

# Bill as Introduced

HB 1299 - AS INTRODUCED

2010 SESSION

10-2086  
08/04

HOUSE BILL           **1299**

AN ACT               establishing a committee to study enacting a moratorium on the sale and use of fertilizers containing phosphorus.

SPONSORS:           Rep. Beaulieu, Hills 17; Rep. Tupper, Merr 6; Rep. S. Smith, Graf 7

COMMITTEE:          Environment and Agriculture

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ANALYSIS

This bill establishes a committee to study enacting a moratorium on the sale and use of fertilizers containing phosphorus.

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Explanation:       Matter added to current law appears in ***bold italics***.  
                      Matter removed from current law appears [~~in brackets and struck through~~].  
                      Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

STATE OF NEW HAMPSHIRE

*In the Year of Our Lord Two Thousand Ten*

AN ACT                    establishing a committee to study enacting a moratorium on the sale and use of  
                                 fertilizers containing phosphorus.

*Be it Enacted by the Senate and House of Representatives in General Court convened:*

1            1 Committee Established. There is established a committee to study enacting a moratorium on  
2 the sale and use of fertilizers containing phosphorus.

3            2 Membership and Compensation.

4            I. The members of the committee shall be as follows:

5            (a) Three members of the house of representatives, appointed by the speaker of the  
6 house of representatives.

7            (b) Three members of the senate, appointed by the president of the senate.

8            II. Members of the committee shall receive mileage at the legislative rate when attending to  
9 the duties of the committee.

10          3 Duties. The committee shall study enacting a moratorium on the sale and use of fertilizers  
11 containing phosphorus.

12          4 Chairperson; Quorum. The members of the study committee shall elect a chairperson from  
13 among the members. The first meeting of the committee shall be called by the first-named house  
14 member. The first meeting of the committee shall be held within 45 days of the effective date of this  
15 section. Four members of the committee shall constitute a quorum.

16          5 Report. The committee shall report its findings and any recommendations for proposed  
17 legislation to the speaker of the house of representatives, the president of the senate, the house  
18 clerk, the senate clerk, the governor, and the state library on or before November 1, 2010.

19          6 Effective Date. This act shall take effect upon its passage.

# Amendments

Amendment to HB 1299

1 Amend the title of the bill by replacing it with the following:

2

3 AN ACT prohibiting the sale and distribution of residential lawn fertilizer containing  
4 phosphorus.

5

6 Amend the bill by replacing all after the enacting clause with the following:

7

8 1 Subdivision Heading. Amend the subdivision heading prior to RSA 485-A:55 to read as  
9 follows:

10 Certain [~~Household-Cleansing~~] *Residential* Products Prohibited

11 2 Definitions. Amend RSA 485-A:55 to read as follows:

12 I. [~~Household-cleansing product~~] "*Residential products*" means any product, including  
13 but not limited to, *lawn fertilizers* soaps and detergents used for domestic cleaning purposes,  
14 including, but not limited to, the cleansing of fabric, dishes, food utensils and household premises.

15 II. "Phosphorus" means elemental phosphorus.

16 III. "Trace quantity" means an incidental amount of phosphorus which is not part of the  
17 [~~household-cleansing~~] *residential* product formulation, is present either as a consequence of  
18 manufacturing, to assure product performance for purposes other than cleansing, or to assure  
19 container stability, and does not exceed 0.5 percent of the content of the product by weight,  
20 expressed as elemental phosphorus.

21 3 Products Prohibited. Amend RSA 485-A:56 to read as follows:

22 485-A:56 Products Prohibited.

23 I. No [~~household-cleansing~~] *residential* products except those used for lead exposure hazard  
24 control purposes shall be distributed, sold or offered for sale in this state, which contain a  
25 phosphorus compound in concentrations in excess of a trace quantity.

26 II. *Fertilizers containing phosphorus shall not be used on residential lawns and*  
27 *turf in New Hampshire, unless one of the following situations exists:*

28 (a) *A soil test or plant tissue test submitted to the New Hampshire department*  
29 *of environmental services shows a need for phosphorus.*

30 (b) *A new lawn is being established.*

31 4 Effective Date. This act shall take effect July 1, 2011.

2010-0639h

AMENDED ANALYSIS

This bill prohibits the sale of residential lawn fertilizers containing phosphorus.

"Not Adopted"

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2010-0639h

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This bill prohibits the sale of residential lawn fertilizers containing phosphorus.



# Speakers

# SIGN UP SHEET

To Register Opinion If Not Speaking

PHOSPHORUS

Bill # HB 1299 Date 2-11-10

Committee Environment + Agriculture

\*\* Please Print All Information \*\*

Name	Address	Phone	Representing	(check one)	
				Pro	Con
Naney Papp	25 Main Street	284-9995	Moms	X	
Olivia Brooke Papp	age 8		Children	X	
(Part) Bonnie Curry	Litchfield, NH 5 Pleasant St.	889-3096	myself	X	
Andrew Owens	9 S. View Rd., Kene, NH	603-352-8855	MYSELF	X	
Virginia Heard	5 Colledge Farm Rd.		myself	X	
Martin Schmitt	10 Bellflower C. Dr. Concord NH	603 334-3907	Agro-Turf		X
Michael Peaslee	100 Pleasant St 15 Rumbold St	800-884-8800	Moderated		X
Frances Gehling	38 Hymen St London VT 03253	437-3966	self	✓	
Rep. Timothy Torrey			Stratford 7	✓	
Kathryn J. Hob				✓	
Amy Pollard	223 South Main St. Newmarket, N.H. 03857			✓	
Phil Waller	301 Stark Hwy W Dunbarton	774-3909		✓	
Jared Teutsch	84 Silk Farm Rd, Concord NH		LAKES	✓	
Jacque Colburn	NHDES 29 Hazen Drive Concord NH			✓	
Josh Arnold	3 Pork Hill Ossipee, NH 03864			✓	
Jasen Stark	Concord, NH	224-9699	NH Timberland owners Assoc		X
Robert Johnson, II	295 Sheep Davis Rd, Concord	224-1934	Farm Bureau		✓
Charles Townsend	49 Hall Rd, Concord	603 391 0316	Rep-Grafton, 10	X	
Catherine Holland	-Rep Grafton 10			✓	
Rep Susan Kerner	Dud 15 Hampton	926-3051	Self	✓	
Jonathan Gregory	11 Washington St Concord	568-3838	Self	✓	
Robert Fenton	110 Hills Rd. Pittsfield	435-5478	NOFA/self	✓	
Nick Schneider	32 Mechanic St, Winchester NH	913-5254	Concord pop market	✓	



