



### **Annual Meeting and Membership Renewal**

Rainbow River Conservation will hold its annual meeting the morning of December 2<sup>nd</sup> starting at 9 AM at the Rainbow Rivers Club at 2000 San Jose Blvd in Dunnellon. Our guest speaker will be James Couillard, Director of Marion County Parks & Recreation. Jim will give us an overview of county parks and recreation, including the Rainbow River and its connected parks and trails, and what is being done to enhance user experiences while protecting the natural resources.

This is membership renewal time. Enclosed are a 2018 membership renewal form and a return envelope. Please send your membership fee and completed form as soon as possible. An up-to-date email address is necessary to get quarterly newsletters and other informative correspondence throughout the year. Having recognized that our river lot members had dwindled somewhat over the last several years RRC board members collected a list of owners from county records and composed a letter informing them of our concerns for the river and inviting them to join our ranks. This resulted in about 18 new members and \$2660 donated to our legal fund.

### **Education Program**

RRC's Education Program, chaired by Nathan Whitt and Jon Brainard, continues for a fourth year to offer 4<sup>th</sup> graders hands-on experiences to help them understand and appreciate the source and health of our drinking water and water supply to our spring-fed rivers. The children will be bused from local schools to the Rainbow Springs State Park November 16 and 17 to perform some simple experiments to acquaint them with the water cycle and environmental factors influencing the Rainbow River and its wildlife habitat. If you enjoy watching young minds in a learning mode call Jon at 407-491-8158 and volunteer to assist in this adventure.



Fourth grade at springs last year

### **Blue Run Park in Dunnellon**

In an effort to get a suitable Blue Run Park bathroom facility built Marion County Parks and Recreation wrote a FRDAP grant proposal to the State. The county agreed to provide the necessary 50% match. Although the proposal scored highly the governor and legislature struck all FRDAP funding from the 2018 budget. The county has responded by scaling down the bathroom facility to some extent and still committing \$150,000 to the project, leaving a shortfall of about \$40,000. This latter amount could probably be raised from private foundations but the Dunnellon City Council has not endorsed that option and wants to resubmit the FRDAP application for possible 2019 funding. We believe this approach and delay is the wrong answer to a much needed facility.

## Rainbow River Assessment Project

Since last March, RRC has been participating in the Florida Springs Institute “SpringsWatch” project. Each month project volunteers sample river parameters such as dissolved oxygen, water clarity, water temperature, water conductivity to determine the age of the water, and light attenuation to determine the absorption of light. Recently, the project has recorded water clarity in the morning and afternoon to determine the effect of river recreation on water clarity.

The project also records observations of bird species and apple snail eggs. In September Black-bellied whistling ducks were observed for the first time. In response to a SpringsWatch report concerning an alarming growth of hydrilla and green algae (spirogyra) SWFWMD staff and the Aquatic Preserve manager made a field inspection. FWCC carried out a treatment of hydrilla on September 27<sup>th</sup>.



Black bellied whistling duck

## Rainbow BMAP and MFL

Dr. Bob Palmer, who was our keynote speaker at last year’s annual meeting, recently wrote a critique of state legislation and plans to rectify our problems with quality and quantity of water feeding our springs and rivers. This critique is included under Education on [www.RainbowRiverConservation.com](http://www.RainbowRiverConservation.com). In summary, the 2015 Rainbow Basin Management Action Plan (BMAP) calls for an 82% reduction in nitrates in 20 years (30% of that to be accomplished by 2020). The plan calls for projects in the basin to substantially reduce nitrates emanating from fertilizers and waste water. The projects would consist of Agricultural Best Management Practices (BMPs), improved sewage plant outfalls, conversion of septic systems to central sewer or performance based septic systems, etc. As pointed out by Dr. Palmer the BMAPs are generally not enforced and are falling woefully short of meeting their goals. Since adoption of the Rainbow BMAP nitrate levels in the river have continued to rise to as high as 2.6 mg/L resulting in unprecedented growth of filamentous algae.

As pointed out in Dr. Palmer’s critique the Water Management Districts (WMDs) were under a legislative mandate to develop Minimum Flows and Levels for 30 Outstanding Florida Springs by July 1st, utilizing emergency rule procedures if necessary. As discussed in RRC’s Summer Newsletter the Southwest Florida WMD adopted a long term minimum flow emergency rule June 29<sup>th</sup> for the Rainbow River which places essentially no limit on water withdrawals for consumptive use. The Rainbow River flow rate has generally declined in the last 20 years from 900 cfs to 430 cfs last spring. This, of course, has the effect of increasing the residence time of nitrates in the river which nurtures the growth of invasive algae. RRC has been waiting for the emergency rule to lapse in 120 days and the WMD to propose a permanent rule to be challenged in court.

Ironically, this past summer was a wet one with near record rains. The river flow rate climbed to 525 cfs by September 10<sup>th</sup>. Then, when Hurricane Irma passed through, the flow rate climbed rapidly to 725 cfs in the next 20 days. This is not full recovery of the historic flow and we certainly don’t want to count on hurricanes to replenish the natural river flow. We need a sensible limit on springshed water withdrawals in order to maintain the quantity and quality of the Rainbow River.

