

Testimony
Robert Beaumont, Chairman Wallingford Public Utilities Commission
Before the Planning & Development Committee
March 21, 2012

Re: SB-440 AN ACT AUTHORIZING AMOUNTS IN THE CLEAN WATER FUND TO BE USED FOR PHOSPHOROUS REMOVAL.

The Town of Wallingford supports the intent of SB-440 which recognizes that a number of municipalities are faced with staggering costs associated with the state Department of Energy & Environmental Protection's (DEEP) plan to implement requirements relative to phosphorous removal. Although making Clean Water Fund moneys available for municipal water pollution control projects concerning phosphorous removal is helpful, it does not begin to cover the costs associated with DEEP's requirements relative to phosphorous removal. In addition, SB-440 fails to address concerns that there are more workable, cost-effective approaches to DEEP's requirements that will reduce phosphorous levels to protect rivers and streams without imposing crippling costs on our communities. .

The Town of Wallingford and a number of other municipalities are currently faced with enormous compliance burdens associated with DEEP's proposed permit requirements relative to phosphorous discharge limits. We understand that these requirements are driven by U.S. Environmental Agency ("EPA") initiatives but believe that the DEEP should work with the regulated community to develop a workable approach to this problem that will not impose crippling costs on our communities.

Currently Wastewater Treatment Plants ("WWTP's") are not regulated for phosphorous levels in their effluent. The DEEP is in the process of developing draft permits, with new limits for phosphorous, for operators of WWTP's that discharge into certain rivers and streams. The DEEP has determined that these discharges result in phosphorous levels that promote the growth of certain organisms. The DEEP maintains that this is the primary cause for streams failing to meet their designated use classifications. It is important to note that elevated phosphorous levels in streams and rivers do not pose a direct hazard to public health.

As indicated by the enclosed listing from the DEEP, some 45 entities in Connecticut will be affected by the new discharge standards. Unlike the regulations reducing nitrogen discharge, the purpose of which is to reduce the cumulative effect of discharges on nitrogen levels in Long Island Sound, phosphorous limits are intended to improve water quality in river reaches. The new limits will not apply to discharges into tidal waters, or for entities that discharge directly into the Connecticut River.

For Wallingford, Cheshire, Southington and Meriden, the four towns along the Quinnipiac River, compliance with the proposed permit limits would require a total capital investment of

approximately \$58 million, a total increase in plant operating costs of \$1.9 million per year and resultant rate increases that would range from 23% to 40% by town. For Wallingford alone the initial capital cost would be \$19 million with a resulting 32% rate increase.

The DEEP has indicated that all four towns can expect draft permits within the next two months with phosphorous limits varying by town from 0.1 ppm to 0.2 ppm. We note that, including the four Towns along the Quinnipiac, there are a total of twelve WWTP's in the state that would have discharge limits of 0.25 ppm or below. The current limit of removal technology is a concentration of 0.05 ppm. To put these removal limits in perspective we have listed below the cost for Wallingford to construct and operate treatment plant facilities to meet each proposed limit.

Discharge Limit (ppm)	Capital Cost	Annual Operating Cost	Rate Increase required
0.2	\$16 million	\$351,000	27%
0.1	\$19 million	\$423,000	32%
0.05	\$60 million	\$518,000	89%

In addition to the staggering costs for compliance with the proposed limits, the four towns have identified the following significant problems with the DEEP's approach:

1. In our opinion the DEEP has not clearly defined the expected improvement in water quality that would be achieved as a result of their proposed significant reductions in phosphorous discharge.
2. The DEEP has indicated that the phosphorous levels for all permits in this 5-year permit cycle are to be considered "interim" and that they may impose stricter limits in a subsequent permitting cycle. The DEEP has indicated that for this reason permitted entities "might be wise to build to the lower concentration limits".
3. The permit limits are also expressed in terms of pounds per day; these poundage limits are calculated using the proposed concentration levels multiplied by each plant's current flow rate. For Wallingford's WWTP the current average daily flow rate is 5.36 million gallons per day ("MGD"); the plant's design flow rate is 8.0 MGD. This means that, if Wallingford installed treatment technology that would achieve 0.2 ppm we would be locking in our plant capacity at less than design flows. This would be an untenable no-growth position. In other words, the stated permit limits can be misleading when it comes to their application in actual plant design.

Given the interim nature of the current limits and the need to build prudently for future demand, the general approach for the Quinnipiac River towns (and presumably for some of the other forty-one entities on the attached list) will be to design to a concentration that reflects full plant capacity. For Wallingford this would shift the project to the 0.1 ppm removal level.

4. The DEEP has acknowledged that non-point sources are contributors of phosphorous loading in CT rivers and streams. However, in its effort to reduce phosphorous loading, the DEEP is choosing to target only the NPDES permit holders and has not developed or promoted a comprehensive program to curtail non-point sources.