# Hearing Minutes

HOUSE COMMITTEE ON ENVIRONMENT AND AGRICULTURE

PUBLIC HEARING ON HB 1299

**BILL TITLE:** establishing a committee to study enacting a moratorium on the sale and use of fertilizers containing phosphorus.

**DATE:** February 11, 2010

**LOB ROOM:** 308      **Time Public Hearing Called to Order:** 10:00 a.m.

**Time Adjourned:** 1:30 p.m.

(please circle if present)

**Committee Members:** Reps. Sad Beaulieu, Owen P. Alex, Webb, Beauchamp, Lindsey, Poznanski, S. Smith, Wiley, Haefner, Messier, B. Williams, Knox, Gandia, Groen, Palmer and Tucker.

**Bill Sponsors:** Rep. Beaulieu, Hills 17; Rep. Tupper, Merr 6; Rep. S. Smith, Graf 7

TESTIMONY

\* Use asterisk if written testimony and/or amendments are submitted.

**Rep. Jane Beaulieu** - Prime sponsor of the bill. Amendment replaces original bill. Does away with study committee.

\* **Debra Vanderbeek, RISE** - Opposes the bill. Specialty fertilizer products – used around homes, gardens, turf grasses, golf course. Need products to maintain phosphorus necessity for human life and plants are similar. Products specifically designed. Rainfall minimize runoff. Noise minimize runoff. Heat minimize runoff. Airborne particulates. Unwanted studies healthy turf grass reduces runoff. Land shore protection act.

\* **Jacque Colburn, NH Department of Environmental Services (DES)** - Supports the bill. Nitrogen and phosphorus both expand the study group. Glad to work with study committee.

**Jody Connor** - For health of animals and people, need to keep water healthy.

Rep. Williams: Amendment too hard to enforce, yes agreed.

\* **Richard Uncles, Director, Department of Agriculture** - Opposes the bill. Essential nutrients required by plants. Phosphorus binds to soil and it doesn't leach. Could cause problems when runoff.

How is theirs placed in statute and it should be in Agriculture not DES.

Technical concern "lawn fertilizer" – only residential. What about commercial?

Elemental phosphate vs. available phosphate – use the wrong terminology. Some states with services watershed problems have outlawed usually local shoreline protection takes care of misuse. Never any complaints. Does the problem really exist? Fertilizer must be applied properly. Is there an alternative for phosphorus – no sleep Uncles. Original bill seemed pre-disposed to a moratorium. Yes, study group if it is plant and soil scientists.

Rep. Williams: Membership wrong – no way, 3 Senators.

\* **Jared Teutsch, NH Lakes** - Supports the bill. Narrowly tailored to residential lawns and lakes. Ban is unenforceable – buy lawn fertilizer that is i.e. 10-0-5. Not issue with Agriculture or Forestry. Milfoil will release elemental phosphorus.

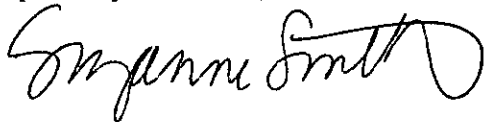
Rep. Haefner: Should we be pushing this at the Federal level? Two states – Minnesota passed and enforced and Maine passed something that may be volunteer.

**Dan Holmes** - Supports the bill. Peterborough, organic farm needs growth and quality committee to learn how important it is to us.

**Shawn Papp** - Supports the bill. Availability of iron, aluminum, and calcium higher ph more soluble moratorium would be harmful.

**Tim O'Connell, Butter Farm** - Opposes the bill. Phosphorus definite need for all plants, essential to cells.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Stephanie Smith". The signature is fluid and cursive, with a large loop at the end.

HOUSE COMMITTEE ON ENVIRONMENT AND AGRICULTURE

PUBLIC HEARING ON HB 1299

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**DATE:** 2/11/10

**LOB ROOM:** 308

**Time Public Hearing Called to Order:** 10:00 am

**Time Adjourned:**

(please circle if present)

**Committee Members:** Reps. Sad, Beaulieu, Owen, P. Allen, Webb, Beauchamp, Lindsey, Poznanski, S. Smith, Wiley, Haefner, Messier, B. Williams, Knox, Gandia, Groen, Palmer and Tucker

**Bill Sponsors:** Rep. Beaulieu, Hills 17; Rep. Tupper, Merr 6; Rep. S. Smith, Graf 7

TESTIMONY

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Absent - Pozniarski  
Beecham 12<sup>50</sup>  
Allen  
Lyndsey  
Smith

HB 1299

2/11/10 12<sup>40</sup>

Jane B #17 W. Manchester  
Member Association

Amendment replaces original bill. Goes away  
with <sup>Study</sup> Committee.

Vander Bleek - Specialty fertilizer products - used around  
homes, gardens, <sup>turf grasses</sup> golf course. Need products to maintain.  
Phosphorus rec. for human life & plants are similar.  
Products specifically designed  
Rainfall - minimize runoff  
Noise  
Heat  
Airborne particulates

Unw. studies healthy turf grass reduces runoff

? Land shore protection act

Ms. Jacques Colburn DES - Lakes Coordinator - Bill as introduced.  
Was in favor. Nitrogen & phosphorus both - expand the  
study group. Glad to work with study committee.

