

**Fifth Session - Thirty-Ninth Legislature**  
**of the**  
**Legislative Assembly of Manitoba**  
**Standing Committee**  
**on**  
**Social and Economic Development**

*Chairperson*  
*Mr. Daryl Reid*  
*Constituency of Transcona*

**Vol. LXIII No. 6 - 6 p.m., Monday, June 13, 2011**

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**MANITOBA LEGISLATIVE ASSEMBLY**  
**Thirty-Ninth Legislature**

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<i>Vacant</i>	Lac du Bonnet	

**LEGISLATIVE ASSEMBLY OF MANITOBA**  
**THE STANDING COMMITTEE ON SOCIAL AND ECONOMIC DEVELOPMENT**

**Monday, June 13, 2011**

**TIME – 6 p.m.**

**LOCATION – Winnipeg, Manitoba**

**CHAIRPERSON – Mr. Daryl Reid (Transcona)**

**VICE-CHAIRPERSON – Mr. Tom Nevakshonoff (Interlake)**

**ATTENDANCE – 11 QUORUM – 6**

*Members of the Committee present:*

*Hon. Messrs. Blaikie, Chomiak, Hon. Ms. Melnick, Hon. Messrs. Rondeau, Struthers*

*Messrs. Cullen, Graydon, Maguire, Nevakshonoff, Reid, Schuler*

*Substitutions:*

*Mr. Wiebe for Hon. Mr. Chomiak at 10:37 p.m.*

**APPEARING:**

*Hon. Jon Gerrard, MLA for River Heights*

**PUBLIC PRESENTERS:**

*Mr. Doug Chorney, Keystone Agricultural Producers*

*Mr. Peter Marykuca, private citizen*

*Mr. Cam Dahl, Manitoba Beef Producers*

*Mr. Weldon Newton, private citizen*

*Mr. Greg Bruce, Ducks Unlimited Canada*

*Mr. Robert T. Kristjanson, private citizen*

*Ms. Lois Wales, Manitoba Government and General Employees' Union*

*Mr. Kristian Stephens, Canadian Fertilizer Institute*

*Mr. Allan Kristofferson, Lake Winnipeg Research Consortium*

*Ms. Cheryl Kennedy Courcelles, private citizen*

*Ms. Eva Pip, private citizen*

*Ms. Vicki Burns, private citizen*

*Mr. Josh Brandon, Green Action Centre*

*Mr. Kevin Rebeck, Manitoba Federation of Labour*

*Mr. Don Flaten, National Centre for Livestock and the Environment, University of Manitoba*

*Mr. Scott Fielding, City of Winnipeg*

*Mr. James Beddome, Green Party of Manitoba*

*Ms. Caitlin McIntyre, private citizen*

*Ms. Gaile Whelan Enns, Manitoba Wildlands*

*Mr. David Mackay, private citizen*

*Mr. Greg McIvor, private citizen*

*Mr. Ross Eadie, private citizen*

**WRITTEN SUBMISSIONS:**

*Donald Cobb, Lake Winnipeg Foundation*

*F. Phillip Abrary, Ostara Nutrient Recovery Technologies*

*Gail Kreutzer, private citizen*

*John Fefchak, private citizen*

*Henry David Venema, International Institute for Sustainable Development*

*Karl Kynoch, Manitoba Pork Council*

*Roger Ritsema, private citizen*

*Joe Leschyshyn, private citizen*

*Ruth Pryzner, private citizen*

**MATTERS UNDER CONSIDERATION:**

*Bill 46–The Save Lake Winnipeg Act*

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**Clerk Assistant (Ms. Monique Grenier):** Good Evening. Will the Standing Committee on Social and Economic please come to order.

Before the committee can proceed with its business before it, it must elect a new Chairperson. Are there any nominations?

**Hon. Jim Rondeau (Minister of Healthy Living, Youth and Seniors):** I would like to nominate Mr. Reid as Chair.

**Clerk Assistant:** Mr. Reid has been nominated. Are there any other nominations? Hearing no other nominations, Mr. Reid, will you please take the Chair?

**Mr. Chairperson:** Thank you, folks. Our next item of business is the election of a Vice-Chairperson. Are there any nominations for Vice-Chairperson?

**Mr. Rondeau:** I would like to nominate Mr. Nevakshonoff, please, as Vice-Chair.

**Mr. Chairperson:** Mr. Nevakshonoff has been nominated as Vice-Chairperson. Are there any further nominations? Seeing none, Mr. Nevakshonoff is elected as the Vice-Chairperson of this committee.

This meeting has been called to consider Bill 46, the save Winnipeg act. I would like to inform all in attendance of the provisions in our rules regarding the hour of adjournment. Except by unanimous consent, a standing committee meeting to consider a bill in the evening must not sit past midnight to hear presentations unless fewer than 20 presenters are registered to speak to all bills being considered when the committee meets at 6 p.m. As of this evening, 6 p.m. this evening, there were 92 presenters registered to speak to this bill, and therefore, according to our rules, the committee may not sit past midnight to hear presentations.

I would also like to add that it is previously announced that the Standing Committee on Social and Economic Development will meet again, if necessary, Tuesday, June 14th at 6 p.m. to consider Bill 46.

How late does the committee wish to sit this evening?

**Hon. Stan Struthers (Minister of Agriculture, Food and Rural Initiatives):** I think if you canvass the table, you would find that there's agreement to not see the clock at 12 midnight and hear more presentations after 12 midnight. It's—I think our House leaders have spoken on this and have agreed to the request.

**Mr. Larry Maguire (Arthur-Virden):** Agreed.

**Mr. Chairperson:** It's agreed that this committee will continue to hear all the presentations from those folks that are with us here this evening? *[Agreed]* That would include sitting past midnight. Okay, thank you.

As you will see from the list of presenters before each of the committee members here, we have quite a number of people registered to speak this evening, some who are listed as out-of-town presenters, and these individuals are indicated by an asterisk on the sheet before you.

In what order does the committee wish to hear presentations?

**Mr. Maguire:** Out-of-town first.

**Mr. Struthers:** I'd recommend we hear from out-of-town presenters first.

**Mr. Chairperson:** It's been recommended that we hear out-of-town presentations first.

**Mr. Maguire:** I would agree.

\* (18:10)

**Mr. Chairperson:** Is it agreed the committee will hear out-of-town presentations first? *[Agreed]* Okay. Thank you.

Before we proceed with presentations, we do have a number of other items and points of information for the committee to consider.

First of all, if there is anyone else in attendance in the audience here this evening who would like to make a presentation, please register with the staff at the entrance to this committee room and we'll add your name to the list.

Also, for the information of presenters here with us this evening, while written presentations are not required, if you are going to accompany your presentation with written material, we ask that you provide 20 copies. If you need assistance with photocopying, see our staff at the entrance to this room and we'll assist you in that regard.

As well, I would like to inform the presenters with us this evening that, in accordance with our rules, a time limit of 10 minutes has been allotted for our presentations with an additional five minutes for questions from the various committee members here this evening.

Also, in accordance with our rules, if a presenter is not in attendance when their name is called, their name will be dropped to the bottom of the list. If a presenter is not in attendance when their name is called a second time, their name will be removed from the list of presenters.

We have a number of written submissions for the committee to consider for Bill 46, and we have received written submissions from the following persons and have already previously been, I believe, distributed to committee members here this evening: Donald Cobb, Lake Winnipeg Foundation; F. Phillip Abrary, Ostara Nutrient Recovery Technologies; Gail Kreutzer, private citizen; John Fefchak, private citizen; Henry David Venema, International Institute for Sustainable Development; Karl Kynoch,

Manitoba Pork Council; Roger Ritsema, private citizen; and Joe Leschyshyn, private citizen.

