APPENDIX J:
Original Public Comment Letters

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RE: Draft TMDLs for Fecal coliform Bacteria for Selected Subsegments in the Lake Pontchartrain Basin, Louisiana (040102, 040103, 040201, 040302, 040304, 040305, 040603, 040703, 040909, 040910, & 041302, 041401)
(*St. Tammany Parish – Subsegments 040909 & 040910*)

Dear Ms. Smith,

St. Tammany Parish Government (STP) appreciates the opportunity to review the above draft TMDL document and submit comments into the public record.

General Comments are as follows:

- The TMDLs for Fecal Coliform Bacteria pertain to the W-14 Main Diversion Canal (040909) & Salt Bayou (040910) located on the Northshore of Lake Pontchartrain in St Tammany Parish, LA.
- The W-14 Canal designated uses include primary contact recreation (PCR), but this waterbody is a stormwater drainage canal and is not intended to be used for recreation or full body contact. There is only "a minimal chance of ingesting appreciable amounts of water".
- The PCR designation should be downgraded to the more appropriate designation of secondary contact recreation for Subsegment 040909 & the TMDL adjusted accordingly.
- The proposed draft TMDL is only a Waste Load Allocation (WLA), which is usually conducted/enforced for LDEQ permitted discharges (at the end-of-pipe), not nonpoint sources.

- It presents no compelling science for the fecal coliform sources or loadings, much less the recommended reductions throughout the watersheds of subsegment 040909 and 040910
- Subsegment 040909 is not included on Table 2-7 on Page 2-14 for either the St. Tammany Parish MS4 or the City of Slidell MS4, but should be added to Table 2-7 since parts of the 040909 are located in both MS4s, (see Figure 1).
- Subsegment 040910 is not located in an MS4 and should be deleted from Table 2-7 on Page 2-14 (see Figure 1).