Jody Connor? for health of animals & people - need to  
keep water healthy.

Rep. Wm's Amendment too hard to enforce, yes agreed

Dick Unkle - Regulatory Services - <sup>Sept.</sup> opposed Essential  
nutrients required by plants. Phosphorus binds to  
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runoff.

Trouble - How is this placed in statute and it should be in  
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Technical concern "lawn fertilizer" - only residential -  
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~~The same~~ Elemental phosphate vs. Available phosphate -  
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Some states with serious watershed problems  
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Shoreline Protection takes care of mis use. Reversing complaints

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moratorium would be harmful.

Tim O'Connell - Phosphorus definite need for all plants, essential <sup>to</sup> cells

# Testimony



Members dedicated to protecting lakes

February 11, 2010

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*Education Director*  
Jared A. Teutsch (Northfield)  
*President*

Representative Tara Sad  
Environment and Agriculture Committee  
New Hampshire House of Representatives  
Legislative Office Building, Room 308  
Concord, New Hampshire 03301

Subject: HB 1299 Amendment prohibiting the sale and distribution of residential lawn fertilizer containing phosphorus.

Dear Madam Chair and Members of the Committee:

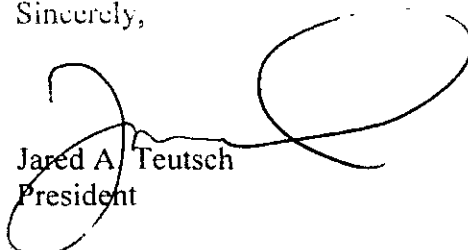
Thank you for the opportunity to testify about House Bill 1299. On behalf of New Hampshire Lakes Association (NH LAKES), a 501(c)3 nonprofit organization representing over 26,000 lake enthusiasts, we support HB 1299 if amended and urge the Committee to vote Ought to Pass as amended.

NH LAKES has long supported water quality protection as the basic means for promoting and enhancing the quality of life along our lakes. Unfortunately, there are a growing number of water quality threats associated with increased phosphorus loading into our lakes and ponds. Luckily, residential lawn fertilizers containing low and no phosphorus are readily available today through most manufacturers with little to no price difference.

In addition, phosphorus in residential lawn fertilizers is, in most cases, a completely unnecessary pollutant that ends up in our lakes and ponds. Without proper regulation, phosphorus can encourage overabundant plant and algal growth which can lead to increased problems with toxic algal blooms and the increased growth of exotic invasive aquatic weeds. Toxic algal blooms are undesirable because they release toxins in the water that can cause severe injury to swimmers and pets. Exotic invasive aquatic weeds can reduce recreational enjoyment and value of our public waters. By eliminating a significant contributor of phosphorous pollution at its manufacturing sources, we are able to greatly reduce its impact on lakes and those who use lakes.

For these reasons, NH LAKES supports HB 1299, and urges the Committee to vote *Ought to Pass as amended*. Thank you.

Sincerely,



Jared A. Teutsch  
President



Members dedicated to protecting lakes

Phosphorus in New Hampshire Soils:

Approximately 25% of phosphorus stream loads in New Hampshire derive from agricultural and developed lands (Moore et. al. 2004), and the application of fertilizer to crops, lawns, and home gardens is a major component of this runoff. Many farmers and homeowners apply more phosphorus to their crops and lawns than is required, and much of this excess ends up in streams and lakes. The ecological affects of this non-point pollution are well documented. It is important for us to know how much additional phosphorus, if any, our plants need so that we may limit the potential ecological damage.

First off, we must understand how much P is required by our plants, and this depends on the method used to extract the Phosphorus from the soil for testing. The University of New Hampshire Cooperative Extension (UNHCE) operates a comprehensive soil testing program and they use the Mehlich-III method of extraction. The UNHCE recommends that New Hampshire soils contain between 30 and 50 ppm of phosphorus (Adams 2004). Daniels et. al. (1999) agree that there is no need for concentrations to be higher than 50 ppm for grasses and forage crops. If one's soil naturally contains the necessary amount of phosphorus, the application of more will not significantly increase lawn or crop growth, and much of the excess is likely to runoff. As more phosphorus is applied to the soil, the concentration in the runoff that will eventually enter lakes increases more or less linearly (Daniels et. al. 1999, Vadas et. al. 2005, Soldat et. al. 2008), although distance from significant streams or water bodies, slope, soil type, buffer strips and crop or forage cover are also factors (Daniels et. al. 1999). Once concentrations reach 150 ppm, excessive Phosphorus runoff from a particular field, garden, or lawn becomes an environmental concern (T. Buob, personal comm., Daniels et. al. 1999).

So how much phosphorus is already present in New Hampshire soils? Phosphorus levels in New Hampshire tend to be naturally high, and in many developed areas the concentration has been augmented by excessive fertilizer application in the past. Buob & Rochette (2003) found that 70% of agricultural soil samples (tested by UNHCE) from the Connecticut River watershed contained over 50 ppm of P, which is above the optimal range for agricultural soils. Similar trends exist in data collected more recently and from different types of land use. The table below displays the percentages of samples over 30 ppm (minimum concentration needed for healthy plant growth), 50 ppm (high end of the optimal range), and 150 ppm (potential for high concentration of P in runoff) for different land uses.

<b>Results of UNHCE Soil Sample Tests - Phosphorus Concentrations</b>				
<b>Land Use</b>	<b>Average (ppm)</b>	<b>Percentages of Samples with Concentration Higher Than:</b>		
		<b>30 ppm</b>	<b>50 ppm</b>	<b>150 ppm</b>
Residential Lawns & Gardens	175	86	77	42
Corn, Forage, & Pasture Crops	112	80	64	26
Commercial Fruit	144	82	69	35
Commercial Vegetables	225	94	87	55
Commercial Turf	105	82	64	24

Table 1: Phosphorus concentrations in New Hampshire soils. Raw data courtesy of Tom Buob and Michael Toepfer of UNHCE.