Does the committee agree to have these presentations included in the *Hansard* transcript of these meetings this evening? *[Agreed]*

Prior to proceeding with public presentations, I would like to advise members of the public regarding the process for speaking in the committee here this evening. These proceedings of this meeting are recorded verbatim and the transcript will be a part of these proceedings. Each time someone wishes to speak, whether it be an MLA on either side of the table, or a presenter at the podium here this evening, I have to first, as Chairperson, indicate the name of the person wishing to speak and that's a signal for the good folks sitting behind me to turn your microphones on and off.

Thank you for your patience and we'll now proceed with public presentations.

#### **Bill 46—The Save Lake Winnipeg Act**

**Mr. Chairperson:** First out-of-town presenter I have listed to speak is Doug Chorney, Keystone Agricultural Producers.

Good evening, Mr. Chorney.

**Mr. Doug Chorney (Keystone Agricultural Producers):** Good evening.

**Mr. Chairperson:** Welcome. Do you have a written presentation, sir?

**Mr. Chorney:** I do.

**Mr. Chairperson:** Just give us a moment to distribute, then I'll give you the signal to proceed.

Please proceed, Mr. Chorney, when you're ready, sir.

**Mr. Chorney:** Good evening. My name is Doug Chorney. I am president of Keystone Agricultural Producers, Manitoba's largest general farm policy organization, representing over 7,000 farm families across the province and 22 commodity groups.

I would like to thank you for the opportunity to present Bill 46, The Save Lake Winnipeg Act.

We all know that water quality and water management are serious and complex issues for Manitoba. There are substantial benefits from our water resources, such as hydroelectric power

generation, but we must first deal with excess moisture and flooding.

This year we have seen the devastating impact water can have on the landscape, including farm families and their operations. Nearly 40 per cent of the province's cropland is likely to go unseeded this year due to excess moisture and the impact of flooding on cattle and other livestock sectors is well documented.

We are here this evening to talk about the health of Lake Winnipeg and we believe that all the watershed issues are intimately connected. My concern is that Bill 46 will likely fail to save Lake Winnipeg, because of attempts to single out issues and offer solutions based on incomplete scientific information.

I also fear that Bill 46 will, unintentionally, impede the Province's ability to clean up the lake.

If it is true that we are at the tipping point for the health of Lake Winnipeg, what we need is an extensive water strategy involving all stakeholders and addresses all of the interconnected challenges that we face in the watershed.

We cannot look at our water problems, including the management of volumes during the spring and the overall quality of independent issues. It will take a tremendous amount of planning, research and commitment by government, industry and the general public to achieve the goal of developing and implementing a water strategy.

There's a significant landscape issue that contributes to the eutrophication of Lake Winnipeg. We know that runoff from the spring snow melt moves off the land too quickly. We need a system in place to slow the flow of water and store it in appropriate places so the nutrients are kept out of larger watershed—out of the larger watershed until vegetation is no longer dormant and able to utilise them. Wetlands accomplish just this.

Bill 46 makes changes to The Crown Lands Act to allow for regulations pertaining to wetlands. However, what is needed is a comprehensive plan to produce positive results. We fear that when the Province designates a wetland as a provincially significant wetland, it will simply ban any activity involving that area. For example, we know that when cattle producers have incentives to manage wetlands, they can actually remove more nutrients from the

surrounding area by harvesting the grasses that capture them from the water.

We urge the government to take the time necessary to review the extensive amount of work that has gone on in Manitoba regarding wetlands and ecological goods and services. To move forward, we need to develop a comprehensive EG and S program for Manitoba, that government has put on the back burner for years. Included in that program, we must consider the opportunity for utilizing natural wetlands and strategic water retention areas where landowners are compensated for water storage.

Many ecological services can be provided in the watershed that would serve to protect our natural resources. After the hastily planned breach at the Hoop and Holler Bend, it should be clear to government that putting in place a policy that plans for water storage throughout the watershed is a good idea.

We would also like you to consider the damage that moving forward with Bill 46, as written, may cause our provincial agricultural sector, family farms and Lake Winnipeg. We recommend to committee that at minimum, part two, dealing with the changes subsection 40.1(1) to The Environment Act, prohibiting confined livestock areas and manure storage facilities for pigs, be removed entirely from this bill. This amendment effectively extends the entire—effectively extends the entire province—the moratorium on the hog sector expansion that was passed in 2008 through Bill 17, The Environment Amendment Act.

It is likely that this amendment will actually damage the health of Lake Winnipeg more than it will help. It is no secret that over the past five years the Province of Manitoba has become increasingly inhospitable to the pork and other livestock sectors. As Manitoba Pork Council can confirm, any expansion of the hog industry will likely occur outside of Manitoba, but still within our watershed.

As explained in the Lake Winnipeg Stewardship Board's report in 2006, the health of Lake Winnipeg—close to 50 per cent of the total phosphorus entering the lake comes from outside of Manitoba. What we risk by banning pork production is losing control over the fate of our lake. Producers and governments from other provinces and states do not have the same vested interest in reducing nutrient movement as we do.

We know that Manitoba livestock producers are continually working at improving their nutrient management through the adoption of beneficial management practices and adherence to science-based regulations and nutrient managements plans. Only three months ago, Manitoba Pork Council announced a comprehensive plan to improve the environmental sustainability of their sector in Manitoba. MPC hasn't been given the opportunity to implement the recommendations in that report and now, by way of this bill, they are once again tagged as being the polluters of Lake Winnipeg.

Manitoba must become a regional leader in sustainable livestock industry development from a social, economic and environmental position. This current bill does not allow that. Rather than foster actions that will help Lake Winnipeg, the regulations will be forthcoming, will be—will stifle development. This raises another area of concern that is regulations will be developed in silos, this will not allow for input from the affected stakeholders. If it is the Province's intention to save Lake Winnipeg, you are heading in the wrong direction. It's time to show leadership and work with other stakeholders to develop and implement a water strategy for the province. This approach is long overdue. We need commitment from our government for incentives as opposed to a heavy stick approach that this bill, and the impending regulations, will force upon us.

Bill 46 illustrates that government cannot take the time, or make a commitment, to the citizens of Manitoba to take a fair approach. In closing, I would like to say that Keystone Agricultural Producers is in full support of saving Lake Winnipeg. However, we do not support Bill 46 because we believe it will have little impact on attaining that goal. Thank you.

**Mr. Chairperson:** Thank you, Mr. Chorney, for your presentation. Questions for the presenter?

\* (18:20)

**Hon. Bill Blaikie (Minister of Conservation):** Actually, just a word of thanks to Mr. Chorney and to the Keystone Agricultural Producers for giving us your views tonight. I'm sure there might be other members of the committee who may want to ask you a question or discuss your presentation with you, so I'll cede the floor at this time, but thanks very much.

**Hon. Stan Struthers (Minister of Agriculture, Food and Rural Initiatives):** Yes, thank you very much, Doug, for your presentation tonight and the leadership that you show in the agricultural

community. I appreciate the advice that you've given to me in my stint, at least, as being Agriculture Minister. So thank you very much.

I was interested when you said that you described this, at least part of this bill, as an extension of the moratorium that was contained in Bill 17. As you know, at the time, the—our friends across the aisle from me here voted against Bill 17, voted against that water protection measure. You're aware that they voted in favour of Bill 46 last week at second reading. Why would they do that?

