

Harrison and Mr. Zmarzly proceeded to walk upstream approximately 0.1 miles and did not observe any dead fish. Water quality measurements were also taken upstream of Site 2 (Table 1).

At 11:45, Mr. Mitchell notified Mr. Harrison that Mr. McGhin and he had continued downstream approximately 0.7 miles on the Withlacoochee River until they had no longer observed any dead fish (Site 12) and began seeing live fish that showed no signs of stress. They indicated that they had counted over 400 dead fish in this segment of the Withlacoochee. This was determined to be the lower extent of the fish kill. Water quality measurements were also taken at Site 12. Mr. Harrison instructed them to meet Mr. Zmarzly and him behind the Home Depot to discuss a plan to finish enumerating the dead fish. Mr. Harrison also spoke with Bert Deener (WRD-FM Regional Supervisor) and Tim Bonvechio (Fisheries Biologist III) and requested additional assistance with the field investigation. It was determined that the kill area was too large (approximately 4.5 miles of stream) to complete a direct count of all dead fish. It was decided to estimate the total number of fish killed by extrapolation from direct counts on stretches of Sugar Creek and the Withlacoochee River. Miles of stream traversed during each direct fish count would also be documented. At 12:15, Mr. Harrison contacted Mr. Robinson to provide an update on current findings and plans for enumerating the fish killed.

At 13:45, WRD-FM staff met at Site 3 to collect water quality data and discuss the sampling plan. Mr. Harrison and Mr. Zmarzly proceeded to enumerate downstream of Site 3 for approximately 0.46 miles to Site 4. Twenty-five dead fish of various species and sizes were found, and all appeared to be at least 2 days old (Photo 2). Sugar Creek had large amounts of black algae on the bottom of the stream in this section (Photo 3) and still had a pungent odor. One small unnamed tributary to Sugar Creek was intercepted in this stretch, and live fish that showed no signs of stress were observed in this tributary.

Mr. Mitchell and Mr. McGhin returned to Site 11 at 14:00 and proceeded to enumerate fish upstream of the GA Hwy 133 bridge for approximately 0.3 miles to Site 10. They observed 51 dead fish in this segment of the Withlacoochee.

Mr. Deener and Mr. Bonvechio proceeded to the railroad crossing on the Withlacoochee River just below the confluence of where Sugar Creek and the Withlacoochee River adjoin (Site 8) (Photo 4). They proceeded to survey the Withlacoochee River upstream of the confluence with Sugar Creek for approximately 0.1 miles to Site 7 and did not observe any dead fish. They then proceeded to enumerate dead fish upstream of the confluence in Sugar Creek for approximately 0.33 miles to Site 6 and counted 48 dead fish. Then returned to the railroad crossing and proceeded to enumerate dead fish downstream on the Withlacoochee River for approximately 0.44 miles to Site 9 and encountered 157 dead fish (Photo 5). They also noted discolored water and a pungent odor of the areas where dead fish were observed (Photo 6). Mr. Deener and Mr. Bonvechio also stated that they observed live fish that showed no signs of stress in small tributaries/side channels to Sugar Creek and the Withlacoochee River.

Upon finishing fish counts in the various sections of Sugar Creek and the Withlacoochee River, staff met at Site 5, where another water set of water quality measurements were taken (Table 1). Staff discussed their findings and felt the current extent of the investigation was sufficient. The field investigation of the fish kill was ceased at 17:00.

Conclusion

Indications are that the sewage that entered Sugar Creek at Site 2 likely degraded the water quality to the point that it could not support fish life since there were no dead fish observed upstream of Site 2 where the sewage spill entered Sugar Creek, above the confluence of Sugar Creek and the Withlacoochee River, or in small tributaries to these streams. It is unknown how long the water quality remained degraded