For \$12, the UNHCE will test a soil sample for phosphorus, pH, and other nutrients and will also offer fertilizer recommendations. Farmers and homeowners would be wise to take advantage of this service to determine the optimal level of phosphorus application.

Many governments around the country have placed bans on fertilizers containing phosphorus to address water quality concerns. Three states - Florida, Minnesota, and Maine - have banned or restricted the sale or use of such fertilizers, as have Westchester County in New York, Dane County in Wisconsin, the city of Annapolis, Maryland, and several counties in Michigan. A number of these bans do allow for individuals to apply phosphorus to the soil as long as a soil test indicates a phosphorus deficiency (as is sometimes the case for new lawns). In New Hampshire, for example, 14% of residential lawn and garden soil samples contained less than 30 ppm of P.

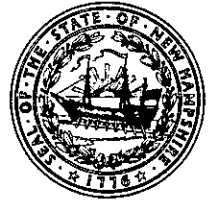
Despite these bans, there has been surprisingly little effort in testing their efficacy of reducing the concentration of P in lakes and streams. Recognizing this, Lehman et. al. (2009) developed a method to assess the change in Huron River phosphorus as a result of the ban enacted in Ann Arbor in 2007. Using sound statistical methods, the researchers determined that significant reductions of the total phosphorus in the river (measured one year after the ban was enacted) averaged 28%.

## References

- Adams, N., 2004. Understanding your soil test results. Printed by the University of New Hampshire Cooperative Extension. Available online at [http://extension.unh.edu/resources/resource/496/Understanding\\_Your\\_Soil\\_Test\\_Results](http://extension.unh.edu/resources/resource/496/Understanding_Your_Soil_Test_Results)
- Buob, T.E. & Rochette, E.A., 2003. State of phosphorus in soils of the Connecticut River watershed in New Hampshire. *Communications in Soil Science and Plant Analysis* 34 (7 & 8), pp. 1177-1192.
- Daniels, M. B., Daniel, T., Carman, D., Morgan, R., Langston, J., and VanDevender, K., 1999. Soil Phosphorus Levels: Concerns and Recommendations. Univ. of Arkansas Coop. Ext. Ser. Fact Sheet #FSA1029-4M-6-98-N.
- Lehman, J.T., Bell, D.W., and McDonald, K.E., 2009. Reduced river phosphorus following implementation of a lawn fertilizer ordinance. *Lake and Reservoir Management* 25 (3), pp. 307-312.
- Moore, R.B., Johnston, C.M., Robinson, K.W., and Deacon, J.R., 2004. Estimation of total nitrogen and phosphorus in New England streams using spatially referenced regression models. USGS Scientific Investigations Report 2005-5012. Available online at <http://pubs.usgs.gov/sir/2004/5012/>
- Soldat, D.J., Petrovic, A.M., and Ketterings, Q.M., 2009. Effect of soil phosphorus levels on phosphorus runoff concentrations from turfgrass. *Water Air Soil Pollut* 199, pp. 33-44.
- Vadas, P.A., Kleinman, P.J.A., Sharpley, A.N., and Turner, B.L., 2005. Relating soil phosphorus to dissolved phosphorus in runoff: a single extraction coefficient for water quality modeling. *Journal of environmental quality* 34 (2), pp. 572-80.



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



**Thomas S. Burack, Commissioner**  
February 11, 2010

The Honorable Tara Sad, Chairman  
House Environment and Agriculture Committee  
Room 308  
Legislative Office Building  
Concord, NH 03301

**Re: HB 1299, establishing a committee to study enacting a moratorium on the sale and use of fertilizers containing phosphorus.**


Dear Chairman Sad:

Thank you for the opportunity to comment on HB 1299, which would establish a committee to study enacting a moratorium on the sale and use of fertilizers containing phosphorus. The Department of Environmental Services supports the establishment of this study committee but we recommend that its duties be expanded to include fertilizer containing nitrogen to make the study more complete, in consideration of water quality impairments in the Great Bay Estuary that are attributable to nitrogen.

Nutrients, if present as fertilizer in amounts in excess of those required by plants, can remain in the soil to be picked up by stormwater runoff and transported to surface waters. In fresh water, phosphorus is typically the limiting nutrient for propagation of algae and cyanobacteria. In these waters, elevated phosphorus concentrations can trigger blooms of algae blooms that impair water quality and cyanobacteria that can cause significant health problems for swimmers. In saline tidal waters, nitrogen, as the limiting nutrient, can have essentially the same effect with algae if concentrations increase to critical levels, such as has occurred in Great Bay. And, excessive applications of fertilizers are known to occur in New Hampshire. For example, soils from established lawns frequently contain concentrations of nitrogen and phosphorus that exceed those necessary for healthy lawns. Therefore, a study committee to assess the potential benefits of a moratorium on the sale and use of fertilizers that contain phosphorus and nitrogen would provide a productive forum to further consider this issue.

Thank you for the opportunity to comment on HB 1299. If you have any questions or need additional information, please contact Jacquie Colburn at 271-2959 or me at 271-3503.

Sincerely,

  
for Thomas S. Burack  
Commissioner

cc: Representatives Jane Beaulieu, Suzanne Smith and L. Mike Kappler

## Understanding Fertilizer Labels

Richard Uncles, Director  
Division of Regulatory Services

Fertilizers are to plants what food is to animals. Except plants can't forage widely for food like most animals. Plants are stuck in one place and can only absorb the nutrients present in their root zone. By fertilizing plants we can help supply the nutrients that may be lacking in the soil and provide for enhanced growth and production. Plant scientists have long known that plants require 15 elements to grow and develop normally, in addition to air and water.