**Mr. Chorney:** Well, that's certainly their free will to vote as they see fit. Our concern is if you take a ban on expanded production, Manitoba will only have so much killing capacity in the province and access to feed grains and distillers' grains, with the big ethanol production that's going on in the US, our weanlings will be exported to jurisdictions that are just adjacent to our province. Hogs will be finished in those jurisdictions, and we'll have no way to regulate that industry in the future. So that's the reason we're focusing on the expansion of the moratorium.

**Mr. Struthers:** Well, what you're telling me is that if a pig produces manure in Manitoba, it's just as bad if a pig produces manure in North Dakota or Saskatchewan. And at that—those nutrients eventually all get into Lake Winnipeg, whether—from wherever it's from. The—why, then, wouldn't we, within the jurisdiction that we have, why, then, wouldn't we extend that moratorium from where it is, as was placed in Bill 17, which my friends across the way voted against, why wouldn't we take the benefits of that and extend it to a bigger area if, as you've suggested, hog manure is a problem?

**Mr. Chorney:** Interesting you should point that out. Actually, since Bill 17 was implemented, there has been a deterioration in the quality of Lake Winnipeg, and one could make the case that there's been absolutely nothing accomplished with the moratorium. Best management practices have been adopted by Manitoba farmers for decades. It's the only way they can be competitive. Nutrients are valuable, whether they be manure or synthetic fertilizers, and producers have spent millions of dollars on precision application equipment, GPS guidance equipment to reduce any chance of overlapping, direct injection.

The hog farmers in my community spread manure with injection and use manure management plans which are government approved, and I, you

know, have to say, I don't think we have a problem with hog manure.

**Mr. Struthers:** Yes, would it be your expectation, then, that my friends across the table vote—continue to vote, well, which way? I mean, they voted both ways on this. They voted against Bill 17, they voted in favour of Bill 46. Would it be your hope that they would continue to vote in favour of Bill 46?

**Mr. Chorney:** Well, I certainly don't speak for your—for the opposition, but I think, and, as I stated, Keystone Agricultural Producers are in favour of saving Lake Winnipeg, and I suspect they are as well. So it's very difficult, perhaps, for MLAs to vote against this bill the way it's written. Regulations that could come forward in the future which are not known to us, because this bill really does not have the specifics included in it, but the potential to regulate it in the future is the big unknown and the fear that farmers have that we've brought forward.

**Mr. Larry Maguire (Arthur-Virden):** Yes, thank you very much, Mr. Chorney, Doug, for your presentation tonight and for your very clear enunciation of where farmers stand on this particular bill to save Lake Winnipeg in—throughout the province of Manitoba. Thank you very much for your presentation.

**Mr. Chorney:** Thank you.

**Mr. Struthers:** I was very interested in what you said. The—you—and I understand your—I understand your point. You said that how could anybody vote against saving Lake Winnipeg. You imply that my colleagues across the way have voted the way they did on Bill 46 because of the title of the act. Are you concerned, then, that their vote would be one way and then they would move towards changing the content or would that be your hope that they would change the content of the bill? Is it your hope that maybe, by some struck of luck, they become government and then not follow through with their vote that they make tonight? I was interested. It—you made it sound like a pretty superficial vote on the part of my opposition.

**Mr. Chorney:** Well, I don't mean to speak for the opposition, and I wouldn't want to infer that I know why they vote the way they do. I'm only drawing conclusions from my own speculation. The idea of saving Lake Winnipeg is, I said, is something that all of us, as Manitobans, should strive for. Nobody's against that.

Farmers have been managing the landscape for all of modern agricultural history. It's been something that's really been neglected. If farmers hadn't been the stewards they've been, the environment would be in much worse condition today than it is, and we should thank our farmers for the work that they do and not look at ways of stifling their industry and stopping them from advancing and moving forward to be efficient and productive and competitive in the world market.

**Mr. Chairperson:** Further questions?

Seeing none, thank you very much for your presentation, Mr. Chorney. Thank you for coming out this evening.

Next out-of-town presenter I have listed is Chris Howorth, Ostara Nutrient Recovery Technologies. Chris Howorth. Seeing that Chris Howorth is not with us this evening, his name will be dropped to the bottom of the list. It's my understanding, though, that he's also agreed to sign up to speak, Mr. Maguire, in addition to the written presentation that was handed out to committee members.

Next out-of-town presenter I have is Peter Marykuca, private citizen. Good evening, sir.

**Peter Marykuca (Private Citizen):** Good evening.

**Mr. Chairperson:** Welcome. Do you have a written presentation?

**Mr. Marykuca:** I certainly do.

**Mr. Chairperson:** Just give us a few moments to help you distribute it to committee members, and I'll give you the signal to proceed.

Please proceed, sir, when you're ready.

**Mr. Marykuca:** My name is Peter Marykuca, and again, I'd like to take this opportunity to address you. I want to reiterate some things that have gone on in the past because now is the time to bring them out, and I'd like to start.

The following words were printed in the *Interlake Spectator*, May the 9th, 1994. I quote the late author, Don Zarow Sr.: Is the day coming that we will stand on a beautiful sand beach on Lake Winnipeg and dare not go in the water? Well, it seems the answer to Don's letter-question is yes.

Years ago, about 1965, 1966, a report by Manitoba Environment, Mr. David Green, stated the Icelandic River basin was in toxic overload. It made front-page news in the *Interlake Spectator* as well.

So what has changed in the past 17 years? Time and time again I see water filled ditches carrying algae and runoff from a cattle grazing and pasture that is being used by a hog operation as spread field as well. Just how many nutrients can this land absorb? Quarter section of land, 100, maybe 150 head of cattle on there, also used as a spread field for the hog operation across the road.

The lake is not polluting itself. The hog industry is a contributing factor. Most Manitobans are grateful that the NDP had the foresight and the courage to put in place the moratorium. Now what needs to be done is to stop all contributing factors that are occurring in the Interlake and other areas as well. We need to restrict the hog industry further by shutting some down completely for allowing manure to run off inadequate spread fields. If they made a mistake in their land-use selection, that's their problem. Why should the public and the environment suffer? Why should the public pay for their dumb mistakes?

Cattle farmers need to be restricted from fencing their cattle in and near all waterways.

The former Conservative government neglected to give hog industry permission—was neglectful in giving the hog industry permission to use non-arable marginal lands and cattle pastures, bush, at times, and Crown lands in the Interlake, so they can off-load their untreated sewage.

\* (18:30)

Considering that the Interlake is one of the several—one of several large areas in the world that is a groundwater charge area, has many artesian and flowing wells because of soil structures and its porosity, it needs and should be protected by law.

Billions of gallons of potable water are used in the hog industry because they want cheap flush toilets for their pigs to go along with their primitive liquid manure handling systems. The slurry is a toxic concoction that should be regulated under The Dangerous Goods Handling and Transportation Act. It should be dealt with as such. Every gallon should be accounted for. To allow the spreading of this filth is inconsistent with the public Health Act of Canada.

Liquid hog slurry contains known pathogens, viruses, bacteria, parasites, and who knows how many other known hog diseases, trace elements, including residue from hormones, antibiotics, detergents and disinfectants. It can and does contain E. coli. The stuff is passed off as a fertilizer. It is a



known pollutant worldwide. It has ruined countries, including waterways and land areas in North America. The stuff is not organic. It should—it could contain—contaminate—pardon me—it could contaminate soils for years to come.

A letter from a provincial engineer, dated back in 1994, stated that lagoons are not meant to treat the sewage. It's just raw sewage. Keep it in for a year and put it on the land. So it's untreated sewage. How many other barns in Manitoba are allowed to spread their waste on lands' surface and just leave it there exposed to both nature and wildlife?

