



3333 Sanibel Captiva Road, Sanibel Island Florida 33957  
Telephone 239.472.2329

July 20, 2010

Mr. Tom Taylor  
Mr. Rafael Montalvo  
The FCRC Consensus Center  
University of Central Florida  
12443 Research Parkway, Suite 402  
Orlando, FL 32826-3282

Re: Ceitus Boat Lift NSEMA, Cape Coral, FL

Dear Messrs Taylor and Montalvo:

In March 2008 SCCF joined ten other petitioners to challenge a decision by the Florida Department of Environmental Protection (DEP) that allowed the City of Cape Coral to remove a required stormwater barrier in the North Spreader/Ceitus canal in Cape Coral, Florida. The barrier, required by DEP Consent Order, was designed to protect the coastal waters of Matlacha Pass Aquatic Preserve from Cape Coral's stormwater runoff and drainage through the westernmost canal. The petitioners agreed to enter into a mediation process called an Ecosystem Management Approach (EMA) in an attempt to resolve the dispute.

The purpose of the EMA process was to develop a suite of projects that would provide an alternative to the replacement of the barrier in the north spreader/Ceitus canal. The collection of projects would need to provide a Net Environmental Benefit (NEB) for the protection and benefit of the Matlacha Pass Aquatic Preserve ecosystem above and beyond the replacement of the stormwater barrier.

SCCF agreed to participate in this process with great hopes that a meaningful suite of basin wide projects could be developed to address issues including water quality, water quantity, timing of water discharges and habitat restoration.

To our great disappointment after two years of meeting and negotiating in earnest with the diverse stakeholders we find that the suite of NEB projects the City of Cape Coral is willing to commit to falls short of that critical threshold of providing an NEB. Therefore, we must recommend replacement of the barrier at an upland location.

A final list and description of the NEB's that the City of Cape Coral has proposed is outlined in the report dated June 22, 2010. Over the past two years the details and inventory of projects has been negotiated and changed on a monthly basis. In the two year process a number of beneficial proposals were recommended but were subsequently watered down or dismissed by Cape Coral. It is not the intent of this letter to recapture the inventory and detail of the various projects recommended and discussed during that time, however, this letter will explain why we feel the suite of projects do not meet the threshold of an NEB.

To be considered, proposed projects had to have a sponsor willing to take responsibility for implementation. Only projects with a sponsor were discussed in depth while "orphan" project ideas were simply listed in the final report. Projects were divided into two groups 1) those that would be the sole responsibility of Cape Coral and 2) those that the City would partner with other government agencies to complete. Because the Consent Order is between DEP and the City, only the Cape Coral projects are required and enforceable under the DEP Consent Agreement. The projects with other partners would not be legally binding or enforceable. Therefore the Cape Coral projects need to provide an NEB on their own. In this way the NEB threshold projects would be enforceable and additional projects could add value if they were completed, but since the other partners could not be held accountable, if the additional projects were not completed the NEB would have been met by the Cape Coral projects.

The final list of NEBs proposed by Cape Coral includes seven initiatives. Unfortunately, in our opinion only one (fertilizer ordinance) provides the level of detail and commitment to meet the threshold to qualify as an NEB.

**Fertilizer:** The City proposes adopting a City wide fertilizer ordinance that would be more stringent than the state's current model ordinance and at least as rigorous as regulations in the surrounding municipalities of Lee and Charlotte Counties and the City of Sanibel. This is important because several canals in Cape Coral, and a majority of waters in Lee County, where the Cape canals discharge, are impaired for nutrient pollution. Scientifically based fertilizer regulation has been demonstrated to be an economical method of addressing source control of non point source pollutants such as phosphorus and nitrogen. Prevention of water pollution and improved water quality are a more cost effective and efficient alternative than having to restore water quality and lost habitats after they have been degraded or lost.

For the past three years the State legislature has attempted to preempt local governments from passing legislation stricter than the weak statewide model ordinance making the development of this commitment timely and important. For these reasons we believe this project qualifies as an NEB because it commits to addressing sources of non point source pollution beyond the standards in the current state rules.

**Sewering:** The conversion from septic to sewer in the Cape is important because at 114 square miles Cape Coral is the second largest city by land area in the state. It is predominantly zoned for residential units at a density of 4.36 units per acre abutting over 400 miles of canals.