The primary nutrients, Nitrogen (N), Phosphorus (P) and Potassium (K), are those used in the greatest quantities by plants. Lesser amounts of secondary minerals, Sulfur (S), Magnesium (Mg) and Calcium (Ca), and minute amounts of nine other micronutrients including Iron (Fe), Copper (Cu) and Boron (B) are all necessary for healthy plant growth. Micronutrients are usually present in adequate amounts in good soils, but the primary nutrients need to be replenished regularly to replace what crops remove from the soil. Liming, which makes soils less acidic, makes fertilizer nutrients more available to plants. Lime also supplies calcium and magnesium if dolomitic, or 'hi-mag' lime is used.

It's always best to fertilize based on the recommendations of a soil test. Too much of some plant food elements may cause plant damage. Excess fertilization can also lead to non-point source pollution, that harms water bodies and leads to the growth of excessive algae. Fertilizer applications should be avoided around surface water or near wells. Always follow label directions and adjust spreader settings as indicated.

Commercial fertilizers are required by state fertilizer labeling laws to state the percentage of the nutrients present in the form of a "Guaranteed Analysis," found on every fertilizer bag. For example, a '5-10-5,' referred to as "the grade," specifies the percentage by weight of Nitrogen (N), Phosphate ( $P_2O_5$ ), and Potassium ( $K_2O$ ) present in the container. A fertilizer package of 5-10-5 weighing 50 pounds would have an actual plant food content of 2.5 pounds of N (50 lbs. x 5%), 5 lbs. of P and 2.5 lbs. of K. Thus, a 50 lb. bag contains only 10 lbs. of actual plant food, the other 40 lbs. is inert ingredient or filler.

Sometimes, fertilization guidelines refer to a certain plant food ratio. The 5-10-5 example above has a 1-2-1 ratio of N to P to K. A 10-20-10 provides the same ratio of N-P-K, but has twice the nutrient concentration. An application of one-half as much 10-20-10, say 10 lbs. per 1,000 square feet will provide the same feeding level to plants as 20 lbs. per 1,000 square feet of the 5-10-5, plus less handling and fewer bags to dispose of. If a 5-10-5 costs \$10 for a 50 lb. bag, the cost for the actual nutrients (10 lbs.) is \$1 per pound. If the 10-20-10 sells for \$15 per bag the cost per pound of actual plant food (20 lbs.) is only \$.75 per pound, clearly a better buy.

Fertilizers can be chemically based or natural based. Most chemical fertilizers are simple compounds. Nitrogen is synthesized from the atmosphere, which contains 78% N in a gaseous form, to create ammonia and urea. Phosphate and Potash fertilizers are obtained from naturally occurring mined deposits that are minimally processed to make the nutrients more available to plants. The fertilizer ingredients that carry the nutrients are then mixed together to create any number of different grades to suit the needs of different crop types and soil fertility levels. Natural based fertilizers are derived from organic materials such as bone meal, fish waste, or food processing by-products. Generally, natural based fertilizers are lower in plant nutrient content than chemical based fertilizers, they also tend to be slower to release their nutrients in a plant-available form. On a cost per pound of nutrient basis, chemical fertilizers are usually far less expensive.

Some fertilizer packages make claims to be "slow release," "slowly available," or "controlled release." These slow release claims generally refer to the nitrogen content, since nitrogen is relatively soluble and may not last long in the soil, especially during rainy periods. Chemical fertilizers can be manufactured so they mimic natural based fertilizers inherently slow release characteristics. By coating the nitrogen particles with sulfur or other materials, the particles dissolve slowly, feeding plants over a longer period of time. Expect slow release fertilizer products to cost more. Gardeners may wish to apply smaller amounts of fertilizer more frequently, adjusting for plant growth response and rainfall to accomplish the same objective, which is to feed plants just what they need when they need it, to maximize crop production while minimizing impacts to the environment.

For more information, contact:

Division of Regulatory Services  
NH Department of Agriculture, Markets & Food  
PO Box 2042-2042  
Concord, NH 03302-2042  
271-2753  
[runcles@agr.state.nh.us](mailto:runcles@agr.state.nh.us)





## TESTIMONY ON HB 1299

Madam Chair, members of the Committee, thank you for the opportunity to testify today. My name is Debra Vanderbeek and I represent RISE (Responsible Industry for a Sound Environment) ®, a national not-for-profit trade association representing over 200 producers and suppliers of specialty pesticide and fertilizer products and we respectfully oppose HB1299. Additionally we have been working with our New Hampshire based customers many who are here today who would be affected by this bill.

Specialty fertilizer products are used around homes, businesses and public areas; on lawns, flowers and trees; in commercial greenhouses and nurseries; on sports turf including golf courses. Specialty fertilizer products, when utilized in accordance with directions, are needed to maintain healthy vibrant turfgrass.

An important element in all fertilizers is Phosphorus (P). P is essential to all known life forms on earth as a key element in many physiological and biochemical processes. Phosphorus is a component of every cell in all-living organisms and cannot be replaced by any other element. Phosphorus is essential for photosynthesis, the process by which plants harvest energy from the sun to produce carbohydrate molecules (sugars). Phosphorus is the second most abundant mineral element in the human body; calcium phosphates are the major constituent of bone and teeth. The recommended daily intake (RDI) for humans is 0.7 g/day.

Turfgrasses are no different than humans when it comes to phosphorus, in order to be healthy; grasses also need a daily intake of phosphorus during the growing season. Turfgrasses receive needed nutrients (P) from the soil solution, however, phosphorus compounds are not very soluble. This can lead to the amount of plant available phosphorus being less than the turfgrass actually requires.

Specialty fertilizer manufacturers have done years of research to establish the nutrient needs of turfgrasses. The result is products that have been formulated to provide the optimal amount of nutrition to maintain healthy and vibrant growth. Turfgrass must be healthy to withstand continued recreational use, insects and seasonal drought.