As we should all know, to make things more disgusting, the Conservative government of the day allowed them to blend in the untreated human sewage from the barn workers because it would be expensive to have separate systems. How dumb is that?

What kind of bacteria mutations could be brewing in the lagoons? Because of the past and current events involving various diseases and the death of many from E. coli, this must be stopped immediately. As much as I hate to say this, I want to remind you all we've already had the unfortunate death of a toddler in Arborg from E. coli. They could not treat it nor figure out where it came from. How did this all happen and why?

The Municipality of Gimli put into action a bylaw, No. 1096, that was consistent with the public Health Act of Canada, prohibiting the importation and spreading of hog manure from outside its boundary to inside its boundary. That's why there's no pig barns in the RM of Gimli. That really bothered the Conservatives. Is that why the late Harry Enns said, don't let those people kick you out of the Interlake? I don't like to be referred to as those people. My sword's not bent.

The Municipality of Bifrost also imposed a restriction on the importation of hog manure from outside its boundaries because a Mrs. Kay Bergman presented council with a letter from her doctors stating that the stench from the hog waste contributed to her medical condition. Could it be that they got a whiff of something legal could drift their way?

The next time we have a related illness or death, the public should demand there be a full inquiry to find out how just what and who is responsible. A court of law should decide on the punishment. We need not any guidelines or regulations that are full of

loopholes. Unless the Farm Practices Board, if it's still involved, can't help protect the public or the environment, get rid of it.

I have not recently noticed any rendering trucks on the highways. You should investigate how the hog industry is getting rid of their mortalities, and is it being done in a safe, friendly manner?

Thank you for your time.

**Mr. Chairperson:** Thank you, Mr. Marykuca, for your presentation here this evening. Questions of the presenter.

**Mr. Blaikie:** I just wanted to thank Mr. Marykuca for his presentation. He's communicated with me on occasion by email, and it's nice to be able to put a face to the messages.

**Mr. Marykuca:** Well, thank you.

**Mr. Chairperson:** Any—Mr. Maguire?

**Mr. Maguire:** Just like to thank you for your presentation as well, Mr. Marykuca.

**Floor Comment:** Thank you.

**Mr. Chairperson:** Any further comments or questions for the presenter?

Seeing none, thank you very much, Mr. Marykuca, for coming out this evening and for your presentation, sir.

For the information of committee members, we received information from Ruth Pryzner, a private citizen, who has left a written presentation for committee members, and her name—she wishes that her name is struck from the list of presenters. And is it agreed by that committee that Ruth Pryzner's submission will be entered in the record for this committee proceedings? *[Agreed]* Thank you.

Next out-of-town presenter we have listed is Rick Bergmann, private citizen. Rick Bergmann? Seeing that Rick Bergmann is not here with us this evening, his name will be dropped to the bottom of the list.

Next out-of-town presenter we have listed is Wendy Friesen, private citizen. Wendy Friesen? Seeing that Wendy Friesen is not with us this evening, her name will be dropped to the bottom of the list.

George Matheson, private citizen. George Matheson? Seeing that George Matheson is not with

us this evening, his name will be dropped to the bottom of the list.

Next name is James Hofer, private citizen. James Hofer? Seeing that James Hofer is not with us this evening, name will be dropped to the bottom of the list.

Arian DeBekker. Arian DeBekker? Seeing that Arian DeBekker is not with us this evening, name will be dropped to the bottom of the list.

Next person—next name we have listed as out-of-town presenter is Claude Vielfaure, private citizen. Claude Vielfaure? Seeing that Claude Vielfaure is not with us this evening, name will be dropped to the bottom of the list.

Next name is Andrew Dickson, Manitoba Pork Council. Andrew Dickson, Manitoba Pork Council? Seeing that Andrew Dickson is not with us this evening, name will be dropped to the bottom of the list.

Next out-of-town presenter listed is Julie Baird, private citizen. Julie Baird? Seeing that Julie Baird is not here this evening, name will be dropped to the bottom of the list.

Next name is Miles Beaudin, private citizen. Miles Beaudin? Miles Beaudin's name will be dropped to the bottom of the list.

Next names I have listed is Cam Dahl and Lauren Stone, Manitoba Beef Producers. Good evening, sir.

**Mr. Cam Dahl (Manitoba Beef Producers):** Good evening.

**Mr. Chairperson:** Welcome. Will you be making a sole presentation?

**Mr. Dahl:** I will. I do need some help in answering questions, so the smart one will sit back there and answer the questions.

**Mr. Chairperson:** That's fine. Do you have a written presentation?

**Mr. Dahl:** I do.

**Mr. Chairperson:** Give us a moment to distribute, then I'll give you the signal to proceed.

Please proceed when you're ready, Mr. Dahl.

**Mr. Dahl:** Thank you, Chair, and members of the committee. I am here today on—with my colleague Lauren Stone, representing the views of the

Manitoba Beef Producers. My name is Cam Dahl and I am the general manager of the organization.

Before I begin to talk about Bill 46, let me give you some background on the importance of agriculture to Manitoba's economy and the impact of the beef industry, in particular. It is undeniable that agriculture is an economic driver in Manitoba. The industry makes up about 28 per cent of the province's GDP and is Manitoba's single largest wealth-generating activity.

Manitoba is home to the third largest beef herd in Canada. We have approximately 12 per cent of the national herd. While 98 per cent of the individual commercial beef cattle operations in Manitoba are cow-calf producers, feedlots make up the remaining 2 per cent of beef operations.

\*(18:40)

The impact of Manitoba's beef producers is large. On an annual basis, Manitoba's beef cattle industry purchase over \$300 million worth in feed. Beyond feed, beef producers purchase \$225 million in operating inputs each and every year. The value of goods and services demanded by Manitoba's beef operations is about \$635 million annually.

Beef production represent Manitoba's single largest agriculture sector in terms of number of individual farm operations. Our industry plays a vital role in Manitoba's overall economy and is an essential component of maintaining rural economic sustainability. Our industry's demand-creation power of \$635 million per year means that not only can our rural communities continue to survive, but also that Winnipeg, Brandon and other major urban centres can continue to receive the extensive economic derivatives of our industry's wealth creation.

Our industry's economic spinoffs help lead the growth of the rest of the province's business community. We are one of Manitoba's leading industries. Beef producers matter to the Manitoba's economy. The impact of legislation on our industry should also matter to all members of this Legislature.

Bill 46 presents some grave concerns for Manitoba's beef industry. Fundamentally, Manitoba producers feel that agriculture is being unnecessarily singled out and targeted by this legislation. This is not productive, nor will this help address concerns over the health of Lake Winnipeg.

There is a perception within our membership that this bill is about the coming election. The health

of Manitoba's economy and our natural environment are simply too important to be subject to political gamesmanship.

Before going through the details of the bill, I would like to begin a little bit by telling you what we do support: No. 1, Manitoba Beef Producers support strong, science-based initiatives that are designed to ensure the preservation of our land and water; No. 2, Manitoba Beef Producers strongly support producers and governments working together to develop environmental initiatives that can be embraced by all sectors of our industry without harming producers' ability to earn a living; and No. 3, Manitoba Beef Producers strongly believe that co-operation between producers and government, as opposed to excessive regulation, will always lead to more effective results and programs that are flexible enough to meet the challenges and changes over time.

Does Bill 46 meet these three basic criteria? The simple answer to that question is no. In fact, the legislation fails on all three of these counts.

Manitoba Beef Producers do not oppose saving Lake Winnipeg. The livelihoods of beef producers depend on healthy land and water. So when we say we strongly oppose Bill 46, please do not be confused and somehow think that we impose improving the health of one of our largest natural resources, Lake Winnipeg. Quite the opposite, in fact: we oppose this bill because it will not accomplish what it has proposed to do. Bill 46 will not save Lake Winnipeg.

