

STREAMWALKS REVISITED

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The goal of my research is to have a system of streamwalks implemented within the Dog River Watershed. A streamwalk is a periodic visual evaluation of a stream and its watershed. I believe streamwalks will bring a sense of awareness to citizens living around the watershed because it will allow them to see the effects that pollution have on Dog River and its tributaries. In conducting my research, I physically sought out and traversed different streams of Dog River and evaluated their suitability for a streamwalk. To collect data I used a GPS (Global Positioning System) and, in a field notebook, recorded information regarding accessibility, length that can be traversed with ease, safety, and scenery. Taking into account any potential problems with the area, I made a decision as to whether I feel the stream is suitable for a streamwalk, finding several prospective sites. With these sites and others that have been found in the past, a network of streamwalks in the Dog River Watershed seems like a possibility for the future. My hope is that this type of system will get citizens to take more notice of Dog River and monitor their actions more closely. If they can get out to a stream and take part in a streamwalk, I feel their awareness and concern for Dog River will heighten and they will recognize the environmental significance of clean waterways.

Keyword: streamwalks, Dog River, watershed

Introduction:

For my research I chose to continue the work that Jason Kudulis, a former student at the University of South Alabama, began last year, the idea of implementing streamwalks into the Dog River Watershed. A streamwalk is a periodic, (usually seasonal), visual assessment of a stream and its watershed (AWW, 2002). Any portion of a stream can be chosen, but most streamwalks range in length from one to three linear miles. This idea of streamwalks seems extremely promising in bringing awareness and recreation to citizens living in areas around the Dog River Watershed. During a streamwalk, participants navigate alongside or through a stream and observe its conditions and surroundings while identifying areas of potential hazard. Those participants can examine riparian vegetation, different types of fauna, erosion, litter, stream depth, and potential clean-up sites. If the water is deep enough, canoes and

kayaks are a fun way to conduct the assessment. Participants will fill out a “stream survey” that asks questions regarding the stream and its surrounding environment (App. A). Anyone can participate in streamwalks and most environmental groups would love to take part in a program like this. Streamwalks should be accessible to the majority of the community.

The project of streamwalks being implemented into the Dog River Watershed would take a step towards the community around the watershed becoming more involved in its well-being and realizing its vital role in the community. Hopefully, people will see how pollution affects Dog River which in turn affects Mobile Bay. Non-point source pollution is pollution that makes its way into our waters but cannot be traced back to a specific place of origin (ADEM, 2005). It is mostly a result of rain washing pollutants into the waterways and is currently the biggest source of pollution in Mobile and its surrounding area’s waterways (WKRG, 2007). My goal and hope for this research was to seek out more places for streamwalks in the Dog River Watershed to show citizens the environmental significance of the Dog River Watershed and give them a way to understand the vulnerability of their water resources.

Streamwalks have proven successful in other areas around the country including the Thames River Basin in Connecticut and Ko’olaupoko, Hawaii (NRCS, 2007 and KBAC, 2007). Ko’olaupoko is a district of Honolulu and has more than fifty streams, many of which have had streamwalks conducted of them. All proved to be informative and many new enrichment projects have been carried out within them. In the Thames River Basin, new projects to improve water quality have been carried out as a result of

successful streamwalks. This information proves that streamwalks could be successful anywhere with the proper public participation.

Research Question:

Last year Jason Kudulis found four potential sites for streamwalks; my goal was to find more. I wanted to see if and where more sites existed and evaluate those sites for potential streamwalks. I chose three sites and tested them for accessibility, length that can be traversed, safety, and scenery. My research is significant because it helped identify more places where streamwalks could work. This will help the community understand the environmental significance of the Dog River Watershed and its vulnerability. Therefore, the question I sought to answer was this: Are there any more sites suitable for streamwalks in the Dog River Watershed, and if so, where are they and how could a streamwalk at that site contribute to the betterment of the Dog River Watershed?