This places septic systems in very close proximity to the water table with limited horizontal and vertical setback, resulting in an exaggerated gradient toward the canals, significantly reducing retention/residence time and limiting soil treatment and binding of nutrients.

Septic systems are well documented sources of nitrogen, often the limiting nutrient in our coastal waters, and so serve as a known pollutant source that contributes to the impairment of local waters. The need for sewers before the Cape becomes more densely developed is critical because of the density and proximity of septic systems to surface waters in the stormwater canals that also serve as recreational boating, fishing and swimming areas and connect to larger natural waterbodies. Additionally, the longer the city delays the greater the conflict with increased development obstacles and the greater the costs to install this basic infrastructure.

The target area for extending sewers is the 46,087 acre drainage basin north of Pine Island Road. Of that area 23,410 acres are considered developable with 4.36 units per acre. The Cape proposal commits to sewer one densely developed section, Section 58, approximately 400 developable acres (less than 2%) within 36 months of the issuance of a DEP environmental resource permit (ERP). The triggers for sewer the remainder of the 23,010 acres will be based on a unit per acre density threshold. In the area north of Bonfish Canal, west of Burnt Store Road and South of Kismet Parkway their proposal is to initiate sewer at an unspecified date in the future when septic densities reach 35%. The remaining sections north of Pine Island Road would initiate sewer at an unspecified date in the future when septic densities reach 45%. Currently none of the sections in the remaining 23,010 acres are close to those densities.

A number of stakeholder suggestions were discussed over the 24 months of this process that would have raised this project to the level of an NEB including a specific timeline for completion and development of a septic utility which could create a funding mechanism for the City, reduce homeowner costs of sewer hook ups and incentivize homeowners to support conversion to sewer.

Cape Coral canals already exhibit significant eutrophication and impairment with only 25% of the land area developed to date. Their proposal provides no level of assurance that sewers will be installed sooner than under the current process. Given the extensive land area available for future development, the estimate for reaching the density thresholds in any platted section appears to be multiple decades into the future. The lack of a firm timeline by which progress could be assessed and water quality conditions could be demonstrated, results in this proposal being effectively nothing

more than a continuation of the status quo and not providing a benefit above or beyond what would occur if no changes were made.

**Stormwater Treatment:** Cape Coral's canal system serves both as a collector of stormwater and source of freshwater to supplement the City's reuse water supply. As such it directly affects the quality, quantity and timing of water for the natural system and City's water supply. Stormwater is collected in a network of roadside swales that flow to catch basins which discharge into 400 miles of the city's stormwater canals that double as recreational areas. With existing density allowances, at build out this basin is expected to exceed 50% development coverage, well beyond the thresholds where best management practices (BMPs) can effectively improve water quality. As one of the most significant sources of pollution affecting Florida's waters, landscape storage and treatment that provides treatment and infiltration are fundamental and crucial elements for managing both water volumes and quality. The density and intensity of developed and impervious area in this watershed both now and at build out together with its proximity to canals where runoff from the back half of all waterfront lots drain, points to the urgent need for regional and distributed storage to improve water quality, manage the timing of flows and provide storage for water quantity.

The City of Cape Coral's NEB proposal for addressing stormwater includes the replacement of an unspecified number of existing catch basin inlets that have no significant detention features at existing outfalls in the area north of Pine Island Road, west of Burnt Store Road and south of Kismet Parkway within 5 years following the issuance of the ERP. According to the City the benefit would be achieved by holding water in roadside swales at higher elevations for a longer duration. This raises concerns about the capacity within developed neighborhoods where higher water levels might cause the failure of septic tanks no longer able to achieve a two foot vertical separation from the water table.

In its final form it is unclear from this project description what NEB is achieved. It is unclear what volume or capacity is being impacted by the work, what the timetable for this project would be and whether this is a Cape Coral project or a partner project with Lee County. Without specific numbers it is impossible to assess the capacity of treatment. The timeline commits to being completed within 5 years of the ERP issuance but also indicates the project may be extended to ten years. Finally, although this is listed as a Cape Coral project, it includes TMDL credit for Lee County in proportion to their financial contribution toward the retrofits and further suggests that the timetable, based on funding may be extended up to ten years, suggesting that this is in fact a partnership project not a Cape Coral project alone.

A number of stakeholder recommendations were made to include both regional and distributed storage that would achieve an NEB but these were not pursued. Due to the lack of specificity and confusion over the time frame commitment this item cannot be assessed to achieve a NEB.

