

## PEQUABUCK RIVER REGIONAL BASIN TOTAL MAXIMUM DAILY LOAD (TMDL) SUMMARY

A Total Maximum Daily Load (TMDL) analysis was completed for indicator bacteria in the Pequabuck River Regional Basin. Waterbodies included in the TMDL analysis are the Pequabuck River, Coppermine Brook, and Poland River. These waterbodies were included on the *CT Impaired Waters List* due to exceedences of the indicator bacteria criteria contained within the State *Water Quality Standards*.

### TMDL Overview

$$\text{TMDL} = \text{Point Sources} + \text{Nonpoint Sources} + \text{Background} + \text{Margin of Safety}$$

- A requirement under section 303(d) of the Federal Clean Water Act
- A management tool used to restore impaired waters by establishing the maximum amount of a pollutant that a waterbody can receive without adverse impacts to fish, wildlife, recreation, or other public uses
- Developed for waterbodies listed on the CT Impaired Waters List
- Provides guidance for responsible parties to use as a framework for developing a TMDL implementation plan

The TMDLs were drafted using data collected by the CT DEP and the CT DEP *Cumulative Frequency Distribution Function Method*, which expresses the TMDL as an average percent reduction from the current condition required to achieve consistency with the State recreational water quality criteria. Potential sources of indicator bacteria include point and nonpoint sources, such as stormwater runoff, pet waste (dogs), natural sources (wildlife), and illicit discharges. This fact sheet includes a summary table of TMDL percent reductions and a land use map, including the reductions, pulled directly from the complete TMDL document.

The percent reductions established in this TMDL can be achieved by implementing control actions where technically and economically feasible that are designed to reduce indicator bacteria loading from nonpoint sources and point sources. These actions may be taken by State and Local government, academia, volunteer citizens groups, and individuals to promote effective watershed management.

It is important to note that the TMDLs are effective for the entire watershed because they are a measurement of compounded impacts at a single point. As such, corrective actions must be undertaken at the source(s) whether it is a tributary or illicit discharge pipe, in order to achieve the required percent reductions. The approach to TMDL Implementation is anticipated to be on a watershed wide scale, which will require that all sources within the regional basin that are contributing to the in-stream impairment be addressed. The DEP supports an adaptive and iterative management approach where reasonable controls are implemented and water quality is monitored in order to evaluate for achievement of the TMDL goals and modification of controls as necessary. Local watershed groups are encouraged to continue their efforts by working with municipalities to formulate a TMDL implementation plan. An implementation plan formulated at the local level will most efficiently make use of local resources by assigning tasks to responsible parties and should serve as an agreed roadmap to reducing bacteria levels in the Basin.

A copy of the entire Pequabuck Regional Basin TMDL can be found on the CT DEP website at <http://www.ct.gov/dep/tmdl>.

Table 1. Summary of TMDL analysis.

Waterbody	Waterbody Segment Description	Segment ID	Monitoring Site	Average Percent Reduction to Meet Water Quality Standards			
				TMDL	WLA	LA	MOS
Coppermine Brook	From mouth at Pequabuck River, upstream to New Britain drinking water watershed boundary and water diversion (just upstream of confluence with Polkville Brook), Bristol.	CT4314-00_01	33	89	90	88	Implicit
Poland River	From confluence Pequabuck River, upstream to confluence with unnamed Brook4313-03_01, upstream of Judd Road crossing (parallel with route 72), Plymouth.	CT4313-00_01#	277	14	17	12	Implicit
		CT4313-00_02					
Pequabuck River	From mouth at Farmington River, Plainville upstream to headwaters South of Rocky Road, Harwinton.	CT4315-00_01	1974	79	81	78	Implicit
		CT4315-00_01	1095	79	81	78	Implicit
		CT4315-00_02	258	83	85	82	Implicit
		CT4315-00_02	267	79	83	77	Implicit
		CT4315-00_03	399	36	19	46	Implicit
		CT4315-00_03	781	76	78	75	Implicit
		CT4315-00_03	712	63	61	64	Implicit
		CT4315-00_04*					
		CT4315-00_05	711	55	56	54	Implicit
		CT4315-00_05	265	17	39	4	Implicit
		CT4315-00_06	264	62	71	56	Implicit
CT4315-00_06	263	61	68	57	Implicit		

\*Current data is unavailable to conduct a TMDL analysis for segment CT4315-00\_04 on the Pequabuck River. However, this small segment (< 0.33 miles) is located adjacent to segments that require percent reductions. Therefore, it is reasonable to presume that the same percent reduction applies to these segments.

#Current data is unavailable to conduct a TMDL analysis for segment CT4313-00\_01 on the Poland River. However, the segment is small (.42 miles) and is directly downstream of a segment (CT4313-00\_02) that requires percent reductions. Landuse is similar for both segments and therefore, it is reasonable to presume that the same percent reduction applies to both segments.

