

December 11, 2009

Mr. Steven Sentes  
Ft. Myers Service Center  
South Florida Water Management District  
2301 McGregor Blvd.  
Ft. Myers, FL 33901



**RE: South Lee County Watershed Plan Update Statement of Work**

1450 Merrihue Drive

Dear Mr. Sentes:

Naples, Florida 34102

The Conservancy of Southwest Florida appreciates the opportunity to comment on the proposed Statement of Work for the South Lee County Watershed Plan Update disseminated on December 2, 2009 for public comment. As an active participant in this process, we would like to offer the following comments and recommendations on the proposed Statement of Work for your consideration.

239.262.0304

December 262.0672

www.conservancy.org

Science Supports that the Update Work be done on a Watershed Basis

It is imperative that any policy decisions as to enhancing water management be directed by science. The Conservancy appreciates and commends the substantial investment made to date by the South Florida Water Management District and Lee County to conduct thorough hydrologic modeling through independent scientific experts. We would encourage the extension of this study to continue to employ such an approach, by encompassing the entire watershed to create a scientifically-robust watershed plan.

Scientific assessment for watershed planning needs to be on a watershed basis in order to provide scientifically-based recommendations for better water management of the watershed in meeting downstream goals for the receiving waterbody. The primary benefit of watershed-level analysis is in that "a watershed plan is a comprehensive framework for applying management tools within each subwatershed in a manner that also achieves the water resources goals for the watershed as a whole."<sup>1</sup> With Estero Bay being the state's first aquatic preserve and a designated Outstanding Florida Water which continues to not currently meet state water quality standards – such a framework is urgently needed.

We understand that the South Florida Water Management District is considering doing a separate watershed plan for the Imperial River Basin. Due to the fact that the Imperial River is a subbasin within the same watershed as the rest of the South Lee County Watershed Update study area, as well as the aforementioned reasons outlining why watershed-level planning is superior, we would request that the hydrological study of the Imperial be folded back into the current South Lee County Watershed Plan Update and that the current proposed Statement of Work be rewritten accordingly to reflect that. This will result in a more scientifically accurate and robust analysis to equitably assess various scenarios in order to identify the best watershed-level improvements for the Estero Bay watershed.

<sup>1</sup> "Basic Concepts in Watershed Planning." The Rapid Watershed Planning Handbook.  
[http://www.cwp.org/Resource\\_Library/pwp.htm](http://www.cwp.org/Resource_Library/pwp.htm) Accessed December 10, 2009

### Economic Efficiency Supports that the Update Work Be Done On A Watershed Basis

In addition to advantages from a scientific perspective that would be afforded by doing a watershed plan that encompasses the entire watershed area including the Imperial River, there are significant economic advantages as well. The investment to date with the current modeling firm has already produced a model extent to the Cocohatchee Canal in Collier County and thus, encompasses the Imperial River Basin. Because the current modeling firm has already gained advanced institutional knowledge of the localized hydrology and is using the most accurate integrated surface/groundwater model available, it would represent a real cost savings to simply include the rest of the watershed into their update study underway - rather than investing in the bidding and awarding of the work to another firm who most likely will not have the same level of advanced institutional knowledge of the watershed, nor the same sophisticated proprietary integrated model. Thus, this would also support the hydrological study of the Imperial be folded back into the current South Lee County Watershed Plan Update and that the current proposed Statement of Work be rewritten accordingly to reflect that.

### Recommendations Need to Be Evaluated Based on What Provides a Real Benefit in Greater Flood Protection for Existing Bonita Springs Residents

With a holistic watershed planning analysis and process, we would be able to identify and weigh the various improvements that would provide the greatest degree of flood risk reduction for existing Bonita Springs' residents while causing the least degree of wetland and hydrologic alteration as well as water storage and treatment loss to the watershed and to Estero Bay. Then, these various alternatives can be evaluated as to the economic costs and resources available to underwrite their implementation. No alternatives should be immediately discarded because they are considered too expensive - if they are truly effective.

