The primary source of this nitrogen polluting Suffolk County is wastewater from septic systems. Nitrogen released from septic systems contaminates groundwater, the only drinking water source for County residents. Further, a great deal of nitrogen is conveyed through groundwater into the surface waters of Suffolk County, including the Great South Bay, Peconic Bay, Long Island Sound, and their tributaries. 3

This nitrogen pollution causes a multitude of direct health and environmental impacts. Excess nitrogen in coastal waters triggers algal blooms that reduce oxygen levels and water clarity, release foul odors, damage aquatic vegetation, kill fish, and produce toxic "red tides" and "brown tides" that endanger human health and make shellfish inedible.⁴ These algal blooms "have [] been identified as a primary contributor to the destruction of the once great shellfishing industry including a devastating reduction in the annual harvest of hard clams and scallops." Damage to coastal communities linked to nitrogen pollution was also found to have exacerbated destruction from SuperStorm Sandy in 2012.⁶

The County's own studies have clearly identified conventional septic systems as the primary cause of these unhealthful impacts. Septic tanks and cesspools, both large and small, are significant contributors to the nitrogen problem. Suffolk County has an extraordinary number of large septic systems: out of approximately 4,500 such systems statewide, more than 2,000 are in Suffolk County. Moreover, "[i]n Suffolk County, approximately 74 percent of homes are unsewered and discharge sanitary wastewater containing elevated nitrogen levels to the underlying groundwater that provides the

by far the best environmental, social, and economic solution available to the County to meet its obligations.

II. THE GREEN AMENDMENT

The Green Amendment requires each branch of government, including Suffolk County, to "conserve and maintain" the environment by imposing a duty to prevent and remedy the degradation, diminution, or depletion of public natural resources, such as clean water. ¹⁷ While it is beyond question that legislative and executive action is discretionary, that discretion is not without limits. The County "lacks the discretion to violate the Constitution," ¹⁸