Methods:

To answer my question I studied maps of Mobile and the entire Dog River Watershed to decide which places I wanted to evaluate for streamwalks. I also used Google Earth to get a closer look at the streams and their surrounding roads and landmarks. The main map I used for reference was the 1982 Springhill 7.5 minute Quadrangle 1:24,000 scale. I found a few places I thought looked promising and visited them with a partner, taking into account the different age groups that may visit and ease of accessibility to the streams. Accessibility includes parking lots, walkways, trails, and traffic on nearby roads. I evaluated those sites for the criteria mentioned above: length that can be traversed, safety, and scenery. My partner and I physically traversed as much of

each stream that we could and recorded that amount using a field notebook and a Global Positioning System (GPS). I checked each stream for any danger (i.e. part of town, loose rocks, deep water, fast currents) and noted vegetation and scenery. From there I determined if the site was suitable for a streamwalk.

Results:

I examined parts of Milkhouse Creek, Spring Creek, and Montlimar Creek (Fig 1), finding mostly positive attributes about each of them. Milkhouse Creek runs parallel with Cody Road and part of it can be seen from Cottage Hill Road near the intersection of Cottage Hill and Cody Roads. There isn't much parking, except for a small strip of small businesses nearby. I parked there and walked to that portion of Milkhouse Creek visible from Cottage Hill Road. There is a trail there, which gives you a great view of the creek but unfortunately the trail is not long and requires some rough maneuvering through the woods.

I then looked at the area of Spring Creek by Demetropolis Road and Hwy 90. Coordinates N $30^{\circ} 37.2799'$, W $88^{\circ} 9.5883'$. This part of Spring Creek is thoroughly enjoyable to walk in and is easily accessible from a concrete ditch behind the American Red Cross. The parking lot is large and could accommodate many people. The stream goes through the neighborhood of Canterbury Heights and there is a good stopping point at Maudelayne Dr. S, about 750 feet north of the access point at the American Red Cross (Fig 2). Here participants could stop and head back towards the American Red Cross but continue past it, for much more of the stream is traversable in the other direction. The scenery is amazing and the water very clear. Depth of water ranges from a few inches to three or four feet.

