



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

OPINION

July 10, 2012

New Strategy Offers Timely and Meaningful Solution for the Health of the Caloosahatchee Estuary

Drought conditions that have plagued South and Southwest Florida over the last five years underscore the need for timely restoration of the Caloosahatchee Estuary. Perhaps now more than ever, consensus has formed among west coast residents and businesses, the agricultural community and environmental organizations that the status quo is not acceptable – the estuary needs help now.

Far too often – including this spring – the Caloosahatchee faces the height of the annual dry season without the vital flow of fresh water to maintain appropriate salinity levels. In recent years, the South Florida Water Management District has taken steps to improve the system by moving forward on local restoration projects and by implementing a new guidance document for making recommendations about federal management of the lake. But the reality is these incremental enhancements are lost in the severity of the situation: more water is needed to protect the river and estuary.

We all know that the long-term solution to this challenge is deep water storage so that fresh water is available for delivery to the estuary, even in times of drought. Construction of Everglades restoration projects, such as the C-43 West Basin Storage Reservoir, and rehabilitation of Lake Okeechobee's Herbert Hoover Dike will eventually provide this water storage and supply. The dilemma is that these federal projects will take decades to implement at a cost of billions of dollars. Simply put, the Caloosahatchee can't wait.

In search of economically viable, technically feasible and immediate interim solutions, District scientists and engineers have devoted countless hours since last summer evaluating strategies for improving dry season conditions in the river and estuary. Few solutions exist. However, by analyzing thousands of computer modeling scenarios, our scientists identified modifications within existing Lake Okeechobee operations that can provide significant benefits to the Caloosahatchee without adversely affecting other ecosystems or permitted water users.

This strategy is known as water supply augmentation (WSA)-supplemental environmental flows. The concept involves allowing limited volumes of stormwater runoff from the Everglades Agricultural Area to flow back into Lake Okeechobee under

specific conditions, making new water available that could then be dedicated to environmental water supply for the Caloosahatchee during dry periods.

Modeling analysis shows WSA-supplemental environmental flows could dramatically reduce high-salinity months in the estuary. In fact, this supplemental source of water to the estuary can solve an enormous ongoing source of harm to our environment. The strategy would also improve ecological conditions in Lake Okeechobee without negatively affecting agriculture and other permitted water users—a true “win-win” scenario. Other potential measures analyzed, like increasing water shortage cut-backs for permitted users, resulted in little to no ecological improvements to the Caloosahatchee Estuary or Lake Okeechobee or had negative impacts to the agricultural economies of Hendry, Glades and eastern Lee counties.

Public discussion on WSA-supplemental environmental flows has only just begun. And well-meaning concerns have been raised over how this strategy could affect water quality in the Caloosahatchee and Lake Okeechobee. Based on the District’s analysis and forty years of credible data, WSA-supplemental environmental flows would result in little change to existing nutrient concentrations in the lake. This is due, in part, to the implementation of best management practices over the last 15 years, which have considerably improved the quality of water leaving farms south of the lake.

In short, WSA-environmental supplemental flows offer a viable, interim solution for improving the health of the Caloosahatchee as we await the construction and operation of the massive capital infrastructure improvements planned for Lake Okeechobee and the estuary basin. Until those long-term solutions are in place, my goal is to advocate for any and all actions that will benefit the Caloosahatchee while limiting harm to other parts of the ecosystem as well as existing legal users.

To support this goal, the Governing Board has directed staff to work with stakeholders so that WSA-supplemental environmental flows can be considered for the restoration “toolbox.” As we continue working with the federal government to seek authorizations and funding for the long-term fixes, we have a unique opportunity to do something meaningful for the estuary today—without having to wait for Congressional appropriations and the construction of large engineering projects. By keeping an open mind, engaging in productive public dialogue and pursuing creative solutions, we can work together to realize practical, realistic and significant improvements to the Caloosahatchee watershed sooner rather than later.

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