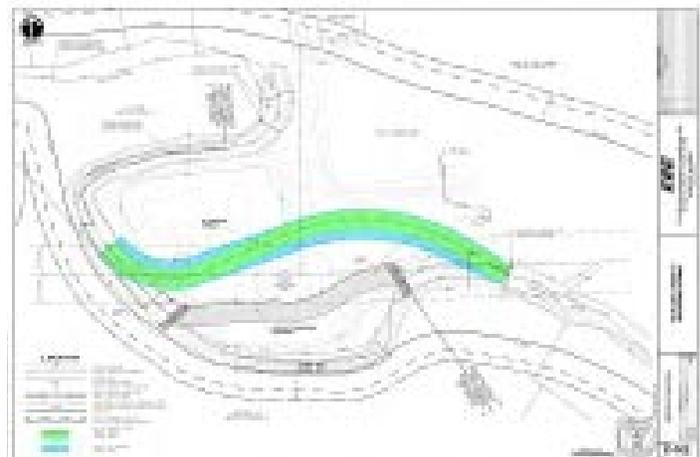
An alternate plan was formulated by RCWA along the lines of the suggestion RCWA had made to the SWMC and a supporting power point presentation was prepared. The alternate plan moved the creek only far enough to provide a stable creek bed and then reconnecting with the historic creek channel saving much of what would have been lost under the Reostone initial proposal.

Although a "public hearing" was never conducted, on July 14, 2010, a public meeting was held at the Cohn School in Sylvan Park. At this meeting, the Rogers Group presented a Reostone revised proposal, a modified plan which was quite similar to the RCWA proposal and generally a substantially improved solution in comparison to their initial proposal.

The birth of the Reostone revised proposal was an accomplishment RCWA can take pride in having parented. This was a case study in the merit of a community-based environmental organization which acts as a point of focus for business, the media and our political leadership to help find solutions which promote the environment. The RCWA shares in this achievement with Rick Turner, Divisional Vice President, Rogers Group, our excellent legislators and print/television media.



*This drawing shows the original Reostone proposal which cut off a large loop of Richland Creek.*



*This is the "Reostone Revised Plan" showing a new channel much closer to the historic Richland Creek.*

## **CREEKVOICE VOLUNTEER STAFF**

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## Flow from pg 1

• jurisdiction. TDEC issues stream withdrawal permits based upon the instream flow information provided by the applicant, and supplemented by any data available from the TWRA and the US Geological Survey. The current stream-flow conditions the TWRA studies provide can be optimal in determining what is available for withdrawal - how much water can be withdrawn from the creek?

Research begun in 2009 for Richland Creek determined that excessive withdrawal by the golf course along the greenway contributed to "...Poor water quality, a decline in fish species diversity and damage to the overall health of water resources." It was indicated by the research summary for this location that the predominant fish species in the stream were "pollution tolerant." This year the Richland Creek flow study has expanded to include reaches of the creek near Hillsboro, White Bridge, Harding and Morrow roads.

As part of the flow research fish assessments are conducted. The assessments are a scientific tool to characterize pollution and human influences on fish assemblage in study areas. The third fish survey on Richland Creek was completed this past July near West Park (60th Avenue North and Morrow Road). Each fish survey produces an Index of Biotic Integrity (IBI) score. This all-day activity entails catching, identifying and counting fish species in the marked study area to produce a numeric rating of watershed health between 12 and 60. Last year, Richland Creek received a poor IBI Score of 34 at the McCabe golf course study area.

The Richland Creek watershed is fed by a network of groundwater springs in a fast growing and densely populated urban area; this complicates protection and multiplies water resource uses. "Tennessee is involved in a major Regional Planning initiative to provide safe



Above: Jared Chrisp- American Fisheries Society Hutton Scholar, Kim Elkin -TWRA Instream Flow Biologist and RCWA volunteers - John Robbins, Betsy Bunting. Below: Spotted Bass

water supply while protecting and conserving our precious aquatic resources," according to TWRA. As population grows, public awareness about instream flow protection must too. To ensure that adequate water supply and precious aquatic resources are sustained overtime, TWRA points out, "The public is essential in promoting the importance of maintaining instream flows."