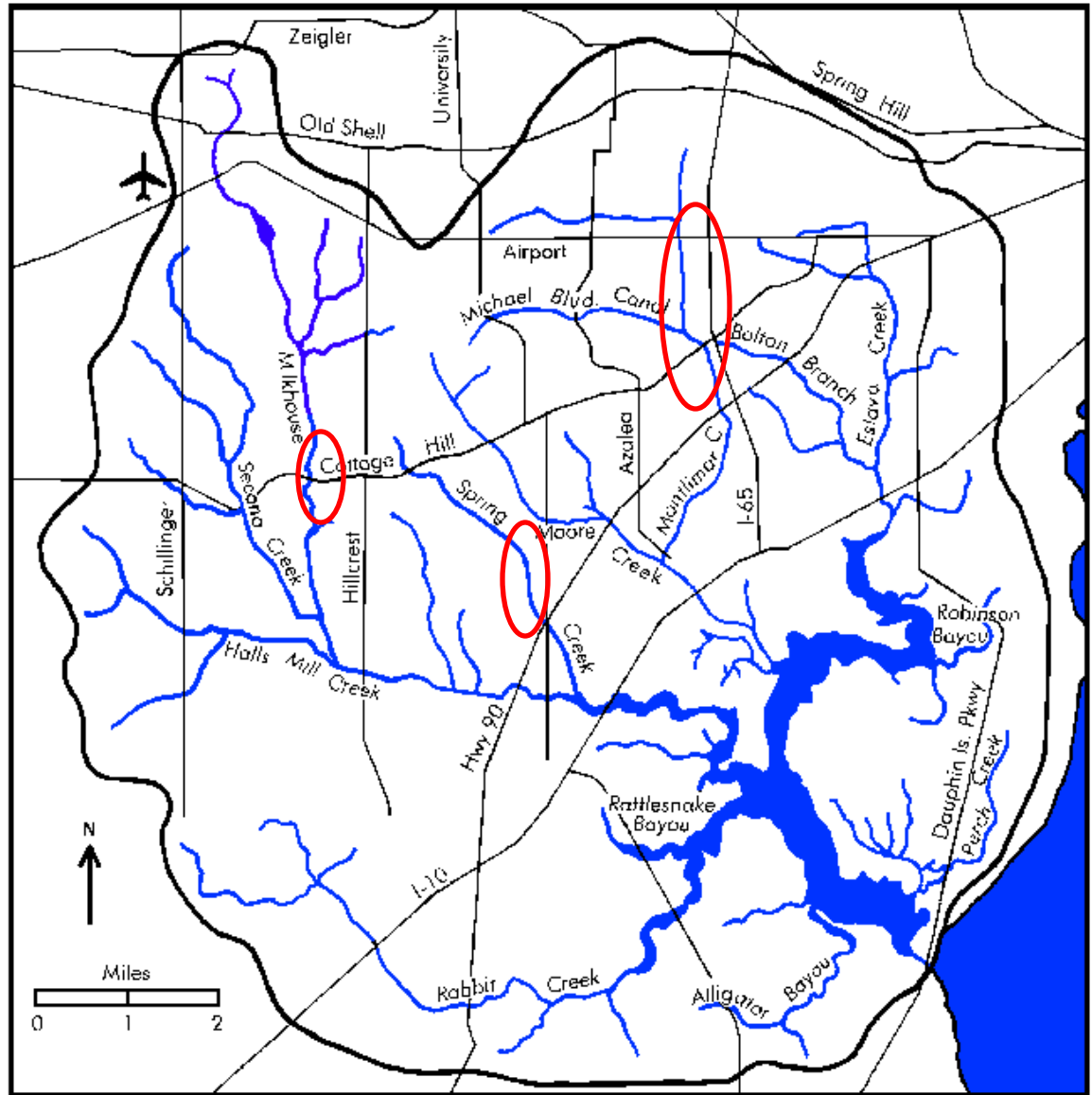


Fig.1 Map of Dog River Watershed with examined sites circled

Vegetation consists of herbaceous plants, willows, sycamores, deerberries, and water oaks. Most age groups would be able to participate in this streamwalk, although elderly people may have problems getting in and out of the stream because it requires climbing over rip-rap. This area is very peaceful and quiet and I was surprised and excited to find little trash in the creek.



Figure 2. Streamwalk at Spring Creek

The Montlimar Canal runs north and south, parallel to Montlimar Drive. The section of the canal from Airport Blvd. to Michael Blvd. is one mile in length and a hike and bike trail has been established there (Fig 3). Coordinates N 30° 40.5183', W 88°

7.9683'. Most people don't even know it's there. The hike and bike trail was funded by ATOFINA Chemical Company (later taken over by Arkema Group) as part of a court ordered environmental project. Environmental education stations were set up to inform people of how their actions along urban waterways can affect the water quality of Mobile Bay, and native shrubs and trees were planted to lessen erosion. Participants could stay on the trail the entire time if they chose to because the creek is entirely visible from the trail. Benches and trash cans line the trail allowing people to sit down, relax, and enjoy the scenery. Ample parking can be found behind Wings restaurant or behind Home Depot.



Figure 3. Montlimar Canal Trail

Conclusion:

In conducting this field research of trying to find additional locations for streamwalks, I was pleased to find the locations at Spring Creek and the Montlimar Canal worthy. I believe both of these places to be excellent sites for streamwalks. I ruled out Milkhouse Creek as a possibility due to the short trail and inability to maneuver through the woods. Spring Creek is unique in that it is more natural and undisturbed, and the Montlimar Creek is special because it is easily accessible and all age groups can participate with no difficulty, even those who may be handicapped or in a wheelchair. With these two sites, in addition to the four locations Jason Kudulis found last year, I feel a system of streamwalks in the Dog River Watershed is a bright possibility for the future.

I have personally become more aware and interested in Dog River as a whole and have acquired a greater sense of responsibility to keep its waterways clean. I'm certain that if people get out and experience a streamwalk for themselves, they too will feel a need to monitor their actions more closely and protect their water resources. Not only can a streamwalk be a means of recreation, but it can bring together people in different areas of the Dog River Watershed. Right now, people not living directly on the river have no reason to care. Hopefully a network of streamwalks will bring together people living directly on Dog River and those in other parts of the watershed so both groups can benefit, and we can turn the watershed into something pleasant for all. The benefits of streamwalks are endless, and with great effort and public outreach we could possibly erase some of the damage that has been done to the Dog River Watershed for so many years or at least end it now.

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Appendix:

Link to the Streamwalk Survey Sheet:
ftp://ftp-fc.sc.egov.usda.gov/CT/community/survey_sheet.pdf