



The State of New Hampshire  
**Department of Environmental Services**



**Clark B. Freise, Assistant Commissioner**

March 22, 2017

The Honorable Chris Christensen,  
Chair, House Resources, Recreation and Development Committee  
Legislative Office Building, Room 305  
Concord, NH 03301

RE: SB 127 – An Act relative to dissolved oxygen concentration water quality standards.

Dear Chair Christensen and Members of the Committee:

Thank you for the opportunity to comment on SB 127, which would eliminate the criteria for dissolved oxygen saturation in surface waters, authorize the New Hampshire Department of Environmental Services (NHDES) to adopt rules for a dissolved oxygen concentration criteria in freshwater and saline waters, and prohibit the use of 7Q10 flows for determining effluent limits for nutrient discharges. NHDES supports the legislation as amended.

Dissolved Oxygen (DO) is the amount of gaseous oxygen dissolved in water. DO is important in a number of ways, primarily in the health and survival of aquatic creatures. Reduced DO causes decreased growth of aquatic organisms, shifts in habitat selection, increased vulnerability to predation, increased disease, altered food webs, and death. New Hampshire Water Quality Standards (found in Env-Wq 1700) set a minimum for DO, which is protective of aquatic life.

NHDES supports the concept of reviewing the criteria, and moving some of the criteria from statute to rule which would facilitate updates based on the latest science. To our knowledge, the current DO criteria protects aquatic life from harmful effects. It should be noted that confirming that conclusion is complex, and is already under study by the Water Quality Standards Advisory Committee - WQSAC (an open committee of stakeholders and experts who advise NHDES on water quality issues) which recently formed a DO Workgroup to address this very issue.

NHDES also suggests, for the committee's consideration, an addition to Section 3 (page 2 lines 8-9), as follows: Add "XV. Water quality standards consistent with RSA 485-A:8 and as required by the Clean Water Act. " This change would clarify NHDES' rule-making authority to make water quality standards per the Clean Water Act. We are

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concerned that the addition of the specific language regarding dissolved oxygen could imply that is the sole parameter over which the state has authority. It is in the state's interest for NHDES to adopt water quality standards rather than the EPA, which is the result if the state fails to set (or lacks the authority to set) those standards.

Thank you again for the opportunity to comment on SB127. If you have further questions or need additional information, please contact Ted Diers ([ted.diers@des.nh.gov](mailto:ted.diers@des.nh.gov), 271-3289) or Gregg Comstock ([gregg.comstock@des.nh.gov](mailto:gregg.comstock@des.nh.gov), 271-2983).

Sincerely,  


Clark B. Freise  
Assistant Commissioner

Enclosures

cc: Senators Gray and Watters