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July 22, 2008

Mr. Steven J. Sentes  
Supervising Lead Project Manager  
South Florida Water Management District  
2301 McGregor Blvd.  
Ft. Myers, FL 33901

Subject: SFWMD Contract #4600000791-WO01  
Update to South Lee County Watershed Plan – Deliverable 1A

Dear Mr. Sentes:

Enclosed is Deliverable 1A, a 50% Progress Report for the Data Collection Task of the Contract referenced above. With ADA Engineering's assistance we have made significant progress, and hope to expedite completion of the Data Collection Task while initiating negotiations for the remaining tasks of the project.

One item that we have received limited information on is the ecological assessment information from the Southwest Florida Feasibility Study (SWFFS). We received from the Corps a draft Planning Objective list that consisted of 4 objectives, a list of 6 problem statements and a list of 7 Planning Opportunities. Each of these documents consists of very brief statements. In order to complete Task II of the next phase of this project as described in the Statement of Work, we will need information from SWFFS draft work products relating to hydrology, general ecology, historic hydrologic patterns, and how they relate to habitat values, if available.

Please review our Progress Report and let us know if there is any additional information that you may be aware of that we are missing.

Sincerely,



Karen D. Brandon, P.E.  
Senior Engineer

cc: Damon Meiers, P.E.  
Roger Copp, ADA  
Pradeep Nagarajan

**Deliverable 1A**  
**Task 1 - Project Orientation and Data Collection**  
**50% Progress Report**

**Table 1** provides a listing of the data collection task requirements and the completion status.

**Table 1 – Status of Data Collection Activities**

<b>No.</b>	<b>Task</b>	<b>Status</b>
1	Identify, review, and compile data such as past studies	See Table 2
	Identify, review, and compile GIS data	Complete
	Identify, review, and compile data from outside agencies, NRCS, NWI	To be completed
	Identify, review, and compile data from recent DR/GR study	Complete
2	Review array of sub-basin studies	See Table 3
3	Compile and review historical flow data for Halfway Creek, South Branch of the Estero, Spring Creek, and the Imperial River	Available from DRGR Study
4	Verify, through review of as-built drawings and permit records, the installed conveyance capacity from I-75 to tidal waters	Partially complete
5	Identify the available format of data	Partially complete
6	Identify SFWMD and Lee County GIS data for topography, current land use/land cover, meteorological, surface, and groundwater monitoring stations	Complete
7	Identify prominent data gaps	To be completed
8	Provide clear maps showing the location of data reference points with respect to roads, and key hydraulic conveyance features	Partially complete

- **Table 2** provides a listing of known Hydrologic studies that have been conducted or are in progress within the study area and the status of acquisition.
- **Table 3** provides a listing of known Sub-basin studies conducted west of I-75 that provide information on specific culverts or bridges in the Estero and Halfway Creek Basins.
- **Table 4** provides a detailed listing of stream crossings in the Estero and Halfway Creek basins from I-75 to tide and summarizes structure details and dimensions.
- **Figure 1** presents locations of the structures and the stream network along Estero River and Halfway Creek, west of I-75.

- The Brooks development is located in the Halfway Creek watershed and has an emergency gate to divert flood flows from the Brooks development north to the South Branch of the Estero River just east of Three Oaks Parkway. Operational protocols for this structure are presented in **Table 5**. Meeting notes have been obtained that discuss concerns regarding this structure (SFWMD, 3/5/07).
- In the course of this data collection effort, a number of data gaps have been identified and they are presented in **Table 6**.

**Table 2 – Previous Hydrologic Studies, as Identified in Attachment A**

No	Study	Status
1	Link to SLCWP on Lee County's web site	Provided
2	Copy of staff report with addendum for Permit No. 36-03802-P	Provided
3	Map of project region with SFWMD permit boundaries, permit numbers, and pending permit application numbers	Provided
4	Copy of cost share agreement between SFWMD and Lee County	Provided
5	Information supporting the SWFFS	Partially provided
6	Electronic copy of SLCWP	Provided
7	Electronic copies of stormwater mgt models	See Table 3 below
8	Scope of Work for DRGR	Provided
9	Topographic information for DRGR	Provided
10	Any other DRGR Study data	Provided
11	Lee County water table monitoring network	Provided

