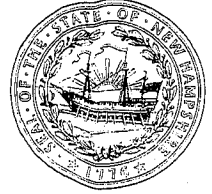




The State of New Hampshire  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**



**Thomas S. Burack, Commissioner**

October 2, 2007

The Honorable Scott Myers, Mayor  
City of Dover  
288 Central Avenue  
Dover, NH 03820

The Honorable Michael X. Watman, Mayor  
City of Somersworth  
1 Government Way  
Somersworth, NH 03878

Dear Mayors Myers and Watman:

On September 6, 2007, Department of Environmental Services (DES) staff met with members of the Planning and Engineering Departments of the Cities of Dover and Somersworth to discuss the Willand Pond water quality issues and possible steps toward a long term solution. Paul Currier, DES Watershed Bureau Administrator, has since reported to me that this was a very productive meeting and that our working relationship with the Dover and Somersworth professional staff on this project is outstanding. There is a real opportunity for DES, the City of Dover, the City of Somersworth, and the Strafford Regional Planning Commission (SRPC) to work in partnership to improve Willand Pond water quality for the long term, and for this to serve as a model of intergovernmental cooperation for the management and improvement of water quality in New Hampshire ponds with highly developed watersheds.

The purpose of this letter is to provide a framework for further discussions by outlining a possible action plan for moving forward together. This framework was presented for discussion by Paul Currier at a follow-up meeting on September 27, 2007.

The cyanobacteria blooms that occurred this summer in Willand Pond were likely caused by a combination of conditions that include: (1) stormwater from developed areas of the watershed discharging nutrients to the pond, and (2) water levels in Willand Pond becoming chronically too high, primarily due to the lack of a well-defined outlet. The result is flooding of the surrounding lands, which increases nutrient concentrations and summer water temperatures. To improve water quality, actions are necessary to reduce both nutrient sources and flooding.

Below we have outlined a series of possible steps for the next six to nine months that could serve to initiate improvements intended to address these concerns:

1. With technical assistance from the DES Limnology Center, the cities should develop a water quality monitoring program for Willand Pond and its watershed. We recommend the collection of data monthly, including, at a minimum, phosphorus concentrations, water levels and rainfall.
2. The Cities of Dover and Somersworth should consider applying jointly to DES for a 319 Nonpoint Source Restoration grant for development of a restoration project consistent with the guidelines. The application deadline for submission is October 19, 2007. Note that grant applications are ranked based on established criteria and grants are awarded on a competitive basis, so there is no guarantee of funding.

DES Web site: [www.des.nh.gov](http://www.des.nh.gov)

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095

Telephone: (603) 271-3503 • Fax: (603) 271-2867 • TDD Access: Relay NH 1-800-735-2964

3. DES and the Cities of Dover and Somersworth should collectively implement a "no additional runoff volume and no net nutrient loading" requirement for all future projects in the Willand Pond Watershed. DES has already "flagged" this area for this purpose for projects that require alteration of terrain (AoT) or wetlands permits. DES can also work with SRPC and the Cities to develop technical specifications and ordinance provisions that would provide similar conditions for smaller projects which require local site plan review but not state review.
4. The Cities should consider the creation of a map using geographic information system (GIS) software to delineate the Willand Pond watershed. The map should include details of watershed features such as the existing stormwater infrastructure, tributary areas, outlets, land cover (including buildings and paved areas), elevation contours, and property lines. The development of this map would assist with watershed management activities.
5. The Cities, with technical assistance from DES, should plan and design construction of a surface outlet channel as follows:
  - a. Conduct a detailed site visit as soon as the GIS map is available in Item 4 above.
  - b. Retain an environmental consultant to assist with outlet design.
  - c. Conduct a watershed runoff analysis to determine the necessary size of a new outlet channel.
  - d. Prepare design plans and obtain state/local permits.
  - e. When funding is available, a contract should be awarded to complete the outlet creation project.
6. With assistance from DES, the Cities should conduct an education and outreach program for Willand Pond watershed property owners to promote understanding of the problem and the solutions.
7. In the longer term, the Cities should develop a strategy that considers options to retrofit Best Management Practices (BMPs) onto the existing stormwater conveyance systems to reduce nutrient loads from developed lands.

In conclusion, I am confident that this partnership can implement solutions to Willand Pond's water quality issues that will restore the pond for recreation and aquatic ecosystem uses over time.

Should you have any questions, please contact Paul Currier at 271-3289. We look forward to working with you to solve the water quality problems in Willand Pond.

Sincerely,



Thomas S. Burack  
Commissioner

cc: Harry Stewart, Director, DES Water Division  
Paul Currier, Administrator, DES Watershed Bureau  
Jody Connor, Director, DES Limnology Center  
Senator Iris W. Estabrook  
Senator Jacalyn L. Cilley  
Representative Thomas R. Fargo  
Representative Roland P. Hofemann  
Christopher Parker, City of Dover  
Craig Wheeler, City of Somersworth  
Cynthia Copeland, Strafford Regional Planning Commission