Manitoba Beef Producers believe that this bill has been introduced: No. 1, without an adequate scientific base; No. 2, without the necessary consultations with Manitobans who will be impacted by the bill; and No. 3, with legislative and regulatory hammers rather than working co-operatively with agriculture to effectively accomplish the environmental objectives of every Manitoban.

Let me deal with each of these points individually. The review from Saskatchewan that led to this bill is built on a number of faulty premises. First, this review does not differentiate between nutrients moving into our watershed from outside our province and nutrients that are introduced at home. Targeting Manitoba's livestock production will simply drive this economic activity out of the province but almost certainly still within our watershed. What is required is a comprehensive strategy that deals with all connected issues across

the watershed and not simply targeting one sector of Manitoba's economy.

Just as importantly, the study does not present a scientific basis for cause-and-effect relationship between agriculture activity, increases in phosphorus levels and algae blooms in Lake Winnipeg.

Taken a lot of statistics in my life, and I'll never forget an example about the dangers of implying cause-and-effect relationship from simple correlations. Do you know that it's possible to effectively predict Manitoba wheat yields from June mosquito counts? High mosquito counts are highly correlated with high wheat yields. But does anybody around this table want to stand up and state that mosquitoes cause wheat yields?

Yet that is exactly what is being done in this review. They have assumed that correlations are the same as cause and effect. This is bad science, or, more accurately, it is incomplete science and should not be used for the basis of legislation. More scientific work needs to be done before legislation is considered by this body.

Further, we have no idea if past legislation has had any impact on the health of Lake Winnipeg. In 2008, this House passed Bill 17 which severely restricted hog production in Manitoba. We do know that this has had an impact on hog production in the province. But do we know if there has been any impact on the health of the lake? Anecdotal evidence would seem to suggest that the past Bill 17 has had no positive environmental impact on the lake.

Why is the Legislature considering expanding legislation that we know has had negative economic impacts without having any idea if there have been environmental benefits? At the very least, the government of Manitoba should have peer-reviewed scientific work detailing the environmental impacts, if any, of former Bill 17. Again, more scientific work is needed.

Efforts to preserve our watershed are the responsibility of every Manitoban. In order to be effective, measures to preserve Lake Winnipeg must have the co-operation of every sector of the economy. Yet this legislation has been introduced without any consultation with any sector of the economy. Why is this? Why is this bill being rushed through the Manitoba Legislature without any prior discussion with Manitobans? Some might be excused from wondering if there's a hidden agenda behind the rush to pass this bill.

*Mr. Vice-Chairperson in the Chair*

It is for this reason that the Manitoba Beef Producers request a pause in the process. We ask that the government of Manitoba set up a series of consultative sessions to be held in every region of the province. Not only will the consultative process allow the Province of Manitoba to explain its reasons behind Bill 46, it will allow legislatures—legislators to hear directly from producers on the measures that are already being undertaken to limit potential for nutrient loading. Further, direct consultation will allow producers to outline any new co-operative approaches that do not require legislative or regulatory measures.

This leads me directly to my last critical point. This legislation is not only unnecessary, but it is ineffective. Producers are the natural stewards of the land. Our members do not need to be forced to be environmentally conscious. This is their natural state. This is why Manitoba Beef Producers are especially disappointed that the government of Manitoba has chosen to move directly towards rigid legislation and regulation, rather than working with Manitoba producers to enhance voluntary measures that will effectively meet the needs of each region of the province and each part of the watershed.

In this case, one size does not fit all. Measures that are effective in the southwest corner of the province may not be appropriate for application in the Interlake. Yet legislation and regulation is exactly that—a single rigid approach that will not be appropriate for each region and location. Producers know and understand the needs of their local environment, which is why the government should be talking to them.

The right approach is consultation and co-operation with producers. Further, the rigid legislative and regulatory route that has been embarked upon does not have the flexibility to meet the needs of changing weather and environmental conditions. Today, Manitoba is being hit with floods and excessive moisture, but we all remember times of water shortages and droughts. Are the same nutrient management approaches appropriate for each situation? The answer is no, but the legislative approach assumes this to be the case.

Chair, members of the committee, I'd like to summarize by asking you to reconsider your approach. The path that you are on today is the wrong one. Your approach will drive agriculture activity out of the province without addressing the

health of Lake Winnipeg. Manitoba Beef Producers calls on the government of Manitoba to pause and allow time necessary to complete the scientific study that should form the basis of any environmental legislation.

We ask that you pause to allow for adequate consultation with producers in every region, as well as with the urban centres throughout the province. Failure in this regard will drive wedges between the different economic drivers of our economy to the detriment of every Manitoban.

Finally, Manitoba Beef Producers calls upon the government of Manitoba to pause and engage in a co-operative and voluntary approach that is flexible enough to effectively address needs of every region of the province in all weather and climatic conditions. Rigid legislation and excessive regulation will not accomplish our common goals. Thank you very much for your time.

**Mr. Vice-Chairperson:** Thank you, Mr. Dahl. Open the floor to questions.

\* (18:50)

**Mr. Blaikie:** Just a word of thanks to Mr. Dahl for bringing forward the views of the Manitoba Beef Producers. Nice to see the beef producers sticking up for the hog producers, vice versa.

**Mr. Dahl:** We're in this together as a province.

**Mr. Blaikie:** You're in this together, but I think it's also the case, perhaps, that, in the legislation itself, to the extent that it deals with producers at all, deals primarily, in fact, almost exclusively with hog producers.

It's a wide-ranging bill. It doesn't just—it doesn't single out the hog industry. It talks about the City of Winnipeg sewage treatment plant. It talks about peatlands, about wetlands, a number of things. It's a comprehensive approach.

I wondered if—so, what is it in the bill that would actually affect beef producers? Because as far as I can tell, there's nothing in the bill that actually addresses beef producers at all.

**Mr. Dahl:** I think there are a number of items that have concern, and for example, the broad, sweeping authority that section 7 gives the minister on authorities over Crown lands. And, again, what impacts one sector of Manitoba's agriculture economy in one sector of the economy impacts us

all. And, again, farmers are the natural stewards of the land and do feel that there is a target on agriculture for this and is a target on nutrients that, you know, is not appropriate. And that can as easily be applied to Manitoba's beef producers as it is currently being applied to Manitoba hog producers.

**Mr. Struthers:** Thank you very much, Cam, for your presentation. I certainly want you to pass on to Major Jay Fox and the rest of the Manitoba Beef Producers our appreciation for your presentation and all the advice that you've given to me as Agriculture Minister. I do enjoy working with your group, and I think we have to look at some things that your group has done positively in this area in terms of working with conservation districts to get cattle up out of rivers and those sorts of things. I do believe in giving credit where credit is due.

I do note that you, as a previous presenter did, you talked about the extension of the moratorium that was contained in Bill 17. You spoke of a hidden agenda. You even used the word "pause," which caught my ear because that reminded me that the first time my friends across the way voted against a water protection measure was the pause that we brought in which preceded Bill 17. Then my friends across the way voted against Bill 17. Now when we take that same concept, that same moratorium and extend it further, all of a sudden, Bill 46, my friends across the way have changed their vote.

Now, let's talk about hidden agendas. We've been up front. You may disagree with us, but this government has been up front and we've said what we're going to do all along the way. Which position from my friends across the way do you think is the real position?