**Table 3 – Array of Sub-basin studies conducted west of I-75**

No.	Study	Consultant	Status
1	Halfway Creek FPL Crossing	Hole Montes	Obtained, but not enough information
2	Water Quality Weirs, Brooks Ditch to South Branch Estero	Barraco & Associates	Talked to Carl Barraco, <b>Search permit files</b>
3	Country Creek Club Development	Wilson Miller	<b>In progress</b>
4	Via Villagio Parkway Halfway Creek Culverts	Hole Montes	<b>Currently in search of permit files</b>
5	Halfway Creek RR Culverts		
6	Via Coconut Point Road Culverts	David Plummer & Assoc., Inc.	Obtained

7	Rookery Point Development, North Branch Estero River at Rookery Drive		<b>Currently in search of permit records</b>
8	Brooks Development	Wilson Miller and Johnson Engineering	Files requested from Andy Tilton. Meeting on 7/24
9	New Development west of US 41 on Halfway Creek	Grady Meyer	New cross sections requested
10	Brooks North Emergency Structure	Brooks of Bonita Springs II Community Dev. Dist.	Obtained
11	SWFFS Estero River Basin Modification of Hydrologic Model, July 2006	DHI, Inc.	Report and model files Obtained
12	SWFFS Integrated Hydrologic Model – Model Documentation Report, January, 2008	SDI Inc., DHI, Inc., and BPC Group, Inc.	Report and model files obtained
13	SWMM Model of Halfway Creek?	???	Model files obtained

**Table 4 – Recent Structure Information for the Estero and Halfway Creek Basins**

Creek	Location	Structure Details	Photograph
NB Estero	I-75	In model, need to confirm, 3 crossings	No
NB Estero	3 Oaks Pkwy	Three 9'x4' & four 10'x4'	Yes, 2
NB Estero	Rookery Drive	???	No
NB Estero	Rivers Ford	Bridge, rough XS info	Yes
SB Estero	I-75	In model, need to confirm	No
SB Estero	Sanctuary SE Dr	In model, need to confirm	No
SB Estero	Three Oaks Pkwy	In model, measured in 2004	No
SB Estero	Corkscrew Rd	In model, measured in 2004	Yes
SB Estero	County Creek Dr	Bridge, rough XS info	Yes
SB Estero	Country Creek Dr near Split Oak Way	Bridge, no info	No
Estero	Sandy Lane	Bridge, Rough XS info	Yes
Estero	Railroad	Bridge, rough XS info	Yes
Estero	US 41	Bridge, in model, need to confirm	Yes
Halfway	I-75	In model, need to confirm, w crossings	No
Halfway	Brooks, 5 locations including 3 Oaks	Four 10'x4' box culverts	No

Halfway	Brooks Gate to SB Estero River (see Table 5 for ops)	Two 6'x4.5'. Gates, Gate Inv=12'. 6' dia RCP feeding gates, Pipe Inv. = 6.5'.	No
Halfway	Knollview Blvd	No info yet	No
Halfway	RR , two locations	Three 10'x4', two 10'x4'	Yes, N
Halfway	Via Coconut Point	Three 10'x6', two 10'x6', Inv=8'	Yes, 2
Halfway	Via Villagio	No info yet	No
Halfway	US 41	Three 10'x7', no invert yet	No
Halfway	FPL crossing	Requested	No

Elevations are in ft-NGVD 1929

A complete GIS database is being developed for all structures within the project limits and will be provided as part of the Data Collection effort.

