



December 9, 2022

Nicole Morgan
Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection
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Tallahassee, FL 32399-2400
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RE: Caloosahatchee River BMAP Five-Year Review, 2022

Dear Ms. Morgan:

On behalf of Audubon Florida and Audubon Western Everglades, I write to submit comments on the Caloosahatchee Basin Management Action Plan (BMAP) 2022. This plan is an important tool to improve water quality for the downstream Caloosahatchee River Estuary. The coastal and estuarine waters downstream of Lake Okeechobee, watershed tributaries, and the C-43 canal have been suffering from poor water quality for decades, especially due to nitrogen pollution which feeds harmful algal blooms such as red tide and blue-green algae. With the longstanding losses of wetlands, intense urban and agricultural land uses throughout this large watershed, and the significant influence of Lake Okeechobee management priorities for water supply and flood protection, these impaired coastal waters have been slow to recover. This BMAP review is an important check on progress and further action needs. Audubon provides comments on that draft review below.

1. The most significant finding in this review is the dramatic increase in actual versus projected nitrogen loads as documented through monitoring versus modeling. While estimated total nitrogen (TN) reductions have approached 80% of the estuarine portion of the Caloosahatchee watershed BMAP, the Tributary TN and total phosphorus (TP) reductions have barely attained 1% of their reduction goals. While the modeled BMAP load for TN was 3.9 million lbs./year, the 2022 measured 5-year average for the watershed was 5.2 million lbs./year. Measurements show modeled numbers are grossly inaccurate and Audubon is very concerned with DEP's continued reliance on modeling for stormwater permits, BMAPs, and BMP programs rather than measured water quality via monitoring to understand goals and compliance.
2. The Review states that the 20-year milestone reduction objectives will not be met. Audubon agrees with the DEP's recommendation to pursue additional regional-scale water quality projects. Additionally, Audubon recommends:
 - a. Prioritizing source controls and improved implementation of nutrient reducing BMPs on farms, which are over 70% of the source of TN for the watershed.

- b. Increasing cost share BMPs on farms, and collaborating with producers to increase implementation of structural BMPs.
 - c. Planning and investing in additional large STAs and wetland restoration projects, including many of which were identified in the Southwest Florida Comprehensive Watershed Management Plan (SFWMD/Army Corps of Engineers – 2013). Similarly, the UF Water Institute¹ recommended developing about 400,000 acre-feet of watershed storage as a basis for watershed restoration efforts.
 - d. Updating the Statewide stormwater rule to be more protective of impaired waterbodies. The two Stormwater Technical Advisory Committees in recent years, as well as the 2010 draft stormwater rules all hold effective program and regulatory improvements that must be considered and implemented. Urban and agricultural stormwater is the source of most of the Caloosahatchee River watershed's nutrient pollution and these rule updates should be considered in this plan.
 - e. Terminating biosolids applications, including AA biosolids in these tributary basins.
 - f. Reducing loads from wastewater by removing septic tanks and supporting conversion to central sewer as well as advanced treatment of discharges from wastewater treatment facilities should be considered in this plan.
 - g. As Audubon recommended in our Lower West Coast Water Supply Plan 2022 Update comments, urban stormwater nutrient pollution will be significantly reduced by working collaboratively with local governments, utilities, and non-governmental organizations to reduce irrigation and fertilization of turfgrass. Additionally, fertilizer ordinances need improved provisions and increased enforcement to aid in reaching these goals.
3. As written, the plan does not account for discharges to the Caloosahatchee Estuary as a result of the new Lake Okeechobee System Operating Manual (LOSOM) currently being adopted. This additional loading will further challenge the already unattainable 20-year goals without the addition of significant projects and policies to reduce TN and TP. As such, LOSOM-related impacts should be considered in this plan.
 4. Audubon recommends increasing monitoring efforts in recognition of the accuracy of measured vs. modeled water quality status and project outcomes. In particular, we agree with increasing the monitoring efforts in the five basins, as well as fully addressing Deadman's Creek/Cypress Branch and Turkey Creek basins which currently are not being monitored.
 5. Audubon urges DEP to proactively address the Environmental Justice concerns of nearby communities that depend on the Caloosahatchee River. While the Review states the data are insufficient to determine the specific effects of projects and ordinances being implemented as part of this BMAP, it is very clear nearby communities will bear disproportionate impacts from environmental pollution. As just one example, when

¹ Graham, W. D., M. J. Angelo, T. K. Frazier, P. C. Frederick, K. E. Havens, and K. R. Reddy. 2015. Options to reduce high volume freshwater flows to the St. Lucie and Caloosahatchee Estuaries and move more water from Lake Okeechobee to the southern Everglades: an independent technical review by the University of Florida Water Institute. Gainesville.
<http://waterinstitute.ufl.edu/research/downloads/contract95139/UF%20Water%20Institute%20Final%20Report%20March%202015.pdf>

harmful algal blooms occur, the fish caught in these waters are unhealthy, and the air near the River when cyanotoxins are present from blue-green algal blooms is especially impactful.

Audubon Florida and Audubon Western Everglades appreciate the significant work being done to track and document the progress of this important Caloosahatchee River BMAP. However, we are concerned by the significant lack of progress toward achieving the water quality improvements this estuary needs. We urge you to consider our recommendations to improve performance in order to meet BMAP and TMDL goals in this watershed. We would welcome a meeting with DEP staff to discuss these suggestions in further detail and we appreciate your consideration of these comments.

Sincerely,

A handwritten signature in black ink, reading "Brad Cornell". The signature is written in a cursive, flowing style.

Brad Cornell
Southwest Florida Policy Associate
Audubon Western Everglades
Audubon Florida