Healthy turfgrass areas provide the following benefits:

- Turfgrass absorb rainfall, which minimizes runoff
- Turfgrass absorb heat, lowering ambient temperatures
- Turfgrass absorb noise
- Turfgrass prevent soil erosion
- Turfgrass minimizes airborne particulate

The fertilizer industry has undertaken targeted efforts to educate consumers and other customers about proper use of these products. Specialty fertilizers for Turfgrasses have directions for use printed on the bag, and many of our members' stewardship efforts have worked to actively engage users and educate them on proper use.

If the goal of this bill is a reduction of Phosphorous in the environment, then this bill ignores other major sources of phosphorus (P):

- 1) Pollen and seeds (from trees and flowers);
- 2) Decaying vegetation (leaves and grass clippings);
- 3) Domestic animals (dogs & cats);
- 4) Local wildlife (waterfowl); and
- 5) Municipalities (treated effluent, stormwater runoff and combined sewer overflow)

In conclusion, numerous university studies have demonstrated that healthy Turfgrasses reduce the total amount of runoff and the amount of phosphorous in that runoff.



LAKES MANAGEMENT ADVISORY COMMITTEE  
NH Lakes Management and Protection Program

New Hampshire Department of Environmental Services  
29 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095



February 11, 2010

The Honorable Tara Sad, Chairman  
House Environment and Agriculture Committee  
Room 308, Legislative Office Building  
Concord, NH 03301

**Re: HB 1299, establishing a committee to study enacting a moratorium on the sale and use of fertilizers containing phosphorus.**

Dear Chairman Sad:

The Lakes Management Advisory Committee (LMAC) is writing to express its support regarding the intent of HB 1299, which would establish a committee to study enacting a moratorium on the sale and use of fertilizers containing phosphorus.

The LMAC believes that the state should make every effort to protect and improve the quality of our surface waters; to do this successfully we need to understand and put in place the best mechanisms to control nutrient and pollutant inputs to our waterbodies. Water quality monitoring confirms that nutrient inputs to our surface waters can have negative impacts. Depending upon the waterbody, even a small amount of excess phosphorus can cause a lake or pond to experience an algal bloom. Phosphorus comes from natural sources, such as soils and waterfowl waste, as well as man-made sources, such as lawn fertilizers, septic systems and from stormwater runoff.

Identifying and removing potential sources of excess phosphorus to our waterbodies is the right thing to do, however, it is also important that these approaches be viable and effective. For example, are no phosphate lawn fertilizers readily available for purchase by the residential consumer in New Hampshire and would requiring the use of phosphorus free fertilizer affect other important sectors of the State's economy, such as Agriculture. The LMAC believes that the study committee's duties should be expanded to be more comprehensive in its review and assessment of this issue. Since other states and several counties and municipalities across the country have enacted laws limiting or prohibiting the use of fertilizers containing phosphorus, it may be valuable to review these existing laws and programs to understand what they include, how they have been implemented, and if they have been successful in reducing phosphorus contributions to waterbodies.

With the passage of RSA 483-A in 1990, the General Court established the New Hampshire Lakes Management and Protection Program (LMPP) to be administered within the Department of Environmental Services. The LMAC is charged to advise DES in carrying out the purposes of RSA 483-A. "It is the policy of the state to insure the continued vitality of New Hampshire lakes as key environmental, social, and economic assets for the benefit of present and future generations." The LMAC is made up of representatives from academia, business,

NH FISH AND GAME COMMISSION - STATE CONSERVATION COMMITTEE  
UNH SCIENTIFIC COMMUNITY - NH BUSINESS AND INDUSTRY ASSOCIATION - NH TRAVEL COUNCIL  
MUNICIPAL CONSERVATION COMMISSION - MUNICIPAL PLANNING BOARD - ELECTED MUNICIPAL OFFICIAL  
NH LAKES ASSOCIATION - CONSERVATION COMMUNITY - NH ASSOCIATION OF REALTORS - NH MARINE TRADES ASSOCIATION  
NH FISH AND GAME DEPARTMENT - NH DEPARTMENT OF RESOURCES AND ECONOMIC DEVELOPMENT - NH DEPARTMENT OF SAFETY  
NH OFFICE OF ENERGY AND PLANNING - NH DEPARTMENT OF AGRICULTURE, MARKETS AND FOOD - NH DEPARTMENT OF TRANSPORTATION

Honorable Representative Tara Sad  
HB 1299 – Committee to Study Enacting a Moratorium on Fertilizers with Phosphorus  
February 11, 2010  
Page 2 of 2

conservation organizations, lake associations, tourism, fish and game commission, marine trades, realtors, municipal government and state agencies who work together to ensure that state actions affecting our lakes are well thought-out and appropriate for the resource and its users.

In conclusion, the LMAC supports the intent of HB 1299, but would like to see the focus of the study committee be broadened to more thoroughly investigate and address the issue. If you have further questions, please feel free to contact Jacquie Colburn at 271-2959 or [jcolburn@des.nh.gov](mailto:jcolburn@des.nh.gov) or me at (603) 568-2014 or [phildoris@tds.net](mailto:phildoris@tds.net).

Sincerely,



Philip J. O'Brien, Ph.D., Chairman  
Lakes Management Advisory Committee

cc: Rep. Beaulieu  
Rep. Tupper  
Rep. Smith  
Thomas S. Burack, DES Commissioner (*via electronic mail*)  
Harry Stewart, DES Water Division Director (*via electronic mail*)  
Paul Currier, DES WMB Administrator (*via electronic mail*)  
LMAC Members (*via electronic mail*)

# Voting Sheets

HOUSE COMMITTEE ON ENVIRONMENT AND AGRICULTURE

EXECUTIVE SESSION on HB 1299

**BILL TITLE:** establishing a committee to study enacting a moratorium on the sale and use of fertilizers containing phosphorus.

