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It is estimated that it will cost roughly \$1.6 to \$2.4 billion to convert all of the 290 significant (over .5 million gallons per day) wastewater treatment plants in the Bay watershed from their current discharge levels down to 3 mg/l total nitrogen discharge through implementation of Nutrient Removal Technology. Due to economies of scale, the cost per pound of nitrogen reduced is greater in smaller facilities. This would equate for example to approximately \$10 million in capital for a given facility of about 4 MGD.

Existing Nutrient Removal Technology in the Chesapeake Bay watershed is currently operating to 8 mg/l (a traditional effluent concentration for this technology) in about 70 of the 290 wastewater treatment plants. By 2010, it is expected that a total of 139 facilities (69 additional facilities) will be operating Nutrient Removal Technology. To retrofit those plants to get reductions down to 3 mg/l total nitrogen, as well as to upgrade the remaining 151 facilities that have no specific plans for adding this technology, could cost up to \$2.4 billion.

Since each wastewater plant is different, even ones with the same capacity, it is difficult to determine an average cost per plant, but we can generalize about the costs for removing each pound of nitrogen from entering the local waters, and eventually the Bay. In general, implementing Nutrient Removal Technology to 8 mg/l costs about \$4/lb of total nitrogen removed. To go to 3 mg/l, this ratio would most likely go to something on the order of \$ 6-10/lb. However, even this remains cost effective as compared to many nutrient management techniques for non point source reductions. For example, urban stormwater control costs approximately \$150/lb and conservation tillage or animal waste management costs about \$7/lb.