Corsica River Conservancy

July, 2015

Dear Corsica River Conservancy Member,

It is time to provide you with an update about progress in restoring the Corsica River and to ask you to renew your membership and support of your Corsica River Conservancy (CRC). It is hard to believe that CRC is in its tenth year! Moreover, the multi-partnered project to restore the Corsica has proceeded continuously and actively from 2006 to the present. I wish I could say that ten years of effort has gotten us to our goal of a restored river. But that is not the case. Much has been done and significant progress has been made. Yet there is still much to do. CRC's mission is both to restore and to conserve - the latter is a continuous process of dealing with continuous changes to the watershed.

A Ten Year Perspective

Many of the goals set out in the Corsica Watershed strategic plan have been met. The old wastewater treatment plant operated by the Town of Centreville was a big problem that was corrected early in the restoration. The new plant is regularly tested and continues to operate at the highest levels of nutrient and bacteria reduction. Most effluent is now piped to the Town's spray field rather than discharged directly to the River. Based on CRC's ten years of testing, we can say that the River is generally safe for human contact, though one should be cautious in areas of concentrated runoff immediately following significant rain events.

With the aid of state and federal funding, the Town has implemented many structures to control storm water runoff and the nutrient and sediment it brings to the River. Queen Anne's County has installed many similar structures - they are called "BMPs" standing for Best Management Practices - such as coastal plain outfalls, large rain gardens, and permeable paving. Hopefully you have seen many of these at locations such as the Board of Education building, the Health Department parking lot, the old railroad terminus on Pennsylvania Avenue, and the parking lots at Whitemarsh Park. The beautiful rain garden constructed by QACs Master Gardeners behind the Centreville Library was one of the first to be installed and it continues to effectively treat and control all runoff from that parking lot.

More storm water management improvements are being made in the watershed and are now required in any new construction. Recently, CRC together with our other restoration project team partners, were successful in persuading the State Highway Administration to purchase approximately eight acres of undeveloped land on the south side of Town on Rt. 213 to help limit and improve runoff into Millstream. This is a very significant development for our watershed. The project will take a few years but will undoubtedly improve water quality in the Millstream tributary.

Residential storm water control also has seen significant improvement. CRC's rain garden program installed nearly 400 rain gardens over 6 years with the help of committed residents like you and the aid of grant funding. These rain gardens are continually reducing runoff by sending it into natural filtration systems, returning rainwater to groundwater.

But, the Corsica Watershed is still primarily agricultural in use. So the progress that has been made in that sector is especially important. The principal BMP tool for reducing nutrients to the River from agriculture has been the use of cover crops. These are planted after harvest to take up residual fertilizer used for crops and to help reduce sedimentation runoff. The goal at the start of the restoration was to get 5000 acres in the watershed into cover crop on an annual basis. That goal, about half of the estimated watershed acreage in active cultivation, has been met or exceeded on a regular basis. The 2014-15 certified cover crop for our watershed was a record 6,651 acres. There also have been many other BMPs implemented voluntarily by our farmers with the help of our partners at the local Soil Conservation District (SCD) and Department of Agriculture (MDA). These include grass swales and buffers, manure management and fencing around streams to keep out livestock.

So what do we know and how do we know it?
The Maryland Department of Environment (MDE) has established and operated a nationally recognized stream monitoring system in our watershed over these past ten years. This system tracks the flow of water through our three sub-watersheds and the quality of water in their tributaries. Approximately five years ago, that system began to show measureable reductions in nutrients in two of the three sub-watersheds, Three Bridges Branch and Gravel Run, that are continuing to the present. The third, Millstream, has remained at a steady level, neither increasing nor decreasing.

Several years ago, the Chester River Association (CRA) began issuing an annual “report card” on the various tributaries of the greater Chester River Watershed. The grades in this report are based on scientific samples taken by “Chester Tester” volunteers, including CRC members. The tributaries of the Corsica have continued to receive the highest grade of any tributary system in the report - the grade of B.

So, things appear to be getting better in the tributaries of the Corsica. What about the main stem of the River that most of us see more regularly? As one might expect, changes are occurring more slowly there. What we know about water quality in the main stem of the River is based on ten years of seasonal water testing by CRC volunteers and two (and sometimes three) continuous monitoring stations maintained by the Maryland Department of Natural Resources (DNR) throughout that period. These show that there has been some improvement in the presence of dissolved oxygen (DO) - a necessary quality of a healthy aquatic system. Without sufficient DO, we would be seeing frequent fish kills and declining numbers of critters in the River.

But excess nutrients in the River continue to fuel excessive algae growth which, in turn, helps cloud the water and restricts sunlight penetration. The general aim is to have water clear enough to allow sunlight to penetrate through one meter or more in order to permit the growth of underwater grasses. These grasses are critical for supporting a healthy underwater ecosystem.

Getting time on our side

BMPs such as cover crops, rain gardens and denitrifying septic systems reduce nutrients that leach into our groundwater. That groundwater travels slowly on its way through the watershed and into the River. Estimates are that groundwater in our part of the Eastern Shore may travel at an average of 15 to 20 years before emerging into tributaries of the Bay.. Aside from storm water, the excess of nutrients we now have in the Corsica is largely a legacy of practices followed decades ago. The large and growing numbers of BMPs installed in our watershed are helping to turn this around and get time on our side so that future groundwater will carry increasingly less nutrients into our tributaries.

Restoration, conservation and resilience - Staying the course
Changes will continue to occur in our watershed. Though most of the land remains forested or in active agricultural use, residential growth continues. As more people are accommodated, the environmental impact of each has to be proportionally reduced if we are to continue progress. Recently, we have been closely watching the planning for a new residential development at the headwaters off of Chesterfield Avenue in Town.

Our conservancy activities will also continue to change and adapt. This year, after ten years of continuous seasonal water quality testing of the main stem of the River, CRC has transferred this responsibility to CRA. CRA recently expanded its testing program to now include the main stem of the Chester system. This consolidation of effort should lead to a more comprehensive and uniform data set which can be more easily understood by the public. CRC aims to continue its core programs of monitoring the watershed, promoting restoration and conservation, building community awareness and involvement, educating adults and youth, and supporting more access to the River. Please plan to join us on Awareness Day September 19th (see the enclosed flyer) and watch for the coming grand opening of the Corsica Watertrail.

What can each of us do?
Finally, a reminder here that all of us who live or recreate in the Corsica Watershed have a part in its restoration. If you own or operate a farm and have not yet taken advantage of the cover crop, other BMPs or available conservation easements assistance, contact our local SCD office (410-758-3136). If you own or rent a home, take a close look at how rain water flows from your roof, driveways or surrounding slopes. There may be BMPs that can be easily installed that will curtail runoff from your property. And remember that Maryland's biggest "crop" is our lawns. Be as parsimonious as possible in applying fertilizer and pesticides and abide by the law. Continue to consult our website **www.corsicariverconservancy.org** (newly revamped!) and your helpful Extension Service office (410-758-0166) for tips and guidance. The latter can provide 'Baywise" program materials to help you

Last but not least, continue to support CRC by renewing your membership and making a contribution (self mailer enclosed), attending outreach events such as Awareness Day, and volunteering your efforts. The Board members and I thank you for your continued support.

Frank DiGialleonardo
President, Corsica River Conservancy