

**GUEST OPINION BY COMMISSIONER RAY JUDAH**

**C-43 STORAGE RESERVOIR**

8-9-06

The South Florida Water Management District (SFWMD) recently held a tour of the C-43 (Caloosahatchee River) storage reservoir test cells on an 11,000 acre tract of land west of Labelle. The test cells were built to evaluate embankment design, seepage and water quality in preparation for construction of the west reservoir included in the Comprehensive Everglades Restoration Plan (CERP).

The C-43 west reservoir is part of the SFWMD Acceler8 program intended to expedite the construction of several additional reservoirs and special treatment areas to capture and store regulatory releases from Lake Okeechobee.

Unfortunately, the design and construction of the C-43 reservoir will only serve to further exacerbate water quality problems in the Caloosahatchee River and coastal estuaries.

Furthermore, the C-43 reservoir, in conjunction with the other planned reservoirs and special treatment areas, will not provide adequate storage to handle maximum flows from Lake Okeechobee.

Unlike the C-44 (St. Lucie Canal) reservoir on the east coast, which is to include a 6,300 acre filtration marsh to remove nutrients such as phosphorus and nitrogen from lake water runoff, the C-43 reservoir will not be built in conjunction with a special treatment area.

The SFWMD has indicated a desire to include a water quality component in phase II of the Project Implementation Report for the C-43 reservoir, but there is no commitment to the funding or timing of a special treatment area.

To further compound the problem of inadequate water treatment, the SFWMD is expected to build the C-43 reservoir with slurry walls to protect the integrity of the earthen berms and pipes, thus greatly reducing the potential for filtration through ground water seepage.

In the absence of a water quality component, the C-43 reservoir will serve as an incubator for bacteria and algae growth such as the toxic blue green algae that is becoming more prevalent

in the Caloosahatchee River and creating public health concerns. Heavy nutrient loading in the form of phosphorus and nitrogen, warm water, and limited circulation in the reservoir create an optimum environment for the proliferation of bacteria and algae.

The use of aerators in the reservoir to enhance circulation, prevents nutrients in the water from settling to the bottom causing nutrients to remain in suspension, resulting in further degradation of our coastal estuaries.

Only a decision by the Environmental Protection Agency to hold the SFWMD accountable in complying with state water quality standards and the Clean Water Act will result in meaningful action to address water quality treatment in the C-43 reservoir.

An evaluation of the water budget for Lake Okeechobee, including inflow, rainfall and evaporation, is another cause for alarm when considering the total storage capacity of the reservoirs and special treatment area to be built under the CERP.

The C-43 reservoir is expected to store approximately 170,000 acre feet of water, and the cumulative amount of storage expected to be provided by the additional reservoirs and special treatment areas under CERP is approximately 800,000 acre feet of water. Wet season flows from Lake Okeechobee indicate a need for an additional one million acre feet of water storage to minimize the adverse impact of excessive fresh water releases from Lake Okeechobee.

The SFWMD proposed plan to build over 300 aquifer storage and recovery (ASR) wells to store the excess water is cost prohibited (\$6 to 8 million per well) and is potentially of grave risk to the environment.

Only the creation of a storage flow-way through the Everglades Agricultural Area south of Lake Okeechobee will restore historic flows to the Everglades and provide critical storage capacity to address maximum fresh water releases from Lake Okeechobee.