**Mr. Dahl:** Minister, I appreciate your comments about co-operation, and as an organization we will always, always favour co-operation because, again, as I said in my presentation, that is always the best and most effective approach.

As to the comments about, you know, which position on the floor of the Legislature is right or wrong, I—you know, from my position here today, I'm colour-blind. I'm not speaking to you as New Democrats, I'm not speaking to you as Liberals, I'm not speaking to you as Progressive Conservatives. I'm speaking to you as members of the Legislative Assembly, and we have concerns with the approach, and those apply to all members of this House, and we would ask all members of this House, regardless of political affiliation, to consider a pause, again, for

more scientific review, for a broader consultative process with all sectors in Manitoba economy and to allow us to together develop those co-operative measures that we talked about.

**Mr. Maguire:** Thank you very much for your presentation tonight, Mr. Dahl, on behalf of the Manitoba Cattle Producers Association, and to Lauren that's with you as well. I appreciate the fact that I spent most of my life trying to work co-operatively with urban and rural folk to try and bring common ground in those areas to find—search this out. This bill is certainly not just about one sector, it's about many, and I appreciate your presentation in regards to the sector that you represent. And so thank you very much for putting forth your forthright views from your industry in regards to this matter.

**Mr. Vice-Chairperson:** Comment, Mr. Dahl? Okay, time for this presentation has expired. I thank you for your presentation.

Call Mr. Dan Klippenstein, private citizen. Mr. Dan Klippenstein, whose name will be dropped to the bottom of the list.

Call Mr. Weldon Newton, private citizen.

Hello, Mr. Newton. Do you have any written materials for the committee?

**Mr. Weldon Newton (Private Citizen):** Yes, I do.

**Mr. Vice-Chairperson:** Our Clerk's assistant will distribute them. You may begin. Mr. Newton. You may proceed.

**Mr. Newton:** I guess, to start with, I would like to suggest that a more appropriate name for this act would be, the complete destruction of the hog industry act. I guess I'm somewhat disgusted that again we are here. I have seen the tabling of legislation that is designed to complete the destruction of the hog industry in Manitoba. And I guess I would ask where our current Minister of Agriculture (Mr. Struthers) and our previous minister of Agriculture (Mr. Struthers) and our previous minister of Finance (Ms. Wowchuk), has been sitting and what they think the hog industry is going to look like down the road.

Our family was a small hog producer until last November when we completed the shutdown of our barns. We ran about an 80 sow farrow-to-finish operation and employed one person to help us run our barns. We also grow approximately 2,300 acres of cereal grains, grass seed, canola and peas. We currently have only about 40 per cent of our land seeded this spring and the odds of seeding more this

spring I would say are zero. We got 1.3 inches of rain last night.

The last time we were not able to seed our entire crop was in 1999 and we had hogs at that time to help provide us with some income to carry us through. Obviously we don't have that option this year, and even in that year we only had 150 acres we didn't seed. We have raised hogs at our current location for over 50 years. It was the hogs that allowed myself to start farming with my dad and also, later, allowed another brother to join our operation.

My brother and I now own and operate the farm. And incidentally, we are in the process of preparing for the third generation to be part of the farm. My nephew has some interest in being part of it. Certainly shutting down the hog operation is certainly going to jeopardize that transfer in the near future and whether we can successfully do it down the road remains to be seen.

In February of 2010 we started to close our hog operation and terminated the employment of our hired man who had worked for us for 20 years. He had done a lot of the work in the barns and that's why we had hired him. He also did some work in the field.

While as a small operation by today's standards, it did provide a significant source of income for us. It certainly would have been nice to have that extra income this year.

We shut down because the ban on winter spreading is to come into effect in 2013. I know all the science around winter spreading of manure and the small risk that this practice entails. However, unlike your government, I have to pay my bills. We simply could not cash-flow the costs of a lagoon for an operation the size of ours, and that is why the exemption was originally in the legislation for small operations. When we shut down, there were no programs to help us finance the cost of these additional storage structures and we saw no point in continuing to invest money in the replacement and maintenance of our barns knowing that in 2013 we were going to have to shut down anyway.

I believe the Province later put a program in place, which, as usual for Manitoba, was only provided after the federal government agreed to pay 60 per cent of the costs. It was also too late for many other small producers in the province, because I

know very well many others shut down at the same time that we did and for exactly the same reason.

The real frustrating part for me was, as many of you know, I was part of the phosphorus expert committee that looked at the nutrient loading in Manitoba. It was seven years after the phosphorus expert committee recognized the costs of this proposed change of banning winter spreading was beyond the financial capabilities of small operations. In fact, I believe it was in February of 2004 that the concern was first forwarded to the Minister of Conservation at that time by the phosphorus expert committee.

\*(19:00)

Seven years to make a decision and, in the meantime, we are faced with a two-year moratorium on the construction of barns and manure storage structures with the Clean Environment Commission examined the industry. Then you have the Auditor General take a run at the hog industry, and she decided that since Ontario and Québec don't allow winter spreading, then Manitoba should not as well. She did not acknowledge the large amounts of government funding provided to achieve that status.

None of these studies have provided you with a magic bullet to shut down the industry, but you decided that there should be a moratorium on the east side of the province anyway.

Since our barns were emptied, I have appealed the building assessment. I appealed the building assessment last year, and the assessment was reduced for this year and it'll be further reduced in 2012. With this legislation in place, I intend to appeal again this year for 2013 in—and I'm going to start—I want it written down to zero. As a result, obviously, the municipality is out of some fairly significant tax revenue from our—even from our small operation.

In order to justify the costs and have any hope of paying for the 400-day storage structure of operation, we would now lead an operation at least three times the size of what we were previously. So now if we want to expand to restart our operation, building a lagoon is apparently no longer good enough. We must now use advanced bio—advanced environmental practices to protect the water. I'm told this means we must now also use a biodigester or solid-liquid separation. When I asked the gentleman from Manitoba Conservation on Friday, I believe it was, what this would actually accomplish, since the technology does not reduce the nutrient content, his

reply was, well, it concentrates the nutrients and it's less expensive to transport. To be very blunt, that's another stupid answer that did not apply to our operation.

We either own or rent 12 of the 16 quarter sections of land in a one-mile radius of our barns, so transportation costs can't be reduced to any less than what we would face now to move the—to move and apply the manure as a fertilizer on our fields. For the arithmetic for you, that's over 1,600 acres of cultivated land on these 12 quarter sections. I don't have a problem of land availability to spread the manure. Incidentally, on those 16 quarter sections of land, we routinely apply inorganic fertilizer at rates recommended by soil testing. This past year we applied approximately 96,000 pounds or 43.5 metric tonnes of 1151 on that land. So the phosphorus is going to get there one way or the other. So now we have the phosphorus from our grain that's being shipped all over the world instead of some of it being recycled and used as plant nutrients on our farm.

It appears that this regulation change is being driven by an impending provincial election, whereby the current government is intent on demonizing the hog industry in order to maintain support of those in Winnipeg who are ignorant and uninformed about the financial and environmental realities of agriculture today.

Also the Premier (Mr. Selinger) is using a report by Dr. Leavitt and others in which he attempts to correlate the increase in hog production in Manitoba in the 1990s to the increased levels of phosphorus in the Lake Winnipeg sediment. He certainly did not provide any cause and effect for his conclusions. I suspect he could have got the same result if he had correlated the phosphorus levels to the number of people over age 40 in Manitoba in the same time frame.

