

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

A Total Maximum Daily Load (TMDL) analysis was completed for indicator bacteria in the Norwalk River Regional Basin. Waterbodies included in the TMDL analysis are the Norwalk River, Ridgefield Brook, and Silvermine 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. A summary of TMDL percent reductions and land use map are provided below.

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.

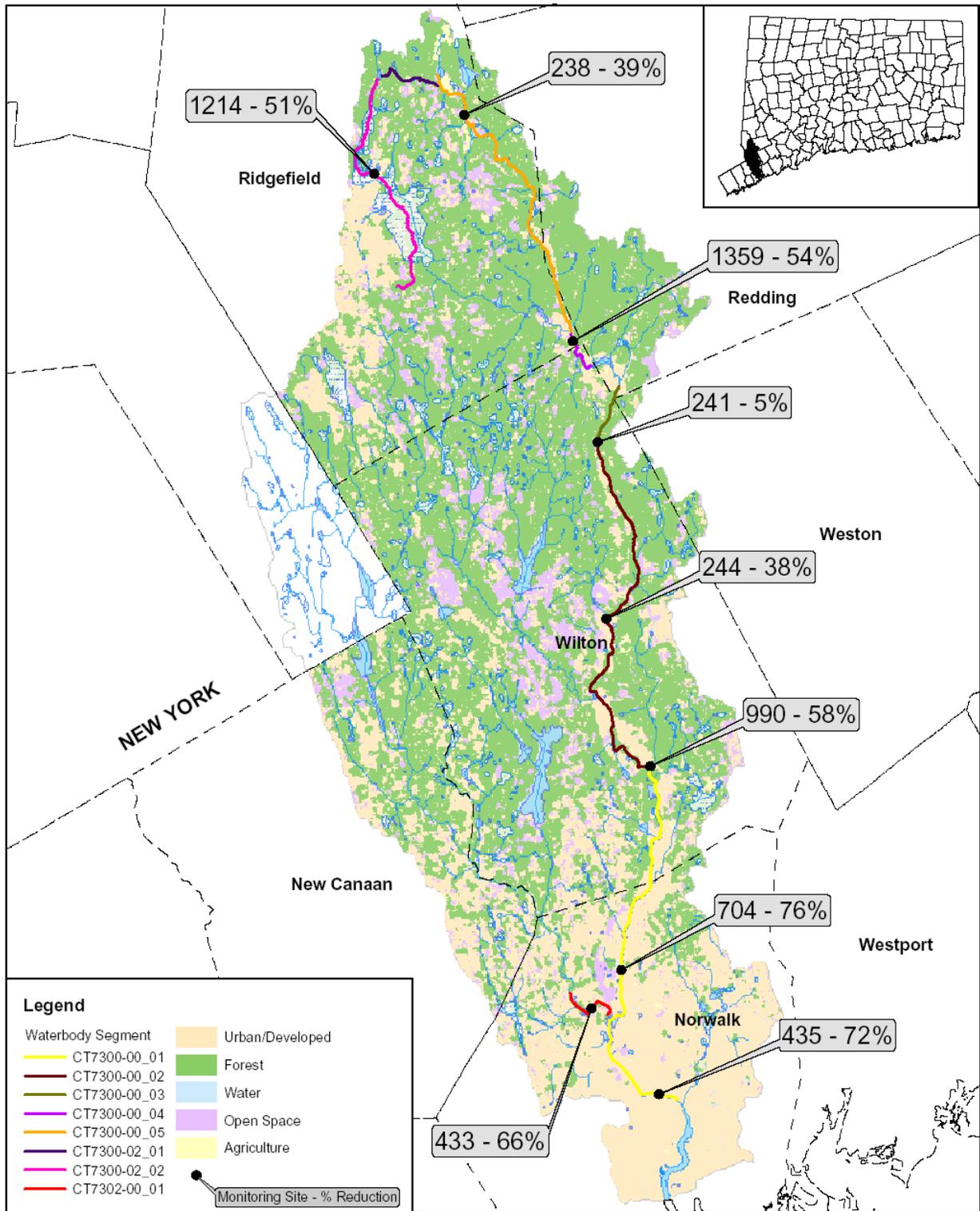
It is important to note that the TMDLs are effective for the entire watershed because they are a measurement of compounded impacts at a single point. As such, corrective actions must be undertaken at the source(s) whether it is a tributary or illicit discharge pipe, in order to achieve the required percent 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 Norwalk Regional Basin TMDL can be found on the CT DEP website at <http://www.ct.gov/dep/tmdl>.

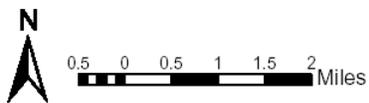
A Summary of TMDL Percent Reductions

Waterbody	Waterbody Segment Description	Segment ID	Monitoring Site	Average Percent Reduction to Meet Water Quality Standards			
				TMDL	WLA	LA	MOS
Norwalk River	From Rt. 1 (Norwalk) upstream to outlet of Little Pond and Ridgefield Brook (Ridgefield).	CT7300-00_01	435	72	74	70	Implicit
		CT7300-00_01	704	76	76	76	Implicit
		CT7300-00_01	990	58	60	56	Implicit
		CT7300-00_02	244	38	38	38	Implicit
		CT7300-00_03	241	5	9	3	Implicit
		CT7300-00_04	1359	54	53	55	Implicit
		CT7300-00_05	238	39	42	37	Implicit
Ridgefield Brook	From confluence with outlet of Little Pond and head of Norwalk River (Ridgefield) upstream to Great Swamp (Ridgefield).	CT7300-02_01*	1214	51	60	45	Implicit
		CT7300-02_02					
Silvermine River	From mouth at Deering Pond (Norwalk) upstream to Rt. 15 (Norwalk).	CT7302-00_01	433	66	67	65	Implicit

\*Current data is unavailable to conduct a TMDL analysis for the Ridgefield Brook segment, segment CT7300-02\_01. However, this small segment (1 linear mile) is located between two segments (CT7300-00\_05 and CT7300-02\_02) that require percent reductions. Therefore, it is reasonable to presume that the same percent reduction applies throughout Ridgefield Brook.



**Figure 3: Basin Land Use Map and TMDL % Reductions**



Map Data: CTDEP  
Map Created: April 2005