



Upcoming Events

RRC will have its education booth set up at Dunnellon Boomtown April 13th. Come visit us. The Rainbow River Cleanup event will be held May 18th at Rio Vista Park starting at 9 AM and ending with a RRC sponsored picnic at noon. For further information see the attached announcement. If you can supply a pontoon boat please call Mary Ann Ermatinger at 727-434-9012.

Fourth Graders Education Program

Fourth graders from Dunnellon Elementary School participated in the 5th annual Springs Education Program March 11th and 13th where they performed simple experiments and learned about the history of the early inhabitants of the Rainbow Springs area. Under the tutelage of RRC and FORS members they built a shoebox model of porous materials in order to simulate how rainfall washes pollutants into the aquifer. They also learned about the early Timucuan Indians who lived in harmony with the springs environment.

Blue Run Park

The City of Dunnellon finally accepted the Marion County plan of developing a bathroom facility at the Blue Run Park. Funding will be provided by Marion County and Housing and Urban Development funds. Building permits are being secured and the facility should be completed by next Fall.

River Conditions

March was a dry month with less than 1 inch of rainfall. Nevertheless, previous lengthy rainfalls since Hurricane Irma recharged the aquifer and the river flows remain relatively high. At the same time, however, the nitrate level hovers around 2.6 mg/L which encourages the continuing presence of nuisance algae.



Nathan Whitt, Terry Blaes and Linda Brown welcome Dunnellon fourth graders to Rainbow Springs.



Students look at spring as they learn about the aquifer.

River Assessment and Fish Count

RRC continues their monthly Baseline Assessment Project, partnering with the Florida Springs Institute. The Rainbow River team includes Sandra and Paul Marraffino, Gretchen and Brooks Martin, Michelle and Ray Blasingame, Martha Henwood, and Bill Vibbert. The project purpose is to develop water quality data pertaining to plant growth, water clarity, oxygen saturation percentage, light transmission and water conductivity. The study also records bird species, turtles, apple snail eggs, and other wildlife.

On February 16th RRC partnered with the FSI, FWC and the US Geological Survey to determine the numbers and species of fish in the Rainbow River. Two segments in the upper river were sampled and eighteen species were observed. The results showed high numbers and diversity of fish in the upper river.



Fish counting team diving in Rainbow River.

Rainbow River Minimum Flows and Levels (MFL)

We have been reporting to you the status of SWFWMD's development of a MFL for the Rainbow River. The lawful intent of this rule is to prevent excessive diversions of water from the river and thus protect its ecology. In June of 2017, in order to meet a state mandate, SWFWMD filed an emergency long term average MFL which would serve to mask the diversions of flow from the river. On March 26, 2019 the SWFWMD board adopted a MFL devoid of the long term average identity but with no specification as to what flow the MFL would be applied. The reduction allowed would be 5% of the average measured from 1965 to 2015. The reduction is underestimated from a hydrologic model not meant to apply to spring flows. These errors, as well as the ignored relationship between algae and water velocity, may require a legal challenge to the adopted MFL.

Rainbow River Basin Management Action Plan (BMAP)

In June of 2018 the FDEP produced a Silver/Rainbow BMAP identifying many projects aimed at reducing the influx of nitrates into our springs and drinking water. The target nitrate level was identified as 0.35mg/L which is deemed the incipient level for aggressive growth of invasive algae. The BMAP also estimated levels of nitrates contributed by various sources to the groundwater in each of the springs recharge basins. In the Rainbow River basin farm practices (fertilizer and animal waste) contribute 54% of the nitrates. The Rainbow BMAP suggests at best that only a 15% nitrate reduction in farm fertilizer can be achieved and only a 10% nitrate reduction in animal waste can be achieved.

Under these circumstances there is no way the nitrate level in the Rainbow River can be lowered from 2.6 mg/L to 0.35 mg/L. Therefore, RRC has joined with several other environmental organizations to challenge inadequate BMAPs promulgated for about a dozen major springs. An administrative hearing is tentatively scheduled for September.



Red-headed Duck seen on Rainbow River. This species is rarely seen in this area.