To date the DEEP has indicated that, although they appreciate our concerns regarding the cost impact of their proposed permit limits, their hands are effectively tied in this matter by EPA's directives regarding phosphorous removal. In order to move forward with the development of a workable solution to this apparent impasse we would welcome the opportunity to engage in a meaningful dialog with the DEEP and the U.S. EPA regarding the following topics that relate to both the Quinnipiac River basin and to the basins in which the other regulated cities and towns are located:

- The linkage or lack thereof between in-stream levels of phosphorous and water quality impairment.
- The impact on water quality that might be achieved through a significant reduction in non-point sources of phosphorous.
- Whether significant reductions in point source discharges of phosphorous are the most cost-effective means of improving stream quality.
- The beneficial impact on water quality that would be expected based upon phosphorous removal technology that would achieve significant levels of reduction, but at a cost that would be a fraction of that required to meet the standards currently proposed by the DEEP. We are hopeful that the DEEP will support this approach, which would allow time to fully evaluate the benefits to stream quality and whether additional removals are actually justified.

We therefore urge lawmakers to assist us in developing and implementing a more workable, cost-effective approach to comply with EPA standards. The Town of Wallingford and other stakeholders are certainly willing to work together to arrive at a workable solution to this issue but, thus far, that has proven difficult. **In addition, we urge lawmakers to also support an increase in the funding level for phosphorous removal project grants to 100% of the cost of the project and the creation of a specific set-aside within the Clean Water Fund sufficient to fund all phosphorous removal projects required pursuant to DEEP-imposed permit limits.** We would welcome any support your committee can provide us in developing reasonable compliance alternatives **and/or providing full grant funding support for phosphorous projects.**

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TABLE 1 SEASONAL PERMIT LOADS and PERFORMANCE LEVELS

Regional Watershed	NPDES	Average Performance Level (mg/L)	Permit Load (pounds / day)
Bantam River Watershed	LITCHFIELD WPCF	2.39	9.97
Blackberry River Watershed	NORFOLK SEWER DISTRICT	Cap	3.45
Blackberry River Watershed	NORTH CANAAN WPCF	Cap	4.29
Factory Brook Watershed	SALISBURY WPCF	0.62	1.97
Farmington River Watershed	PLYMOUTH WPCF	0.5	4.38
Farmington River Watershed	WINSTED WPCF	1.49	17.16
Farmington River Watershed	BRISTOL WPCF	0.1	7.48
Farmington River Watershed	PLAINVILLE WPCF	0.2	3.49
Farmington River Watershed	NEW HARTFORD WPCF*	Cap	10.92
Farmington River Watershed	CANTON WPCF	Cap	24.8
Farmington River Watershed	FARMINGTON WPCF	2	70.11
Farmington River Watershed	SIMSBURY WPCF	2.5	46.95
Fivemile River Watershed	NEW CANAAN WPCF	0.19	1.47
Hockanum River Watershed	VERNON WPCF	0.14	4.56
Hockanum River Watershed	MANCHESTER WATER & SEWER	0.25	13.21
Housatonic River Main Stem Watershed	New Milford WPCF*	Cap	5.76
Limekiln Brook Watershed	DANBURY WPCF	0.1	7.55
Naugatuck River Watershed	TORRINGTON WPCF	0.4	17.29
Naugatuck River Watershed	QUALITY ROLLING AND DEBURRING INC.	0.7	0.53
Naugatuck River Watershed	THOMASTON WPCF	1	7.35

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Regional Watershed	NPDES	Average Performance Level (mg/L)	Permit Load (pounds / day)
Naugatuck River Watershed	WATERBURY WPCF	0.2	34.26
Naugatuck River Watershed	NAUGATUCK WPCF	0.4	16.43
Naugatuck River Watershed	BEACON FALLS WPCF	1	2.67
Naugatuck River Watershed	SEYMOUR WPCF	0.7	7.54
Naugatuck River Watershed	ANSONIA WPCF	0.7	11.92
Norwalk River Watershed	RIDGEFIELD MAIN WPCF C/O OMI	0.1	0.52
Norwalk River Watershed	RIDGEFIELD RTE 7 C/O OMI*	1	1
Norwalk River Watershed	REDDING WPCF	Cap	1.08
Pomperaug River Watershed	SOUTHBURY HERITAGE VILLAGE WPCF*	Cap	10.92
Pootatuck River Watershed	NEWTOWN WPCF	Cap	4.01
Quinebaug River Watershed	THOMPSON WPCF	0.7	2.1
Quinebaug River Watershed	PUTNAM WPCF	0.7	8.41
Quinebaug River Watershed	KILLINGLY WPCF	0.7	18.23
Quinebaug River Watershed	PLAINFIELD NORTH WPCF	0.7	3.86
Quinebaug River Watershed	PLAINFIELD WPCF	0.7	2.51
Quinebaug River Watershed	GRISWOLD WPCA	0.7	2.92
Quinnipiac River Watershed	SOUTHINGTON WPCF	0.2	7.53
Quinnipiac River Watershed	CHESHIRE WPCF	0.2	4.06
Quinnipiac River Watershed	MERIDEN WPCF	0.1	8.71
Quinnipiac River Watershed	WALLINGFORD WATER & SEWER	0.2	8.95
Quinnipiac River Watershed	CYTEC INDUSTRIES INC.	0.1	1.49
Shetucket River Watershed	SPRAGUE WPCF	Cap	3.11

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Regional Watershed	NPDES	Average Performance Level (mg/L)	Permit Load (pounds / day)
Willimantic River Watershed	STAFFORD WPCA	Cap	8.61
Willimantic River Watershed	UCONN WPCF	Cap	23.76
Willimantic River Watershed	WILLIMANTIC WPCF	Cap	18.63