10. **OLD BUSINESS**

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NATURAL RESOURCES DEPARTMENT MEMORANDUM

DATE: **September 10, 2007**

TO: **City Manager Judie Zimomra**

FROM: **Natural Resources Director Robert K. Loflin Ph.D.**
Environmental Biologist James Evans

RE: **Northern Everglades and Estuaries Protection Act Update and Recommended Priority Projects**

Background

The Northern Everglades legislation amended the Lake Okeechobee Protection Act (LOPA), Sec. 373.4595, F.S. to create the Northern Everglades Restoration Program and provides a dedicated state funding source for the Northern Everglades restoration and adds new estuary protection programs. It expands the use of the Save Our Everglades Trust Fund to include the Lake Okeechobee Watershed Protection Plan and the River's Watershed Protection Plans for the Caloosahatchee and St. Lucie Rivers. The Bill also extends the state's commitment to provide funding for CERP and the Northern Everglades through the year 2020.

The Caloosahatchee and St. Lucie River Watershed Protection Programs will include goals for salinity envelopes and freshwater inflow targets for each estuary. The Legislation requires the development of the Caloosahatchee and St. Lucie Estuaries Watershed Plans to identify watershed storage projects and water quality targets by March 2009. The watershed plans will be the basis for Basin Management Action Plans (BMAPs) to ensure compliance with TMDLs. Total Maximum Daily Loads for the tidal portions of the Caloosahatchee River and estuary are to be proposed for final agency action by December 31, 2008 by the Florida Department of Environmental Protection.

Implementation of the estuary watershed protection plans will be funded through a "five-five-five cost share" with five million dollars contributed from the Florida Legislature, five million dollars contributed from the South Florida Water

Management District, and matched by five million dollars from Lee and Martin Counties for a grand total of fifteen million dollars per watershed per year.

The Northern Everglades Interagency Working Group is currently working on developing a list of projects for the Northern Everglades and Estuaries Protection Plans and will soon be soliciting local stakeholders within the St. Lucie and Caloosahatchee watersheds for project recommendations. Staff has prepared the following list of recommendations as a working list of priority projects for the Caloosahatchee Basin for City Council.

Staff Recommendations

Staff recommends that all projects within the Caloosahatchee Basin that are funded under the Northern Everglades Legislation be selected on the basis of the "Biggest Bang for the Buck" in terms of improvements in water storage and water quality, regardless of where they occur within the basin or at what stage of the planning process they are currently in.

Staff also recommends that the Northern Everglades Interagency Working Group include the work that has already been done or is currently being done by the Southwest Florida Feasibility Study (SWFFS) Hydrology and Water Quality Sub Teams. The SWFFS Water Quality Subteam is currently working on developing a list of projects within the Caloosahatchee Basin that have been evaluated and ranked based on their water quality benefits.

Recommended Priority Projects

1. Filter Marsh (STA) for C-43 Reservoir on SFWMD property- approximately 1800 acres is currently available at the site; additional land may need to be acquired.

2. Divert agricultural canals that are currently flowing into Lake Hicpochee into a reservoir and filter marsh (STA) prior to discharging into the Caloosahatchee. Removal of nutrient-rich organic sediments in Lake Hicpochee.

3. Acquire lands alongside key polluting tributaries within the Caloosahatchee Basin in proximity to where they enter the river to construct filter marshes or turf scrubbers to treat water prior to discharge into the River.

4. Identify areas of high density septic systems and package plants within the watershed that may be contributing to nutrient loading and convert them to central sewer (e.g. Lehigh Acres-Orange River, North Fort Myers, Captiva Island).

5. Centralized Recycled Water Containment Area in the S-4 basin (Southeast Caloosahatchee).

6. Restore riparian buffers, where possible, along the Caloosahatchee River and its tributaries.

7. Conversion of wastewater treatment plant discharges in Fort Myers to re-use e.g. Fort Myers Central and Fort Myers South.

8. Urban stormwater retrofits in the tidal Caloosahatchee and its tributaries.