I suspect that the number of significant flood events in the Red River Valley in the last 40 years and the subsequent move of—movement of dissolved phosphorus from crop and forage land as well as sewage discharges from Winnipeg and other human population centres are the real sources of most of this phosphorus. As long as there is green plant material being produced on the landscape, there will be significant movement of phosphorus off the landscape during spring runoff, and, certainly, this was well illustrated in a report by the phosphorus expert committee on how phosphorus actually moves in Manitoba. It's not in rainfall events like it is in the

corn belt; it's in spring runoff in Manitoba. And, as I've mentioned, this has been documented in peer-reviewed research and this has been verified as occurring in Manitoba by researchers at the University of Manitoba. I would hope that you would familiarize yourself with these studies, as well, before you continue your demonization of the hog industry.

**Mr. Vice-Chairperson:** One minute, Mr. Newton, sorry.

**Mr. Newton:** Agriculture cannot achieve a zero discharge of nutrients off the landscape.

I ask you to withdraw this draconian legislation, initiate some rational discussion with your staff—some of them have actually considerable knowledge on this subject—and start a rational dialogue with producers and their organizations. You might be surprised what you might accomplish. Find out what beneficial management practices have potential to reduce nutrient movement off the landscape that already are not widely used and are affordable.

Continuing trying to drive a wedge between the urban residents and agricultural producers will not solve the problem. That only serves the interests of your political PR people and doesn't solve the problems of the landscape. Thank you.

**Mr. Vice-Chairperson:** Thank you, Mr. Newton. Open the floor to questions.

**Mr. Blaikie:** Yes, I just want to thank Mr. Newton for his presentation and assure him that there's no intention to demonize any industry or sector.

The bill is somewhat comprehensive and tries to address a number of the problems that relate to saving Lake Winnipeg, and it's not a bill that deals only with one particular industry. And even in the—where it does deal with the hog industry, there's certainly no intention to demonize the hog industry.

**Mr. Newton:** Well, I appreciate the—that's your opinion. I guess it's needless to say I disagree with it, but we'll agree to disagree tonight.

**Mr. Struthers:** Thank you very much for your presentation, Weldon, and I do appreciate the time that you've spent with me discussing your own challenges that you're up against in your farm site. I appreciate that.

You did mention, though, that—you did mention the next provincial election and that your view would be that this is being done for political purposes. I

think you've heard me a couple times earlier this evening talk about our consistency as a government when it comes to dealing with these water protection measures. We've consistently—whether we agree with you or not, we've been consistent in that.

It seems to me we're up against a little bit more of a problem now because the bill was passed unanimously the other day. The Conservative Party voted in favour of Bill 46. Isn't that playing politics?

**Mr. Newton:** Well, I'm not even going to try to understand the banter and the procedures that go on within the Legislative Assembly in this province. I'm—you know, I'm not even going to try to understand that.

**Mr. Struthers:** Well, I understand, but I would ask you to be fair. You've told me that as Agriculture Minister I should think more than just the politics of this. It was in your presentation, and that's fair ball. I don't mind that. But now don't bail out and say you're not going to attempt to understand all of the politics.

When the Conservative Party voted against the pause, voted against Bill 17, and now a bill that's based on the—it's based on the moratorium that we've already passed in this Legislature, that they voted against, now they've switched their vote.

My question is what you, as a Manitoban—which of their positions are you going to assume they're going to carry forward after this debate is over?

**Mr. Newton:** Well, I guess I'll leave that up to them to make that decision. I've put my point forward on what I think of the legislation, and I think there's a far better way of doing that, and if it's done appropriately, some of the small operations might actually even come back in business.

I think—I know Maple Leaf is significantly short of hogs. Hytek, they've probably got enough to look after themselves. My operation happens to be six miles from Hytek; it's 45 miles from Maple Leaf. Still—and we held a contract with Maple Leaf from day one until we closed down our operation because they gave us a guaranteed market. I'd still go back to them, and it's within that.

But under this, there's absolutely no way I can afford to open my barn again unless I get significant government help, and it's not there. That's the simple reality for us.

**Mr. Maguire:** Thank you very much for your presentation, Mr. Newton, tonight to the Minister of Conservation (Mr. Blaikie) in regards to this bill, and

I appreciate the fact that you have some expertise in this, having spent some time on the Phosphorus Expert Committee.

\* (19:10)

And when you speak of consistency, my honourable friend across the way forgets that they were the ones that wanted to take nitrates out of the waste-water treatment plant in north Winnipeg for about four years, and then they eliminated it from this bill.

So I think that the situation that we're faced with here is one that I appreciate the fact that there are so many people signed up to come and make presentations. It's obviously a concern to this bill.

I know there's people speaking for and against, and that's why we are here tonight is to hear those issues and from those speakers across the province of Manitoba that are—that can give us views and ideas on how a bill like this could be improved, if they see their way clear to do that from the government's perspective. And so I appreciate your forthright presentation on how this impacts not only your farm but many of the size of your farm across the province. Thank you.

**Mr. Vice-Chairperson:** Mr. Newton, any response to that?

**Mr. Newton:** Well, I think that lays out why I came to present tonight. The hog industry has been part of my life ever since I came back to farm, and as I said, that's how I got started to farm. We built a barn in 1972. We're still using that barn, by the way; it's still in pretty good shape. And we expanded again when my other—when my brother came back, you know, to be able to finance this because grain operations simply could not.

Also, with the hogs, we were able to expand at our own pace and at a reasonable cost. We're not competing with our neighbours for our rent, and we're in a very competitive area, as almost every area of the province is, for grain land. We can't expand that forever, and this was an operation—ability for us to manage our own operation within our own financial capabilities.

And I guess, just as a point of interest, when we renegotiated our line of credit with our bank this spring, in February, I believe it was, at that point, obviously, we had shut our operation down, and I just—I made the comment to the bank manager, to the gentleman that we were dealing with. I said, if I



came to you yesterday or tomorrow and asked for sufficient money to build a lagoon for our hog operation, I suspect you would probably just laugh at me, wouldn't you? He kind of looked at me and he says, yes, I think I probably would. And I can assure you, we have a very good credit rating at that bank.

**Mr. Vice-Chairperson:** Okay, time for this presentation has expired. Thank you, Mr. Newton.

Call Mr. Greg Bruce, Ducks Unlimited Canada.

Good evening, Mr. Bruce. Do you have any written materials for the committee? You do. Our Clerk's assistant will distribute them. You may begin when ready.

*Mr. Chairperson in the Chair*

**Mr. Greg Bruce (Ducks Unlimited Canada):** Good evening.

**Mr. Chairperson:** Good evening, sir. Please proceed when you're ready.

**Mr. Bruce:** Thank you. Thank you, Mr. Chair and members of the committee. My name is Greg Bruce. I work for Ducks Unlimited Canada, and I'm presenting on DU's behalf this evening.

Ducks Unlimited Canada is a private, non-profit organization that conserves, restores, and manages wetlands and associated habitats for waterfowl. These habitats also benefit other wildlife and people. In Manitoba, the best waterfowl habitat is located in landscapes dominated by agricultural use, and as a result, Ducks Unlimited Canada works closely with producers to develop and promote management practices that benefit waterfowl as well as agricultural operations. We've presented to legislative committees in the past on various other bills, and if this committee would like additional information on DU, I'd certainly be glad to provide that.

DU is pleased that Bill 46 recognizes that action must be taken now if we wish to arrest the deterioration of the 10th largest freshwater lake in the world. Since the release of the Lake Winnipeg Stewardship Board's 2006 report entitled *Reducing Nutrient Loading to Lake Winnipeg and its Watershed*, Manitobans have known that we need to demonstrate leadership in solving the eutrophication problems of Lake Winnipeg. Not only do we have a vested interest as the benefactors of this great resource in Manitoba, but as identified in the report, a significant proportion of the nutrients entering the lake come from Manitoba. This further underscores

the responsibility of Manitobans to be part of the solution.

