

# MAINE STATE LEGISLATURE

The following document is provided by the  
**LAW AND LEGISLATIVE DIGITAL LIBRARY**  
at the Maine State Law and Legislative Reference Library  
<http://legislature.maine.gov/lawlib>



Reproduced from scanned originals with text recognition applied  
(searchable text may contain some errors and/or omissions)



# 122nd MAINE LEGISLATURE

## FIRST SPECIAL SESSION-2005

---

Legislative Document

No. 1533

H.P. 1078

House of Representatives, April 4, 2005

### An Act To Prevent Algae Blooms in Gulf Island Pond

---

Reference to the Committee on Natural Resources suggested and ordered printed.

*Millicent M. MacFarland*  
MILLICENT M. MacFARLAND  
Clerk

Presented by Representative PINEAU of Jay.  
Cosponsored by Senator NUTTING of Androscoggin and  
Representatives: CLARK of Millinocket, FLETCHER of Winslow, HOTHAM of Dixfield,  
JENNINGS of Leeds, PATRICK of Rumford, SHERMAN of Hodgdon, Senators: BRYANT  
of Oxford, MARTIN of Aroostook.

2 **Be it enacted by the People of the State of Maine as follows:**

4 **Sec. 1. 38 MRSA §464, sub-§10-A is enacted to read:**

6 10-A. Existing hydropower impoundments managed as major  
8 river basins; recreational use. For the purposes of water  
10 quality certification under the Federal Water Pollution Control  
12 Act, Public Law 92-500, Section 401, as amended, and the  
14 licensing of modifications under section 636, the hydropower  
16 project located at Gulf Island Pond on the water body referenced  
18 in section 467, subsection 1, paragraph A, subparagraph (2) is  
20 not deemed to have met the recreational use criteria in the  
22 hydropower project impoundment unless:

24 A. Monitoring and forecasting is conducted of water  
26 conditions, including, without limitation, phosphorus,  
28 nitrogen, oxygen, sediment conditions, temperature and river  
30 flow, on an ongoing basis; and

32 B. Changes in the operating regimen of the hydropower  
34 project are implemented that would, based on information  
36 obtained in paragraph A, result in improvement of the  
38 suitability of the hydropower project impoundment for  
40 recreational uses in and on the water, including, without  
42 limitation, mitigation of algae blooms resulting in  
44 unsuitable conditions for water contact recreation.

46 If the monitoring and forecasting under paragraph A predict the  
48 likelihood of algae blooms, then changes in the operating regimen  
50 of the hydropower project must be implemented immediately to  
prevent the occurrence of algae blooms. For purposes of  
paragraph B, changes include, without limitation, lowering water  
body temperature, changing river flow or implementing water  
drawdowns at selected periods during summer stratification of the  
water body.

All facilities with wastewater discharge licenses that discharge  
phosphorus into the water body referenced in section 467,  
subsection 1, paragraph A, subparagraph (2) shall fund, on a pro  
rata basis based on wastewater discharge license limits of summer  
biological oxygen demand wastewater discharges in effect on  
January 1, 2005, the development of a real-time monitoring and  
modeling system capable of computing flow fields and nutrient  
water quality parameters sufficient to allow accurate forecasting  
of triggers for drawdown of the hydropower project impoundment to  
prevent algae bloom or anoxic events. This modeling, which must  
build on existing department modeling, must be done under the  
supervision of the department and must be completed on or before  
February 1, 2006. Modification to the protocols for the  
operating regimen of the hydropower project must be implemented  
on or before May 1, 2006.

2 On or before October 15, 2008, the facilities jointly shall  
4 provide a report to the joint standing committee of the  
6 Legislature having jurisdiction over natural resources matters  
8 documenting the effects of the changes. Prior to that date, the  
10 activities undertaken pursuant to this subsection are in lieu of  
12 the establishment of any water quality effluent limitation for  
14 phosphorus for this water body and the department shall  
16 coordinate with the United States Environmental Protection Agency  
18 with regard to implementing this alternative to establishing  
20 further phosphorus limits.

22 When the actual water quality of water affected by this  
24 subsection attains any more stringent characteristic or criteria  
26 of that water's classification, that water quality must be  
28 maintained and protected.

## SUMMARY

20 This bill requires ongoing monitoring of certain water  
22 quality conditions at the hydropower project at Gulf Island  
24 Pond. It also requires forecasting of water conditions and, if  
26 required based upon the forecasting, implementation of changes to  
28 the operating regimen of the hydropower project at Gulf Island  
30 Dam. If the monitoring and forecasting predict the likelihood of  
32 algae blooms, these changes must be implemented immediately and  
34 include, without limitation, lowering water body temperatures,  
36 changing river flow or implementing water drawdowns at selected  
38 periods during summer stratification of the water body. These  
40 changes will improve the suitability of the water body for water  
contact recreation by preventing the algae blooms that contribute  
to unsuitable aesthetic conditions for swimming. This bill also  
provides that the wastewater discharge licensees will pay for the  
appropriate monitoring and modeling system in order to implement  
this legislation. The modeling must be conducted under the  
supervision of the Department of Environmental Protection. After  
the modeling is complete, this bill provides that this program be  
in place 3 summer seasons prior to consideration of additional  
phosphorus limitations being placed on the wastewater discharge  
licensees.