Possibilities for flood risk reduction such as more environmental land acquisition, wetland restoration, distributed storage and treatment, and reservoirs often provide multiple benefits in additional water supply and treatment which significantly offset the initial costs in return for higher long-term investment returns. Therefore, the Conservancy requests that economic analysis be considered as a separate step only after all environmental, water supply, flood risk reduction and other costs and benefits have been fully evaluated for each of the alternatives to determine the optimal alternative for providing the greatest flood protection for existing Bonita Springs residents while ensuring adequate natural resource protection.

### Modeling Needs to Isolate the Benefits and Costs of Proposed I-75 Culverts

One important issue that has arisen in the update analysis to date is the need to isolate the costs and benefits of specific water infrastructure improvements, specifically the I-75 culverts. When such improvements are combined with other improvements into aggregate scenarios, it is impossible to do an appropriate cost/benefit analysis as to the specific costs or benefits of individual improvement elements. Therefore, in the proposed Statement of Work and process going forward, we would request that each scenario modeled with the proposed I-75 culverts also be modeled without them, such that we can determine the specific costs and benefits being afforded by their inclusion or exclusion. This would allow us to better determine where limited resources can be focused to produce the greatest benefit.

### Approach Needs to be Consistently Applied across the Entire Basin and in all Scenarios

Another important issue that has arisen is the need to ensure that modeling protocol and assessment procedures are applied consistently in all analysis. For instance, there were initial suggestions for conveying an additional 200 cfs south to the Cocohatchee Canal – yet without the similar level of analysis as was applied to the Estero Bay tributaries in the original Update Study work as to how such a water management change would affect the wetland hydroperiods and depths in the Cocohatchee Slough, the levels and rates in the Cocohatchee Canal, the relationship with street and floor elevations within downstream communities, and the consistency of such flow rates to the historical flow regimes of the Cocohatchee River and Estuary. Thus, we request that consistent modeling protocols and assessment procedures be required to be done throughout the entire watershed area for all evaluated scenarios and infrastructure improvements, as well as to the extent of including neighboring watershed areas should evaluated water management changes affect neighboring watersheds.

### Recommendations Need to Reflect A Natural Systems Approach to Water Management

Additionally, a prioritization scheme that explicitly outlines water management priorities and favors a natural systems approach needs to be included in the Statement of Work and in verbal and written guidance going forward. The goal of providing sufficient flood protection for existing communities while ensuring that flows are directed to areas and at levels consistent with the natural historical flow regimes, and while maintaining surface and groundwater storage as well as wetland natural hydroperiods and water depths, would clearly outline the parameters by which recommendations are being evaluated and prioritized going forward. We also support the language in Alternative 4 and thoroughly investigating maximizing detention east of I-75 such as Kevin Erwin has suggested in his comments.

Additionally, the impacts to each tributary should be evaluated independently. Specifically, Halfway Creek and the South Branch of the Estero River should not be combined when assessing appropriate flow rates as they are in page 2 of the proposed Statement of Work. Each tributary has a unique historical flow rate and existing capacity, and water management changes should be evaluated based on their impacts to each individual system as such. Therefore, the Conservancy requests that this be revised in the Statement of Work, as well as a prioritization scheme preferencing natural systems approaches to water management be included in this and future guidance to the contracted party undertaking this update work.

### Conclusion

The Conservancy of Southwest Florida requests that the aforementioned recommendations and the Imperial River hydrological study be included in this extension of the Update Study and reflected in this Statement of Work. Please feel free to contact me at (239) 262-0304 x250 to discuss further, and we greatly appreciate your time and consideration in this matter.

Sincerely,

  
Jennifer Hecker  
Natural Resources Policy Manager

cc: Carole Wehle, SFWMD  
Damon Meiers, SFWMD  
Clarence Tears, SFWMD  
Bonita Springs City Council, Bonita Springs  
Lee County Commission, Lee County  
Roland Ottolini, Lee County