TWRA's Environmental Services Division Chief, David McKinney and Instream Flow Biologist, Kim Elkin, wrote an article about the research in the recent 2010-2011 Wildlife Calendar. You can also find out more information at the TWRA website, [www.wildlife.org](http://www.wildlife.org). Please click Wildlife Habitat and Instream Flow to access

## Greetings Richland Creek stakeholders

I would like to begin my letter to you with some good news: we received our approval letter from the IRS last week and the Richland Creek Watershed Alliance is now officially a 501c3 non-profit organization. This means that your donations or membership contributions are tax-deductible and that this status is retroactive to 2008. This non-profit status is a milestone for our organization and I am personally pleased by the achievement as it represents successful culmination of a substantial amount of work and planning. The RCWA mission is to educate, advocate and participate in activities and scientific research that will improve, protect and enhance the environmental sustainability of the Richland Creek watershed.

Public awareness of the RCWA has grown apace with the challenges that the watershed has faced over the past couple of years. From the beginning, the Richland Creek Watershed Alliance has sought to involve more people from the community. Now is a perfect time for our stakeholders to increase their involvement as RCWA makes this transition into a 501c3 organization. We want you to serve on our RCWA Board or one of its committees. If you are interested in being more involved with your local watershed's health, please contact Monette at [monetter@comcast.net](mailto:monetter@comcast.net).

I also want to thank you all for being supportive and taking the time to look at the concerns RCWA presents and solutions

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# ANNOUNCEMENTS

## RCWA needs volunteers to serve!

*RCWA is asking RCWA members who want to serve as committee and Board members to contact us. Please send your contact information and interest in serving to [rcwa@comcast.net](mailto:rcwa@comcast.net) or by snail mail to:*

RCWA  
PO Box 92016, Nashville, TN 37209

## JOIN RCWA - TO SHARE & LEARN MORE

Submit your annual membership of \$15 by snail mail or via PayPal from our website at

[www.richlandcreekwatershedalliance.org](http://www.richlandcreekwatershedalliance.org)

Submit questions or concerns to [rcwa@comcast.net](mailto:rcwa@comcast.net).

For more details, photos or to comment, please visit our blog at [rcwa.blogspot.com](http://rcwa.blogspot.com).

The Richland Creek Watershed Alliance is a tax-exempt, 501c3 non-profit organization (public charity).

## *Greetings from pg 3*

we offer to protect our water resources. As volunteers, we don't always have the time to keep everyone informed of the small details as they happen, but we do provide a summary in the blog and CreekVoice to keep you updated on our work. Our recent success with the Reostone quarry issue which received so much attention from the media reflects your awareness and involvement. It was the support rendered by the community that made the difference. Keep up the good work!

The May 2010 flood should help each of us to focus on the need for more work to improve our watershed and make flash flooding less likely. Although most of us have fully recovered from the flooding, I know some that are still not able to return to their homes. Our hearts go out to you and I hope your home is repaired soon so you can return. As we work to restore our stream buffer areas and reintroduce native trees and plants to these stream banks, we are also reducing the risk of another devastating flash flood along Richland Creek.

I hope you find value in the work that Richland Creek Watershed Alliance is doing and will choose to help in the way that suits your interest and ability best (volunteer, donate or offer your expertise). Growing this organization is about growing the community's involvement. Thanks to you all.

*-Monette Rebecca*



## Richland Creek Watershed Alliance

PO Box 92016 Nashville, TN 37209

*A community-supported volunteer organization promoting environmental sustainability for the Richland Creek Watershed.*

[www.richlandcreekwatershedalliance.org](http://www.richlandcreekwatershedalliance.org)

*Our watershed is rich with stakeholders who share their gifts.*