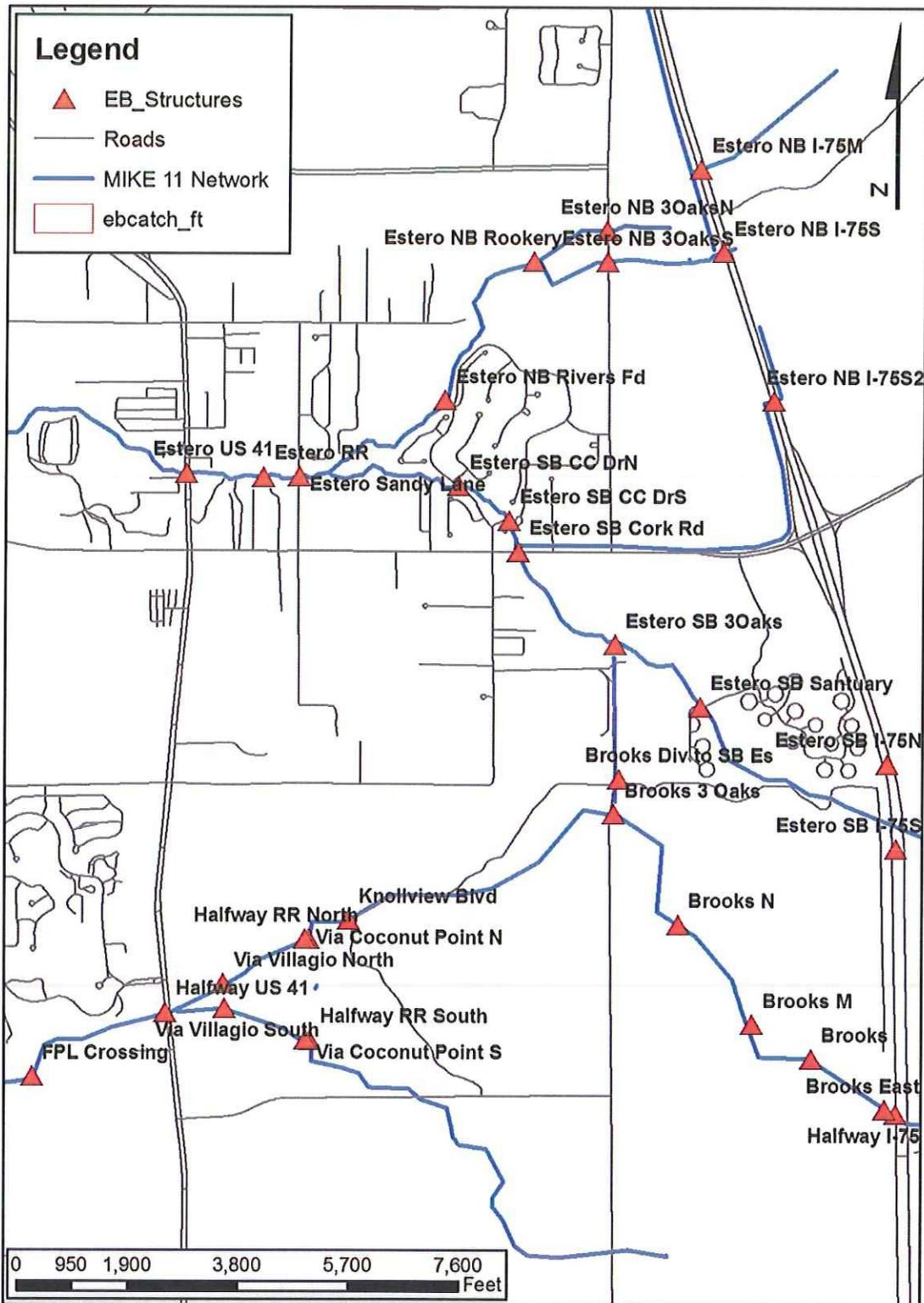


Figure 1 – Structures in Estero River and Halfway Creek

**Table 5 – Brooks Gate Operations**

<b>Brooks North Outfall Control Structure Emergency Operation Schedule</b>		
<b>Condition at Projects</b>	<b>Open Gates</b>	<b>Close Gates</b>
<p>1. Brooks lake elevation's <u>above</u> 25 year level 15.7 ft. NGVD at structure</p>	<p style="text-align: center;"><b>Open</b></p> <p style="text-align: center;">above 15.7 or pre-storm (6" rainfall 70% prediction)</p> <p style="text-align: center;">and if _____</p> <p style="text-align: center;">↓</p> <p style="text-align: center;">Corkscrew Road recorder is below 12.0</p>	<p style="text-align: center;">Brooks is below 15.7</p>
<p>2. Estero River South Branch stage recorder is at 12.0 or below (Corkscrew Road recorder)</p>	<p style="text-align: center;">Corkscrew Road recorder is below 12.0</p>	<p style="text-align: center;">Corkscrew Road recorder is above 12.0</p>

W-03-00170.DOC/02/PN7372

Source: SFWMD Permit No. 36-00288-S-02, The Brooks North Emergency Structure, Dec. 2, 2002

**Table 6 – Known Data Gaps**
