

# Town of Southington



## WATER POLLUTION CONTROL PLANT DENITRIFICATION PROJECT

### FACT SHEET

#### INTRODUCTION

The Town of Southington is undertaking a project to provide nitrogen removal at the Southington Water Pollution Control Plant (WPCP).

#### WHY DOES THE PLANT HAVE TO REMOVE NITROGEN?

The Connecticut Department of Environmental Protection has developed and implemented a General Permit for Nitrogen discharges. The Permit, which became effective in January of 2002, requires that WPCPs in Connecticut remove nitrogen.

#### WHAT ARE THE OPTIONS FOR REMOVING NITROGEN?

Build Denitrification Facilities to remove nitrogen at the WPCP or purchase nitrogen credits from the CT DEP.

#### WHAT ARE THE ADVANTAGES AND DISADVANTAGES OF THE NITROGEN REMOVAL OPTIONS?

	<b>Advantages</b>	<b>Disadvantages</b>
<b>Build Denitrification Facilities</b>	<ul style="list-style-type: none"><li>▪ Less costly over 20 years than buying credits.</li><li>▪ Funding assistance is available from the DEP for construction (may not be available in the future).</li><li>▪ Water quality benefit is provided to the Quinnipiac River and the Long Island Sound.</li><li>▪ After 20 years will have a facility that is still removing nitrogen.</li></ul>	<ul style="list-style-type: none"><li>▪ Requires capital expenditure and bonding of the project costs.</li><li>▪ Annual operating cost to operate the denitrification facilities.</li></ul>
<b>Purchase Nitrogen Credits</b>	<ul style="list-style-type: none"><li>▪ No construction required, so no additional capital or operating costs incurred.</li></ul>	<ul style="list-style-type: none"><li>▪ Must pay cost of credits annually.</li><li>▪ No funding assistance is available from the DEP.</li><li>▪ Purchasing credits would be more costly over the next 20 years.</li><li>▪ No water quality benefit is provided to the Quinnipiac River and the Long Island Sound.</li><li>▪ After 20 years will still need to buy credits.</li></ul>

#### SUMMARY

The estimated project cost for constructing Denitrification Facilities at the WPCP is \$14.5 million. In comparing the estimated costs to build and operate the denitrification facilities over a 20 year period to the cost to purchase credits from the state (based on the best estimates of credit costs available from the DEP), building the facilities would be the less costly approach to achieving compliance with the nitrogen permit requirements. In addition building the denitrification facilities will provide water quality improvement to the Quinnipiac River and the Long Island Sound over the next 20 years and into the future. Building the Denitrification Facilities is the recommended approach.