

TMDL for Total Suspended Solids for Subsegment 120206 in the Terrebonne Basin, Louisiana

Fact Sheet

Section 303(d) of the Clean Water Act and the U.S. Environmental Protection Agency's (EPA's) Water Quality Planning and Management Regulations require states to develop Total Maximum Daily Loads (TMDLs) for waterbodies that are not meeting water quality standards. A TMDL establishes the amount of a pollutant that a waterbody can assimilate without exceeding its water quality standard for that pollutant. TMDLs provide the scientific basis for a state to establish water quality-based controls to reduce pollution from both point and nonpoint sources to restore and maintain the quality of the state's water resources.

A TMDL for a given pollutant and waterbody is composed of the sum of individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for nonpoint sources and natural background levels. In addition, the TMDL must include an implicit or explicit margin of safety (MOS) to account for the uncertainty in the relationship between pollutant loads and the quality of the receiving waterbody and may include a future growth (FG) component.

This fact sheet presents a summary of the total suspended solids (TSS) TMDL that has been developed for subsegment 120206 in the Terrebonne Basin in southeastern Louisiana (Figure 1).

The Louisiana Department of Environmental Quality (LDEQ) listed subsegment 120206 in the Terrebonne Basin on Louisiana's 2004 section 303(d) list for impairment due to total suspended solids (TSS). The suspected source of the

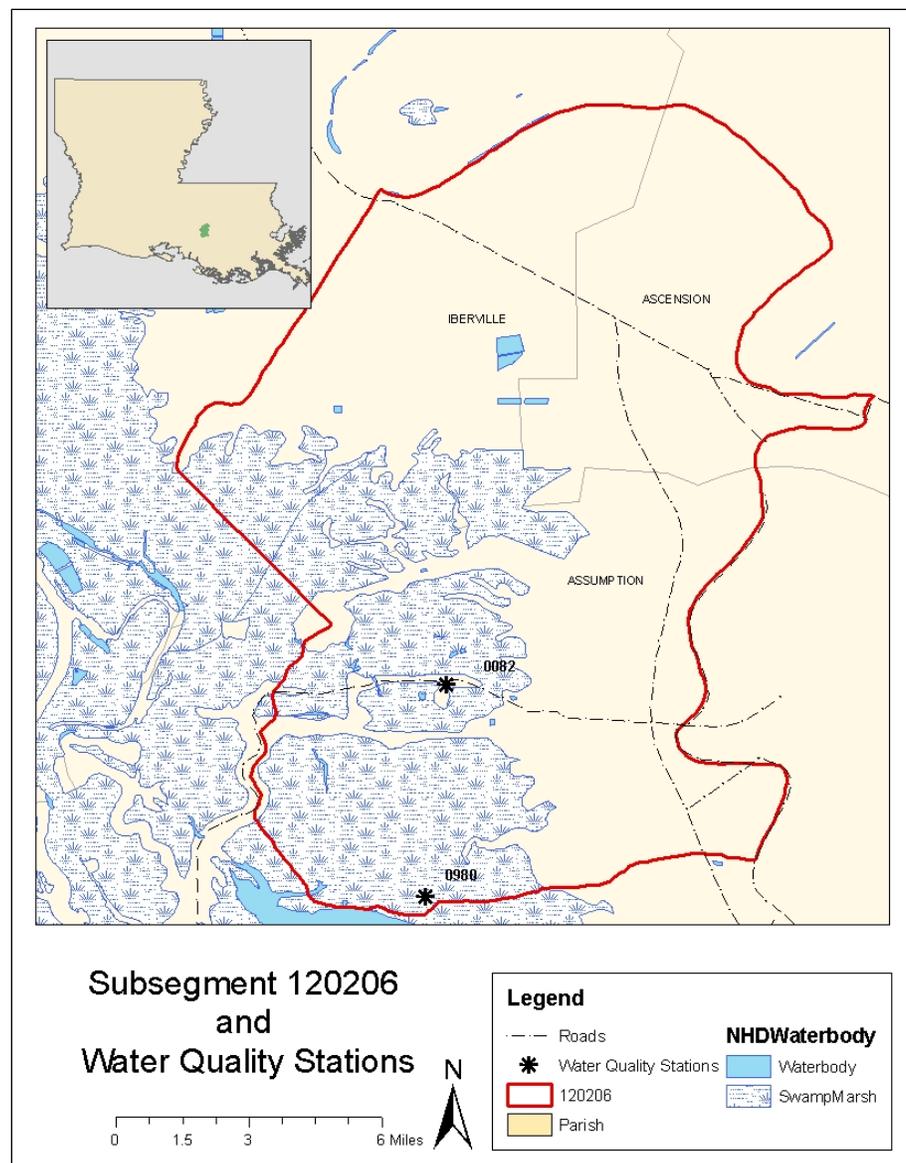


Figure 1. Location subsegment 120206 in the Terrebonne Basin

impairment is not known. The impaired designated uses for this subsegment are primary contact recreation, secondary contact recreation, and fish and wildlife propagation.

Because only narrative criteria are available for TSS, it was necessary to calculate a numeric endpoint for TSS to develop the TSS TMDL. The TSS endpoint was calculated on the basis of the relationship between turbidity and TSS using a regression analysis. The resulting surrogate endpoints were 61.7 and 65.0 mg/L for the two monitoring stations in the subsegment.

The TMDLs were calculated using an average load reduction approach. The approach calculated a percent reduction for each LDEQ monitoring station by using observed levels of constituents. The minimum percent reduction was calculated so that the monitoring data would meet water quality standards at that station. Because two monitoring stations were present in the subsegment, the larger percent reduction was used to ensure that both monitoring stations would meet the criteria.

In TMDL development, allowable loadings from all pollutant sources that cumulatively amount to no more than the TMDL must be established and thereby provide the basis for establishing water quality-based controls. WLAs were given to permitted point source dischargers. The LAs include background loadings and human-induced nonpoint sources. An implicit MOS was used, and an FG component of 10 percent was included. A summary of the TMDL for the subsegment is presented in Table 1.

Table 1. Summary of TSS TMDL, MOS, FG, WLA, and LA for subsegment 120206

Subsegment	Station	Pollutant	Percent reduction	Total allowable loading	MOS	FG (10%)	Σ WLA	Σ LA
				tons/day				
120206	82	TSS	92.7	5.95	Implicit	0.59	5.05	0.30

For More Information

EPA seeks input on this proposed TMDL, including comments, information, and data from the general and affected public. For additional information on this TMDL project, please contact the EPA staff member listed below:

Dr. Golam Mustafa, Task Order Manager, at 214-665-6576 or Mustafa.Golam@epa.gov.