

Miller Creek West Branch Special Study

The City of Jacksonville EQD began collecting monthly data at 18 sites on five WBIDs in January 2010 as part of the monitoring program for the Tributary BMAP #1. Miller Creek samples for fecal coliform bacteria levels came back high, particularly at one site. This site of concern was SS21 (Miller Creek West Branch at Camden Avenue). In April 2010 the site was re-sampled two times along with several upstream sites.

The stream segment of concern is only about 400 feet in length, from the crossing at Camden Avenue upstream until it goes underground at a stormwater culvert. The most upstream samples came back much lower in bacteria levels than the samples at Camden Ave. Re-sampling was done again in August and a field intensive investigation occurred on 8/13/2010 to try to discover any unknown sources on this short west branch and vicinity.

Field Reconnaissance 8/13/2010

At site SS2A at Stillman Street (a branch not connected to Camden Ave.) the water was murky with trash and debris present, with lots of trash on the banks of the stream. No odors noticed. No unusual pipes or discharges in the vicinity.

At Atherton Street, behind Southgate Shopping Center (downstream of Camden Ave.) the water looked good, very low flow, no odor, no unusual pipes or discharges seen.

At site SS21 at Camden Ave., the upstream side of the creek was approximately two feet wide by four inches deep, clear water, sandy bottom, no noticeable flow, 100% tree canopy cover. On the downstream side the conditions were similar, overgrown with vegetation. The flow in the pipe under Camden Ave. contained very little water. At this location pet cats were seen as well as dog feces. This is a residential area.

Just upstream of Camden Ave. at the footbridge (SS21C) the water was about two feet wide by four inches deep, no noticeable flow, overgrown, some oily sheen. Walking up from this site to SS2 at the stormwater outfall, raccoon prints were observed all along this branch.

At site SS2 where the branch goes underground into a culvert, the stream was dry. There was one puddle along this stretch that was completely stagnant. The branch is very overgrown with 100% canopy cover. No pipes or discharge points could be seen. At site SS21D sampled in April, the stream was dry.

EQD investigated farther upstream around Spring Park Rd. and Kenneth St., and west of Spring Park Rd. and found nothing suspicious. There were no open ditches or ditch crossings, all stormwater conveyances were underground.

Summary of findings for Miller Creek west branch: Very low volume of water, very small amount of flow, shallow water level approximately four inches deep, frequently no flow, frequent dry areas of streambed, 100 % canopy cover, heavily vegetated, dog and cats are present, raccoons are present, no other sources have been observed in eight months of sampling in 2010, very low loading compared to the total stream flow. Pets and wildlife appear to be the most likely sources of the high fecal coliform bacteria levels recorded at Camden Ave.