



Florida Department of Environmental Protection

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July 7, 2017

Catherine Bray, CPM
Planning Chief – Water Quality Enhancement
City of Tallahassee
Water Resources Engineering
408 N. Adams Street
Tallahassee, FL 32301

RE: Assessment Category 4e (Ongoing Restoration Activities) Status Update for Lake Lafayette, Upper Segment (WBID 756F)

Dear Ms. Bray,

Thank you for the opportunity to review the City of Tallahassee's update of the ongoing restoration activities targeting Lake Lafayette, Upper Segment (WBID 756F). This review will allow the department to monitor the progress of restoration activities in the waterbody so that by the next assessment cycle (Cycle 4, scheduled to be assessed in 2018) either a Reasonable Assurance Plan can be approved to place the waterbody in assessment category 4b, or the waterbody will be attaining water quality standards for nutrients, bacteria and dissolved oxygen (percent saturation). This letter is in response to your request for review of the Lake Lafayette (Upper Segment) Category 4e Status Update, received via email on May 15, 2017; our comments follow below.

DEP Comments:

- We appreciate the City evaluating the possibility of collecting more data that may better represent the lake.
- We did not get the same results as shown in tables 1 and 5 for the percent reductions. We believe that is because the City's calculations were done on the entire data set and not the average inflow and outflow values presented in the tables, but cannot confirm that because the data was not included in the materials provided for review. The water quality data and sampling summary reports are cited throughout the document and listed in the table of contents (Appendices 1 through 3) but were not provided as part of the attachment to review.
- How many samples were used to calculate the geomeans in Table 2?
- The monitoring was performed using ISCO automated samplers. Nutrients are required to be preserved with sulfuric acid within 15 minutes of collection, and

orthophosphate samples are required to be filtered within the same time period. Also, the bacteria samples (FC and E. Coli) are required to meet a holding time of 8 hours. None of these requirements were met due to the automated sampling method, which resulted in qualifying the results for all nutrients, bacteria and oil & grease. The data was not provided to confirm, but in reviewing the department's qualifier codes it seems that the nutrient data may have needed the Y qualifier (a fatal qualifier in the department's Impaired Waters Rule database) which indicates that the analysis was from an improperly preserved sample and the data may not be accurate. While the report does state that the monitoring was developed to determine the effectiveness of the BMP and therefore shouldn't be used for assessment purposes, it seems questionable that the sampling plan would be designed in a way that would result in having to qualify all nutrients and bacteria, especially when these are the specific parameters that were impaired and which the facility is designed to address. Also, the data not being provided prevents the department from being able to review the qualified data and the data discussed as having been excluded.

- It is unclear what an "alternate event" (on page 13) consisted of. In "2. Alternate Events" it mentions collecting samples during a storm event; did these events include rainfall? There are zeroes in the table, so is this a typo in the paragraph?
- In the section discussing anomalies and issues with the monitoring, a very high zinc value was detected in DI water for the Inflow field blank on 7/29/2016, along with detections of several other parameters including NO3/NO2 which was detected in the sample and method blank. All parameters were non-detected in the Outflow blank except for a very low NO3/NO2 concentration. As a result, another field blank was performed a month later at the Inflow site and based on this single follow-up with what they describe as satisfactory results they concluded that contamination was not occurring. Is only a single follow up sample sufficient to determine that contamination is not an issue?

The department appreciates the City of Tallahassee taking the time to submit an update of the ongoing restoration activities that have been developed for Lake Lafayette, Upper Segment. If you have additional questions about our comments, please contact me at (850) 245-8469 or Kevin.ODonnell@dep.state.fl.us.

Sincerely,

Kevin J. O'Donnell

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