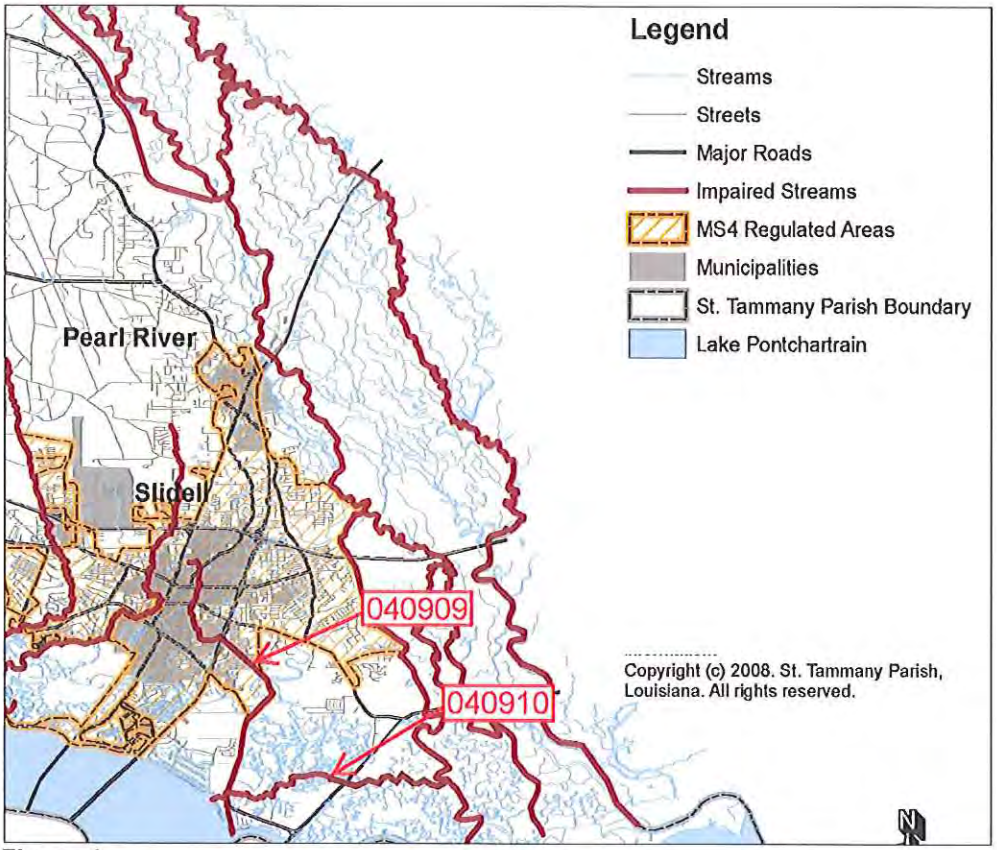


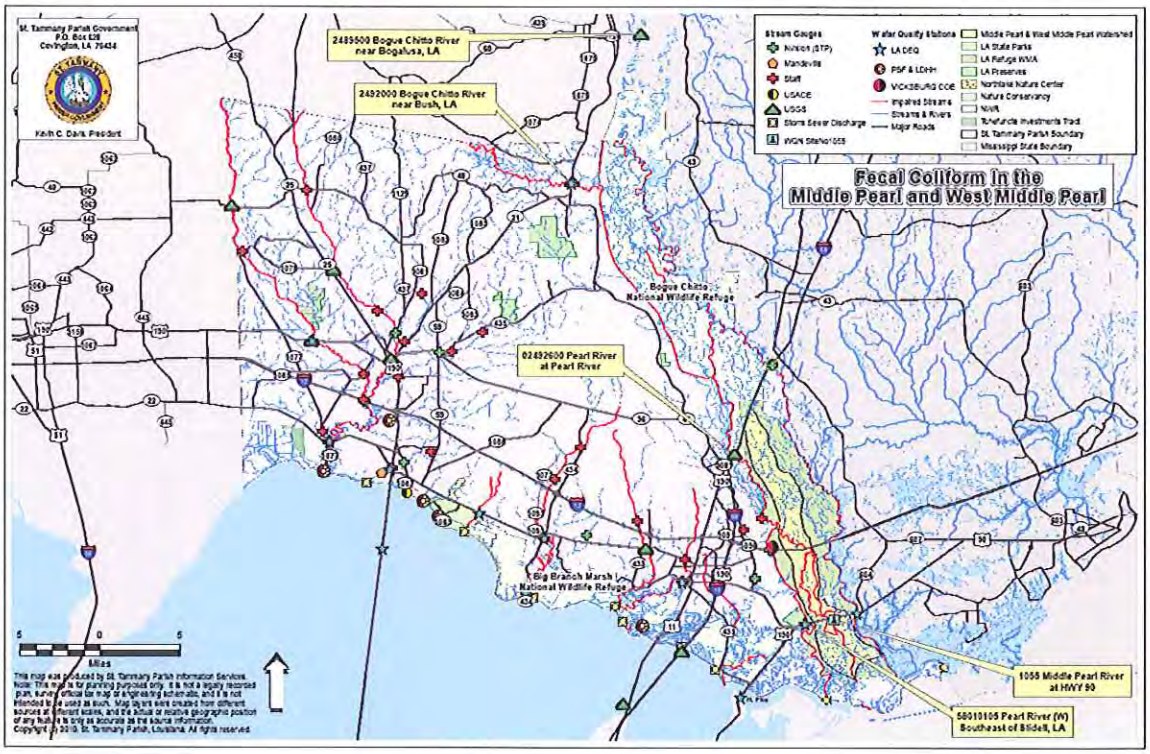
Figure 1
Location of Subsegments 040909 & 040910 in relationship to MS4 boundaries.

STP concurs with the following TMDL assessments:

- Suspected sources of Fecal Coliform impairment are the storm sewer systems, sanitary sewer overflows, and on-site sewer systems.
- Fecal coliform reduction is necessary in order for the affected waterways to meet their designated uses.
- MS4s should achieve WLAs with BMPs & adaptive management instead of numeric effluent limitations.

STP objects to the following TMDL items:

- The TMDL data is not necessarily representative of individual subsegments due to the omission of comprehensive monitoring results and the lack of modeling for each waterway to include flow, discharges, human impacts, & natural processes.
- For example, subsegments 040909 (W-14 Canal) and 040910 (Salt Bayou), both located in St Tammany Parish are distinctly different in hydrology, geomorphology and land use. St Tammany Parish is concerned that:
    - Almost the entire area of subsegment 040910 (Salt Bayou) is near the pristine, undeveloped *Pearl River State Wildlife Management Area*, a habitat protection area managed by Louisiana Wildlife and Fisheries. This management area is outside of the jurisdiction of St Tammany Parish (see map below).



    - Subsegment 040910 (Salt Bayou) is surrounded by wetlands (76.07%), open water (11.08%), forest (7.09%) and grass (0.07%), with essentially no pasturage (0.15%) or cultivated crops (0.12%). Developed land comprises only a small portion of the total land use in the subsegment (5.42%) (page 2-4 draft TMDL report). Additionally, as a result of buyouts following Hurricane Katrina, St Tammany Parish has acquired approximately 30% of

the residences in the Salt Bayou area, which should further limit fecal coliform discharges into the Bayou.

  - Ambient water quality data, other than fecal coliform bacteria (FCB), were not presented in the TMDL for site #1044; data, such as nutrients, DO and BOD, would corroborate, or indicate, whether the FCB might be from anthropogenic waste streams. What is the objective of siting an Ambient Water Quality Monitoring station in such an obscure, pristine, undeveloped location?

  - The Parish proposes that, in the absence of DNA documentation, the fecal coliform bacteria in subsegment 040910 are naturally occurring and, in fact, expected within this relatively unimpacted, wetland area. In which case, no amount of load reduction will result in the attainment of established standards.

