**The New Hampshire Nitrogen Removal Program November 19, 2014**

The New Hampshire Department of Environmental Services (DES) in 2009 as part of the TMDL for the Great Bay Estuary published a proposal for the numeric criteria for wastewater treatment facilities discharging into the Great Bay Estuary. The Great Bay Estuary is located in southeastern New Hampshire and includes the Great Bay, Little Bay, the Upper Piscataqua River and Portsmouth Harbor.

There are 18 wastewater treatment plants that discharge into the Great Bay Estuary. 14 are located in New Hampshire and 4 in Maine. Of the 18 facilities six in New Hampshire are large enough to potentially need supplemental carbon for denitrification, Rochester, Exeter, Newmarket, Durham, Dover and Portsmouth. At present NPDES discharge permits with seasonal nitrogen limits (April-October) have been issued to Exeter, Newmarket and Dover. The facilities have been issued consent orders that will allow up to 5 years to place the nitrogen removal facilities into operation. The treatment technologies to be used to achieve the 3 mg/l total nitrogen limit are presently in the planning/evaluation phase and have not been determined with the exception of Portsmouth, NH. The Portsmouth WWTF is under design to remove nitrogen with a denitrification up flow filter process (Kruger/Veolia Biostyr). This process is being designed to utilize glycerin and does not have the capability to use methanol.

It is not anticipated that the Maine wastewater treatment facilities discharging into Great Bay will require supplemental carbon within the next 5 years.