

**Testimony of David Sutherland – Director of Government Relations  
Before the Finance, Revenue, and Bonding Committee – March 22, 2010**

**In Support of Bonding for THE CLEAN WATER FUND.**

I am here today on behalf of The Nature Conservancy's 23,000 members in Connecticut to thank this committee for its past support for the Clean Water Fund, and to urge you to return its authorizations to 2008–09 levels – \$90 million in GO Bonds and \$180 million in Revenue Bonds annually. The involvement of unions, the Connecticut Construction Industries Association, the Council of Engineering Companies of Connecticut, and other business interests speaks to the extreme effectiveness of this program in creating high-quality jobs. I wish to address its critical role in maintaining and improving the quality of our rivers and Long Island Sound.

The amount of developed area in the State of Connecticut increased by 14.87% from 1985 (527,277 acres) to 2002 (605,709) acres (UCONN – CLEAR). The expansion has resulted in an increase of 21.70% in impervious surfaces over the same time period. Impervious surfaces are roads, driveways, parking lots roofs and other surfaces through which rainwater does not pass into the ground. Rather, much of this stormwater runoff is concentrated into drainage systems which are directed into streams or sewage systems if combined.

This increase in developed area and impervious surface has resulted in additional sewage and stormwater runoff that has likely outpaced system capacity and technology. Research across the nation indicates that water quality and stream health decline when impervious surface in a watershed exceed 10% due to increased runoff and inadequate stormwater management. As the amount of impervious surface exceeds 25%, impacts on water quantity and quality often become severe. Currently, there are 10–20 watersheds with impervious surfaces at or above the 25% threshold with many more above 10%.

Many of our rivers need the help this bill would provide. Research conducted by the Connecticut DEP indicated that 45% of the waterbodies (202) in the State do not fully support their designated uses per the Connecticut Water Quality Standards. Impaired designated uses include conditions that are detrimental to "aquatic life support", "shellfishing", "fish consumption", and human "recreational contact". Clearly, the

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national goal declared by Congress via the federal Clean Water Act "to provide for the protection and propagation of fish, shellfish, wildlife, and recreation in and on those waters" is not currently being met in far too many watersheds here in Connecticut.

One of primary recipients of excess sewage effluent and stormwater runoff from all of Connecticut's watersheds is Long Island Sound. Of particular concern is the increased supply of nutrients to the Sound from point sources (sewage outflow, stormwater discharge). One of the key components of the increased nutrient loading is nitrogen. Nitrogen has long been recognized by EPA's Long Island Sound Study as a principal threat to the life supporting systems of the Sound. Elevated levels of nitrogen fuel a biological response that eventually results in hypoxia - lower dissolved oxygen in the water column ( $< 3$  mg/l) and all too often anoxia ( $< 2$  mg/l) across large expanses of the Sound. The current standard in Connecticut waters of the Sound is  $> 5$  mg/l. Lower dissolved oxygen levels in the water column alter food webs and whole ecosystems of the Sound by directly killing bottom dwelling plant and animals (i.e., lobsters) resulting in dead zones devoid of marine life. While great steps have been taken to reduce nutrient loading, further effort is needed.

Investment in upgrades in sewage treatment facilities and innovative solutions for stormwater are needed to reduce current and prevent further impacts to Connecticut's rivers and Long Island Sound and keep pace with accelerating development rates.