**Marine Habitat/Living Shoreline:** Originally suggested as an adaptation to rising sea level to provide for shoreline creep, habitat and water quality treatment in the canal systems, the significant measurable attributes of this project have been eliminated. The final proposal requires construction of a revetment shelf, pile supported structure, reef ball system or some similar structure of not less than one square foot of habitat area per one linear foot of shoreline seawall with all new and replacement seawalls constructed in the tidally influenced canals north of Pine Island Road.

While some form of three-dimensioned construction will be required and is therefore able to be assessed for compliance, there is no required quantifiable living habitat creation so it is unclear what net environmental benefit is proposed to be achieved. The limited design criteria are not considered to be sustainable over time and it is expected that without planting or habitat creation these areas will become trash collection areas. With no quantifiable targets of restoration established it is not possible to quantify the net environmental benefit to be achieved by this project.

**Improve flows for the State Park:** With the barrier removed the modeling estimates 20 percent of water flows out the south end of the canal, creating both a point discharge of freshwater into Matlacha Pass and reducing flows through the creeks at the northern end of the system. The point discharge creates a freshwater zone incompatible with the marine life inhabiting the area. The reduced flow and lower water levels in the northern creeks would be inadequate for fisheries particularly during winter months when lower tides and water levels predominate.

Cape Coral proposes to convey additional water, if available, through Alligator Slough and into the receiving waters of Matlacha Pass specifically for the State lands lying west of the North Spreader Canal (Charlotte Harbor Aquatic Preserve and State Park), provided that excess water is available and consistent with the City's utility commitments and to the extent that the City's existing weir system is capable of directing such flows. In addition, the City of Cape Coral would arrange quarterly meetings with FDEP for the purpose of discussing Best Management Practices (BMPs).

The City is committing to providing water for the natural system only after all their needs are met **and** they will plan meetings with DEP to discuss BMPs. Currently, when there is more water than the Cape needs it is shunted to the natural system without treatment or regard for timing. During drought conditions, flows are cut off with no action to cut back homeowners or utilities. The natural system gets only what the city does not want, when they don't want it. There are no quantifiable objectives or benefits identified so this does not meet the threshold of an NEB. As for scheduling meetings and planning studies, the EMA stakeholders agreed that meetings and studies do not meet the definition of an NEB.

**Study septic system maintenance program:** Originally proposed as part of a septic system utility within the sewerage objective, this concept was instead separated and

proposed as a study by the City. They propose within 12 months to submit a septic inspection and maintenance study to DEP. However the Florida legislature this year passed Senate Bill 550 which requires the State's Department of Health to conduct rule making for implementation of a statewide septic tank evaluation program.

The Department of Health estimates that there are over 2.6 million septic tanks in Florida, with approximately 10 percent rated to be failing. When fully implemented, the Department will evaluate all septic tanks in the state once every five years to determine those not in compliance and in need of repair or replacement. Since the EMA stakeholders agreed that studies do not meet the definition of an NEB because they have no quantifiable objectives or time commitments, the fact that this is now a statewide requirement further prevents it from qualifying as a NEB.

**Water Quality Monitoring;** Within six months the City proposes to establish a minimum of five water quality sampling stations (in addition to the six it currently maintains) to track water quality trends in the North Spreader tidal canal system. If an undesirable water quality trend develops at a particular sampling station, additional sampling and research will be conducted by the City of Cape Coral to determine the source of the contaminant(s) and to determine what steps may be required by the responsible parties to cause correction. However, in no event shall the City be required to take any particular enforcement action or to undertake any particular corrective action.

While sampling is valuable and needed, this proposal seems to be something the Cape should already be doing to track the impaired waterbodies for development of TMDLs and for NPDES reporting. The fact that the proposal has no standards against which water quality trends would be measured and eliminates any responsibility of the Cape to take corrective action or enforcement eliminates this as qualifying as an NEB.

Although we had great hopes that a meaningful suite of projects could be developed from this process we find for reasons outlined in this letter that the suite of projects falls woefully short of the critical threshold of providing a Net Environmental Benefit and therefore we must recommend replacement of the barrier.

Submitted on behalf of the SCCF,

A handwritten signature in dark ink, reading "Erick Lindblad", written in a cursive style.

Erick Lindblad  
Executive Director