

July 30, 2009

## **RAINBOW CLOSES, THEN RE-OPENS. COUNTY HAS NO PLANS FOR INVESTIGATION INTO SOURCE OF FECAL BACTERIA CONTAMINATION.**

For the first time since 1984, almost the entire Rainbow River was closed to swimming, tubing or any other activity that involved direct human contact with the water.

It happened on Wednesday, July 23rd and the reason was an ugly fecal bacterium called *enterococci* (pronounced entero cock's eye) which exceeded allowable EPA levels.

Only the head springs swim area remained open, though it too showed elevated levels of bacteria. All other public and private swimming areas were closed including The Village of Rainbow Springs beach, KP Hole Park beach, the Rainbow Springs State Campground beach and Dunnellon City Beach. The Marion County Environmental Health Department did not test the open water of the river itself, but we suspect that all areas of the river downstream of the head springs was contaminated, not just the swim areas.

After further testing on Thursday and Friday, the Health Department reopened the river, saying that the fecal bacteria had returned to acceptable levels. However, one official still cautioned against swimming in the Rainbow if you have cuts, open sores or a weak immune system.

On Saturday, July 25th, more than 50 people met at the Dunnellon Public Library to hear Dan Dooley, Director of the Marion County Environmental Health Department, at the invitation of Rainbow River Conservation, address the public regarding the cause of the contamination and the beach closures. While unable to offer much specific information beyond the test results, Mr. Dooley patiently fielded questions for over an hour and a half from a polite but very concerned gathering of citizens.

Results of the meeting can be summarized as follows:

1. The Rainbow River exceeded EPA standards for allowable levels for *enterococci*, an indicator of feces contamination which can cause serious infections of the eyes, ears, sinuses, blood, heart valves (endocarditis) and brain (meningitis). While rarely deadly, it is of growing concern in the medical community because of its tenacious resistance to antibiotics. Also, its elevated presence can indicate dangerous levels of other bacteria and viruses, including e.coli, Giardia and hepatitis A.
2. The source of the feces contamination can be either human or animal.

3. According to the Environmental Health Department, elevated levels of *enterococci* are common during the summer and some of the same Rainbow River swim areas have had borderline readings in the past with some individual closings. In other words, the event on July 23rd was not a sudden spike in sample readings.
4. Storm water runoff, which can flood faulty septic tanks, is often blamed, although a variety of possibilities were put forward during the meeting, including overcrowded swim areas, runoff from sewage spray fields, the vast flotilla of tubers and divers on weekends, and even contamination of the head springs vents themselves from the possible seepage of cattle or horse manure within the springs recharge area.
5. It was suggested that the springs vents be tested for bacteria as a starting point for understanding the sources of the bacteria. Mr. Dooley explained that his department had no means of doing it. However, Southwest Florida Water Management District uses divers to test the springs vents for nitrates and other chemicals and could perhaps test for bacteria as well.
6. The Health Department only tests the swim areas on Mondays. It was suggested that tests be run each day for a two week period in the summer in order to get a sense of the impact of weekend use of the river on bacteria levels.
7. It was mentioned that the county has no way of warning Rainbow River homeowners, boaters or non-rental kayakers and tubers of elevated levels of bacterial contamination, other than closing down the swim areas and warning the independent tube and kayak rental operations. At least one homeowner who had unwittingly taken her daily swim in the river was very concerned because no one had told her about the beach closings.
8. While Mr. Dooley seemed favorable to more frequent testing, at least during high usage periods, no immediate plans have been put forth to do so.
9. RRC President Burt Eno promised that his group would work with the health department to investigate additional bacterial testing and to attempt to learn more about the sources of the bacteria. It was suggested that perhaps a large group could take water samples simultaneously from many different locations to provide a “snapshot” of the entire river. Mr. Dooley seemed willing to provide official collection procedure forms and water sampling containers if RRC manages to formulate a follow-up plan.

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