- Flow is one of the most critical parameters for modeling, calculating and allocating TMDLs. Flow influences all fate-and-transport phenomena within the waterbody, including: transformations, dilution, dispersion, resuspension and reaeration. There are NO USGS flow gauges on either 040909 (W-14) or 040910 (Salt Bayou).

- Further, water quality throughout the lower reach demonstrates the effect of tidal mixing and flow. A substantial tidal prism exists at the mouth of waterbodies in these subsegments, dominating advective flow in summer-critical, low-flow conditions. These mixing effects due to tidal prisms greatly attenuate the concentration and mortality of fecal coliform bacteria.

- The TMDL states that "FCB were not compared to flow because a majority of these subsegments are in tidal areas for which no representative data are available." In the absence of flow measurements, EPA's contractor utilized a method of determining edge-of-bank loading termed monthly water yield, obtained from the LA Office of Climatology. Monthly Water Yield is a calculated value that includes assumptions for: rainfall (changes significantly over the period of record), evaporation, evapotranspiration, infiltration, vegetation interception, runoff coefficients, etc. Thus, the quantity of rainfall reaching a receiving stream is totally dependent upon site-specific factors that have not been provided in the TMDL. Further, the runoff from the monthly water yield should be calibrated with the flow in the receiving stream, which was not done.

  - Reviewers appreciate that the mathematical exercize of calculating flowrate in *some* waterbody was generated, yet these

questionable assumptions lead to questionable results in the loading curve and the reduction scenarios.

- Reviewers believe that the TMDL does not contain a hydraulics & hydrology (H&H) modeling component and no attempt was made to simulate the dynamic system to address the tidal impacts of flow. Thus, the uncalibrated, unreviewed assumptions provide NO defensible runoff into the streams, making the loading curves equally indefensible.

- Reviewers question the calculation of loading, not to mention the even more complex fate-and-transport using any calculation method in which dynamic, unsteady-state (tidal) hydrology is not included.

- The USACE has developed an unsteady-state H&H model for the W-14 watershed and tributaries, which also includes Salt Bayou. The model is public domain and its use would greatly enhance FCB fate-and-transport and provide defensibility for the TMDL.

- The TMDL in its current state would be difficult to implement because it lacks clarity and is not "user-friendly" (for example, there are no %reductions recommendations or discharge permit limits presented).

- Current loading & percent reduction is not in the body of the TMDL and can only be located by wading through the calculations for waterways in Appendix E, for which spreadsheets had to be requested through Public Records Request, posing an additional level of reviewing difficulty.

- Appendix E is confusing and does not clearly indicate the TMDL calculations. The note with the table indicates the values listed were not used in the TMDL calculations.

  - Parish reviewers request clarification on what values were used in the calculations.

<u>St Tammany Parish Recommendations to improve the TMDL:</u>

- Comprehensive characterization of land use, monitoring & testing along with adequate H&H modeling for each subsegment should be performed to ensure the data is a consistent representative of each waterway.

- Improve the clarity and make the TMDL more user-friendly by utilizing more tables and figures in the summary & body of the report, rather than requiring readers to wade through appendices to understand the

TMDL.

- Add current loading & percent reduction in a user-friendly format to the executive summary & body of the TMDL.
- Insert loadings & percent reduction for waterways in the executive summary & in the main body of the TMDL in a user friendly manner such as tables or figures.
- Make Appendix E representative of data values that were actually utilized in the TMDL calculation.
- Include some language regarding implementation difficulties such as funding, regionalization, & escalating MS4 regulatory requirements.

St Tammany Parish (STP) Water Quality Improvement Plan:

STP is developing an action plan to address unsewered subdivisions, individual sewer systems, fecal coliform exceedances, etc. Some of the steps STP is taking include:

- SWMP revision to reflect implementation plan to address Fecal Coliform reduction in STP.
- Regionalization of wastewater treatment to decrease the number of point source discharges in STP.
- Public education campaigns to make citizens aware of the need to control Fecal Coliform exceedances in STP.
- Develop an action plan to enable STP to meet the Fecal Coliform WQ requirements for affected subsegments in the Parish.
- Meet with LDEQ to present the STP action plan that includes tie-ins, wastewater regionalization, decentralized management and inspections, tertiary treatment, wastewater to wetlands projects, illicit discharge reduction, public education & public participation and involvement.
- Aggressive pursuit of funding to expedite implementation of Action Plan.
- Implement the action plan to ultimately achieve improved water quality in STP.

St. Tammany Parish Government appreciates the opportunity to comment on the draft TMDLs for Fecal Coliform Bacteia for Selected Subsegments in the Lake Pontchartrain Basin, Louisiana. We welcome the opportunity to dialogue further with EPA and its contractors in light of the issues brought forth in the proposed fecal coliform bacteria TMDL. Should you have

questions regarding the written comments of St Tammany Parish, please do not hesitate to contact me or Dr. Smythe at (985) 898-2552.

Sincerely,

Sabrina Schenk

Sabrina Schenk,
Watershed Coordinator

E. deEtte Smythe, PhD
Regulatory Manager