



Sanibel-Captiva  
Conservation Foundation  
Marine Laboratory

10/15/2010

Sandy Stilwell  
Captiva Community Panel  
PO Box 72  
Captiva, FL 33924

RE: Update on Scheduled Work for the Captiva Water Monitoring Project

Dear Ms. Stilwell:

We are nearing the home stretch for Year 2 for the Captiva Water Quality Assessment Project Funded through work of the Captiva Community Panel by the Lee County Tourism Development Council (TDC). We started Year 2 spending in February 2010 and plan to finalize this major effort and complete all tasks in February 2011. At Dave Jensen's request we have been providing him with monthly water quality updates for this and related projects. In Year Two, we have been tracking bacteria and nitrogen concentrations using: (1) transect and source area focused sampling; (2) optical brighteners; (3) Enterococci; (4) nitrogen analyses; and (5) groundwater monitoring using the 20 or more monitoring wells we have installed in the area to characterize the relationship between groundwater quality and nearshore surface water quality. To date we have taken over 20,000 samples for this effort and other related water quality projects (for example the Blind Pass opening study, J.N. "Ding" Darling Refuge sampling, Bayous Preservation Association, etc.).

We are about to initiate the last phase of the overall field and laboratory effort for the two year project focusing on microbial source tracking (MST) using several different in house and outside laboratory approaches. This will focus on targeted sampling of wells, surface waters, septic tank and waste water treatment plant (WWTP) discharges, swales, shoreline (beach) wrack samples, and other potential sources of bacteria, especially Enterococci. We will be following a proven flowchart approach from EPA (2005) to differentiate among human and non-human (birds, other vertebrates or mammal) sources using Biolog, Inc. (carbon source metabolic fingerprinting, <http://www.biolog.com/>) and other molecular approaches from Source Molecular, Inc. (<http://www.sourcemolecular.com/>). We will be conducting a large number of field assessments and related lab analyses during the next few months during this year's 2010 Fall dry season and 2010-2011 Fall-Winter returning island resident and tourist season and then spending the remaining time analyzing and completing a final overall syntheses for an overall two-year report (including incorporating data from related water quality efforts from the lab, see above). We will be able to provide overviews of the final report (presentation) and related drafts to CCP, and others as needed before the end of February 2011.

If you have any questions or require additional information, please contact Mark Thompson or Loren Coen at the Marine Laboratory at 239-395-4617.

Sincerely,

Loren Coen, Ph.D.,  
Director, SCCF Marine Laboratory

cc/M. Thompson, E. Lindblad