**DATE:** February 18, 2010

**LOB ROOM:** 308

**Amendments:**

Sponsor: Rep. Beaulieu	OLS Document #:	2010	0639h
Sponsor: Rep.	OLS Document #:		
Sponsor: Rep.	OLS Document #:		

**Motions:** OTP, OTP/A, ITL, Interim Study (Please circle one.)

Moved by Rep. Haefner  
Seconded by Rep. Williams  
Vote: 15-1 (Please attach record of roll call vote.)

**Motions:** OTP, OTP/A, ITL, Interim Study (Please circle one.)

Moved by Rep. Haefner  
Seconded by Rep. Owen  
Vote: 5-11 (Please attach record of roll call vote.)

**Motions:** OTP, OTP/A, ITL, Interim Study (Please circle one.) RECONSIDER

Moved by Rep. Haefner  
Seconded by Rep. Owen  
Vote: Passes by Hands (Please attach record of roll call vote.)

**Motions:** OTP, OTP/A, ITL, Interim Study (Please circle one.)

Moved by Rep. Beaulieu  
Seconded by Rep. Smith  
Vote: 1-15 (Please attach record of roll call vote.)

**Motions:** OTP, OTP/A, ITL, Interim Study (Please circle one.)

Moved by Rep. Haefner  
Seconded by Rep. Williams  
Vote: 15-1 (Please attach record of roll call vote.)

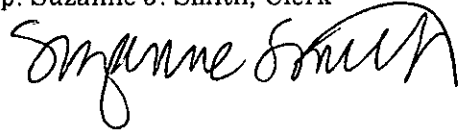
**CONSENT CALENDAR VOTE:**

(Vote to place on Consent Calendar must be unanimous.)

**Statement of Intent:** Refer to Committee Report

Respectfully submitted,

Rep. Suzanne J. Smith, Clerk

A handwritten signature in black ink, appearing to read "Suzanne Smith". The signature is written in a cursive style with a large, sweeping initial 'S' and a distinct 'A' at the end.

HOUSE COMMITTEE ON ENVIRONMENT AND AGRICULTURE

EXECUTIVE SESSION on HB 1299

BILL TITLE: establishing a committee to study enacting a moratorium on the sale and use of fertilizers containing phosphorus.

DATE: 2/18/10

LOB ROOM: 308

Amendments:

Sponsor: Rep. Beaulieu

OLS Document #: 0639h

Sponsor: Rep.

OLS Document #:

Sponsor: Rep.

OLS Document #:

Vote to Reconsider Haefner Owen ITL passes by hand

Motions: OTP, OTP/A, ITL, Interim Study (Please circle one.)

Moved by Rep. Haefner

Seconded by Rep. Williams

Vote: (Please attach record of roll call vote.) 11

Motions: OTP, OTP/A, ITL, Interim Study (Please circle one.)

Moved by Rep. Haefner

Seconded by Rep. Owen

Vote: (Please attach record of roll call vote.) 5-11

OTPA OTP on Amend 1-150 Beaulieu 2nd Smith

MOTION ITL Haefner second Williams 15-1

CONSENT CALENDAR VOTE:

(Vote to place on Consent Calendar must be unanimous.)

Consent approved

Statement of Intent: Refer to Committee Report

Respectfully submitted,

Rep. Suzanne J. Smith, Clerk

Suzanne Smith



ENVIRONMENT AND AGRICULTURE

Bill #: 1299 Title: Phosphorus fertilizer ban

PH Date: 2, 11, 10 Exec Session Date: 2, 18, 10

Motion: ITL/A Amendment #: 0639h

MEMBER	YEAS	NAYS
Sad, Tara A, Chairman	✓	
Beaulieu, Jane E, V Chairman	✓	
Owen, Derek	✓	
Allen, Peter H	✓	
Webb, Leigh A	✓	
Beauchamp, Roger R	✓	
Lindsey, Steven W		✓
Poznanski, Brian D	✓	
Smith, Suzanne J, Clerk	✓	
Wiley, Susan E	✓	
Haefner, Robert H	✓	
Messier, Irene M	—	
Williams, Burton W	✓	
Knox, J. David	✓	
Gandia, Laura J	✓	
Groen, Warren J	✓	
Palmer, Stephen J	—	
Tucker, Pamela Z	✓	
TOTAL VOTE:	15	1

ENVIRONMENT AND AGRICULTURE

Bill #: 1299 Title: Phosphorus fertilizer

PH Date: 2, 11, 10 Exec Session Date: 2, 18, 10

Motion: Reconsider/ITL Amendment #: \_\_\_\_\_

MEMBER	YEAS	NAYS
Sad, Tara A, Chairman		✓
Beaulieu, Jane E, V Chairman		✓
Owen, Derek		✓
Allen, Peter H		✓
Webb, Leigh A		✓
Beauchamp, Roger R		✓
Lindsey, Steven W		✓
Poznanski, Brian D		✓
Smith, Suzanne J, Clerk		✓
Wiley, Susan E		✓
Haefner, Robert H	✓	
Messier, Irene M	-	
Williams, Burton W		✓
Knox, J. David	✓	
Gandia, Laura J	✓	<del>11</del>
Groen, Warren J	✓	
Palmer, Stephen J	-	
Tucker, Pamela Z	✓	
TOTAL VOTE:	5 ✓	<del>11</del> 11

