

**Total Maximum Daily Load (TMDL) Synopsis**

**State:** Kentucky  
**Major River Basin:** Mississippi River  
**HUC8:** 08010201  
**Counties:** Graves, Hickman, Carlisle  
**Pollutant of Concern:** Pathogens  
**Impaired Use:** Primary Contact Recreation

**Impaired Waterbodies for TMDLs (2004 303(d) List):**

Waterbody Name	Segment Length (miles)	County	Suspected Source
Bayou de Chien (from RM 14.0 to 25.9)	11.9	Graves/ Hickman	Agriculture
Central Creek (from RM 0.8 to 2.5)	1.7	Carlisle	Unknown
Cooley Creek (from RM 0.7 to 2.3)	1.6	Graves	Minor Industrial Point Sources

**Note:** Suspected sources as identified in the 2004 303(d) Report for Kentucky.

**TMDL Endpoints (i.e., Water Quality Standard):** 400 colonies/100ml

**Fecal Coliform Allocation:**

Stream	WLA (colonies/day)	LA	Margin of Safety	TMDL	Percent Reduction <sup>3</sup>
Bayou de Chien	0.0 colonies/day <sup>1</sup>	$2.49 \times 10^{11}$ colonies/day	$2.77 \times 10^{10}$ colonies/day	$2.77 \times 10^{11}$ colonies/day	71%
Central Creek	0.0 colonies/day <sup>1</sup>	98.6%	See note 4	98.6%	98.6%
Cooley Creek	$2.59 \times 10^{10}$ colonies/day <sup>2</sup>	99.7%	See note 4	99.7%	99.7%

**Notes:**

- Any future KPDES permitted point source must meet permit limits based on the Water Quality Standards in 401 KAR 5:031, and must not cause or contribute to an existing impairment.
- WLA value based on design flow and acute permit limits and represents the maximum one-day load the facility can discharge. The average monthly load based on design flow and chronic permit limits can not exceed  $1.30 \times 10^{10}$  colonies/day.
- Overall reduction to achieve the target of 360 colonies/100ml.
- MOS is both implicit and explicit.

**KPDES Discharges to surface waters addressed in TMDLs:**

Facility Name	NPDES No.	Design Flow (MGD)	Facility Type	Impacted Stream	Permit Limits	
					Monthly	Maximum
Pilgrim Pride	KY0093874	1.71	Poultry Slaughtering and Processing	Cooley Creek	200 colonies/100ml	400 colonies/100ml