



4.5.3 Existing Conditions

Sugar Creek has experienced several developments and improvements since the 1996 MSMP. Several projects in the Sugar Creek sub-basin have been implemented as per the recommendations of the previous master plan, such as:

- Valdosta Mall regional detention facility - A detention pond at the Mall outfall was constructed.

Another significant feature in Sugar Creek sub-basin that affects hydrology and hydraulics of the system is the Mall. This Mall has a huge impervious area. The retention ponds at the Mall outfall do provide some treatment and detention for the runoff.

One Mile Branch, Hightower Creek and Browns Canal all confluence with Sugar Creek and bring significant sediment loads. Sugar Creek has its outfall in Withlacoochee River. This area of Sugar Creek is controlled by the Withlacoochee River stage elevations.

4.5.4 Water Quantity Problem Areas

1. Browns Canal, One Mile Branch and Hightower Creek all confluence into Sugar Creek and deliver significant sediment loads. A geomorphic assessment of Sugar Creek was performed as part of this project. Refer to Section 3 for the Geomorphologic Assessment report giving a detailed discussion on problem identification and its causes for the entire stretch of Sugar Creek. Other water quantity problem areas in Sugar Creek sub-basin are listed below:
2. Gornto Road: The storm event of April 2009 caused widespread flooding at several locations within the city. Gornto Road was flooded during this event.
3. South of Baytree Road: Widespread channel erosion and fallen trees were observed in about 2000 ft of stream section downstream of Baytree Road. Refer to Appendix I for Baytree Road Culvert for a proposed design for a trash collection device near Sugar Creek.
4. Upper reaches of Sugar Creek: The upper reaches of Sugar Creek near River Street show a lot of channel erosion and sediment deposition downstream.
5. Withlacoochee River: Near the confluence of Sugar Creek with Withlacoochee River, several flooding instances in addition to the April 2009 flooding have been reported. Houses and buildings on Meadowbrook Drive have been severely impacted by flooding caused due to Withlacoochee flooding.
6. North of Gornto Road: Stream bank erosion about 500 feet North of Gornto Road, is threatening sewer manholes running parallel to Sugar Creek. Refer to Appendix E