ENVIRONMENT AND AGRICULTURE

Bill #: 1299 Title: Phosphorus<sup>Law</sup> fertilizer Prohibition

PH Date: 2, 11, 10 Exec Session Date: 2, 18, 10

Motion: OTPA ~~Amendment only~~ Amendment #: 0639h

MEMBER	YEAS	NAYS
Sad, Tara A, Chairman		✓
Beaulieu, Jane E, V Chairman		✓
Owen, Derek		✓
Allen, Peter H		✓
Webb, Leigh A		✓
Beauchamp, Roger R		✓
Lindsey, Steven W	✓	
Poznanski, Brian D		✓
Smith, Suzanne J, Clerk		✓
Wiley, Susan E		✓
Haefner, Robert H		✓
Messier, Irene M	—	
Williams, Burton W		✓
Knox, J. David		✓
Gandia, Laura J		✓
Groen, Warren J		✓
Palmer, Stephen J	—	
Tucker, Pamela Z		✓
TOTAL VOTE:	1	15

**ENVIRONMENT AND AGRICULTURE**

Bill #: 1299 Title: Study enacting a moratorium on phosphorus fertilizers

PH Date: 2, 11, 10 Exec Session Date: 2, 18, 10

Motion: ITL Amendment #: \_\_\_\_\_

MEMBER	YEAS	NAYS
Sad, Tara A, Chairman	✓	
Beaulieu, Jane E, V Chairman	✓	
Owen, Derek	✓	
Allen, Peter H	✓	
Webb, Leigh A	✓	
Beauchamp, Roger R	✓	
Lindsey, Steven W		✓
Poznanski, Brian D	✓	
Smith, Suzanne J, Clerk	✓	
Wiley, Susan E	✓	
Haefner, Robert H	✓	
Messier, Irene M	—	
Williams, Burton W	✓	
Knox, J. David	✓	
Gandia, Laura J	✓	
Groen, Warren J	✓	
Palmer, Stephen J	—	
Tucker, Pamela Z	✓	
<b>TOTAL VOTE:</b>	<b>15</b>	<b>1</b>

# Committee Report

**REGULAR CALENDAR**

**February 18, 2010**

**HOUSE OF REPRESENTATIVES**

**REPORT OF COMMITTEE**

**The Committee on ENVIRONMENT AND  
AGRICULTURE to which was referred HB1299,**

**AN ACT establishing a committee to study enacting a  
moratorium on the sale and use of fertilizers containing  
phosphorus. Having considered the same, report the  
same with the following Resolution: RESOLVED, That it  
is INEXPEDIENT TO LEGISLATE.**

**Rep. Robert H Haefner**

**FOR THE COMMITTEE**

## COMMITTEE REPORT

Committee:	<b>ENVIRONMENT AND AGRICULTURE</b>
Bill Number:	<b>HB1299</b>
Title:	<b>establishing a committee to study enacting a moratorium on the sale and use of fertilizers containing phosphorus.</b>
Date:	<b>February 18, 2010</b>
Consent Calendar:	<b>NO</b>
Recommendation:	<b>INEXPEDIENT TO LEGISLATE</b>

### STATEMENT OF INTENT

The problem areas addressed by this bill are waterways and not residential lawns a mile from the nearest water. We think any ban should be local and not state wide. Phosphates are a naturally occurring substance and are essential to plant life. Placement of lawn fertilizers in a statute with household cleaning products is inconsistent. The science does not support an across the board ban. Even organic farmers need a source of phosphorous. The Department of Agriculture states that any product can be harmful if misused, but in New Hampshire we do not have a problem.

Vote 15-1.

Rep. Robert H Haefner  
FOR THE COMMITTEE

Original: House Clerk  
Cc: Committee Bill File

## REGULAR CALENDAR

### ENVIRONMENT AND AGRICULTURE

**HB1299**, establishing a committee to study enacting a moratorium on the sale and use of fertilizers containing phosphorus. **INEXPEDIENT TO LEGISLATE.**

Rep. Robert H Haefner for ENVIRONMENT AND AGRICULTURE. The problem areas addressed by this bill are waterways and not residential lawns a mile from the nearest water. We think any ban should be local and not state wide. Phosphates are a naturally occurring substance and are essential to plant life. Placement of lawn fertilizers in a statute with household cleaning products is inconsistent. The science does not support an across the board ban. Even organic farmers need a source of phosphorous. The Department of Agriculture states that any product can be harmful if misused, but in New Hampshire we do not have a problem. **Vote 15-1.**

Original: House Clerk

Cc: Committee Bill File



HB 1299

*the problem*

*addressed by this bill*

~~Problem~~ areas are waterways and not residential lawns a mile from the nearest water. We think any ban should be local and not state wide. Phosphates are a naturally occurring substance and are essential to plant life. Placement of lawn fertilizers in with household cleaning products is inconsistent, ~~with statute~~. The science does not support an across-the-board ban. Even organic farmers need a source of phosphorous. The Department of Agriculture states that any product can be harmful if misused, but in New Hampshire we do not have a problem.

Bob Haefner

HB 1299 Establish a committee to study enacting a moratorium on the sale and use of fertilizers containing phosphates. MAJORITY ITL. 15-1

Bob Haefner for the MAJORITY. The MAJORITY of E&A believes this is too far reaching. Problem areas are waterways and not residential lawns a mile from the nearest water. We think any ban should be local and not state wide. Phosphates are a naturally occurring substance and are essential to plant life. Placement of lawn fertilizers in with households cleaning products is inconsistent with statute. The science does not support an across the board ban. Even organic farmers need a source of phosphorous. The Department of Agriculture states that any product can be harmful if misused, but in NH we do not have a problem.

ITL YES  
15-1

HB 1299

The problem areas addressed by this bill are waterways and not residential lawns a mile from the nearest water. We think any ban should be local and not state wide. Phosphates are a naturally occurring substance and are essential to plant life. Placement of lawn fertilizers in a statute with household cleaning products is inconsistent. The science does not support an across the board ban. Even organic farmers need a source of phosphorous. The Department of Agriculture states that any product can be harmful if misused, but in New Hampshire we do not have a problem.

Bob Haefner

A handwritten signature in black ink, appearing to read 'B Haefner', with a large, sweeping flourish above the letters.