The study by Peter Leavitt recommends a 50 per cent reduction in phosphorus levels to reverse chronic algae blooms and return Lake Winnipeg to healthier, pre-1990 levels. DU's science has confirmed that wetland drainage is a significant contributor to Manitoba's widespread eutrophication problems, and, as such, any meaningful reduction in nutrients will be extremely difficult to attain unless we arrest wetland drainage in agro-Manitoba. The reason is that wetland drainage facilitates the leakage of nutrients from agricultural operations. Bill 46 outlines a series of steps intended to move us towards that goal, including the recognition that wetlands contribute to water quality improvement and are areas in need of protection. And specifically, on Bill 46, it refers to Crown lands.

While this is a positive first step, the bill in its present form fails to address the important wetlands in agro-Manitoba on private lands and the vital watershed function they play in nutrient removal and flood reduction, and this role had been referenced earlier by other speakers. In fact, it is these wetlands on private lands that are in most need of protection.

Ducks Unlimited Canada estimates that we've lost over 100,000 hectares, almost a quarter of a million acres, of wetland ecosystems in southwestern Manitoba alone over the last 40 to 60 years. Most disturbing is the fact that this loss continues in the absence of a comprehensive wetland protection policy. DU further conservatively estimates that we continue to lose approximately 2,000 hectares of wetlands every year, again in southwestern Manitoba alone. As such, the benefits of many government-led and private environmental initiative have already been and will continue to be offset until wetland drainage is stopped.

Wetlands filter nutrients such as nitrogen and phosphorus, the same nutrients that add to algae blooms on Lake Winnipeg and many other water bodies in Manitoba every summer. Early results of work done by Dr. Pascal Badiou, a research scientist with Ducks Unlimited's Institute for Wetland and Waterfowl Research, suggests that the majority of discharge occurs early in the spring, prior to the end of April, when the ground is still largely frozen. This early discharge carries the vast majority of the annual nutrient loading which is transported to downstream water bodies. One of the reasons that nutrients are so mobile at this time of the year is

because phosphorus and nitrogen are in soluble form. So drainage channels designed to facilitate the water—the movement of water off the landscape thus also facilitate the movement of nutrients off the landscape and into Lake Winnipeg and other receiving water bodies.

Our research has shown that wetland drainage since 1968 has increased annual phosphorus loading in downstream flows by 32 per cent, annual nitrogen loading by 57 per cent, and annual sediment loading by 85 per cent.

Wetland drainage increases the amount of nutrients exported to downstream surface waters for two reasons or in two ways. First, drainage allows the water to move more quickly through the wetland, thus diminishing residence time in the wetland that would otherwise assimilate and break down nutrients and other contaminants. And secondly, the ditches built to drain wetlands not only drain the water or the wetlands themselves, they also drain the surrounding land around the wetlands. So on average, for every acre of wetland drained, four additional acres of surrounding lands also drain downstream, carrying nutrients, sediment and chemicals that may have leached off the adjacent uplands.

This increase in contributing area also adds more water to downstream flows and allows it to flow faster, which also makes flooding and flood damages worse.

Some will argue that the combination of high fall moisture levels and abnormally high snowfall across the Prairies and all the rain that we're getting were the sole ingredients to the flooding problems we're having this year. However, our manipulations of the land also contribute to water movement as well. Wetland drainage increases the risk of flooding and associated damages by reducing water storage capacity, which results in rapid transportation of water and increases in peak flow.

Ducks Unlimited Canada's most recent research in a watershed in southwestern Manitoba estimates that wetland drainage has increased peak flows by 37 per cent, which is quite significant when you consider the Red River Basin Commission's goal is to reduce peak flows by 20 per cent.

The flood storage capacity lost due to wetland drainage activity in southwestern Manitoba is more than double the flood storage capacity of the Shellmouth Reservoir. That's not to diminish the importance of the reservoir itself, but rather to

highlight the effectiveness in flood mitigation is significantly offset as we continue to allow wetlands to be destroyed.

And while not a goal of Bill 46, wetland drainage also has a staggering effect on greenhouse gas emissions. As an example, annual greenhouse gas emissions given off when wetlands are drained are more than six times the CO<sub>2</sub> equivalent of emission reductions that will be achieved by the recently announced Brady Landfill gas-collection system.

\* (19:20)

Some might argue we're on the road to recovery with programs like the Wetland Restoration Incentive Program, which we are a partner of, and it is a very good program and it's a great first step and can be lauded as probably one of the most attractive wetland restoration programs in the Prairies. And we have some experience with that. However, the reality is that we continue to lose 10 times more wetland acres than this program is able to restore on any given year.

Natural ecosystems such as wetlands are our best defence to the impacts of weather extremes, our fight against climate change, and to help clean up our precious water resources, and the sooner we find ways to protect these natural assets, the better off we will all be in the long term.

Lake Winnipeg is symbolic of the declining health of many of Manitoba's water bodies—and, on that note, I come from Killarney, so I know what I'm speaking of—and any actions to work with producers to find solutions to protect wetlands on private land will not only help to clean up Lake Winnipeg, but also help to improve the quality of the countless other lakes and rivers across Manitoba.

Not only will we improve water quality, but these actions will also help to reduce future flooding and flood damages, and we've got some science to show that.

Investments in wetland protection on private lands will also help to contribute to our greenhouse gas mitigation and adaptation objectives and provide habitat for over 600 species of plants and animals, help make watersheds and agriculture more resilient to weather extremes, provide ecotourism opportunities, and the list goes on.

The bottom line is that wetland protection is one of the best investments that government can make.

In closing, it makes eminent sense to protect the wetlands for Lake Winnipeg's sake alone, but when you tally up all the other costs of allowing wetlands to be destroyed, wetland protection on private land should be a top public and government priority.

Thank you, Mr. Chair, and committee.

**Mr. Chairperson:** Thank you very much, Mr. Bruce, for your presentation.

Questions of committee members?

**Mr. Blaikie:** Thanks to Mr. Bruce for the presentation from Ducks Unlimited and, of course, I think thanks on behalf of all of us for the work that Ducks Unlimited does and has done for so many decades.

I think—I just wanted to take special notice of the point that you make about—frankly, it's something that the bill doesn't do which you would like it to do, which is to address the question of wetlands on private lands, particularly agricultural lands, and, obviously, I think the point that you make about having to deal with that in an appropriate way at some point in the near future is a good one.

Otherwise, a lot of the other programs that we work in co-operation with Ducks Unlimited and others on, if we're gaining ground here, but losing it over there in terms of wetlands, then, you know, that's obviously a significant concern, and I'm glad that you made that point before the committee and before everyone here assembled, so to speak. So thank you for that.

**Mr. Chairperson:** Mr. Bruce, did you wish to comment?

**Mr. Bruce:** No, I appreciate the fact that that point's getting across and we are in the process of developing science. It continues to do that. We try to do that in a way that doesn't diminish the importance of the good work that is being done.

That is not our intent, but our intent is more than anything to underscore that we do need to address this problem because all those good initiatives are not getting us to where we want to be as we continue to allow wetlands to be lost. So I appreciate that that point's been taken.

**Mr. Maguire:** Thank you very much, Mr. Bruce, for your presentation tonight from Ducks Unlimited.

I note with interest many of the points that you've made and we've had discussions with before. I certainly appreciate the work that you're doing with

your organization, and looking at providing positive mechanisms on how we can clean up some of Lake Winnipeg and save Lake Winnipeg for the future can be well gleaned from some of the presentations, many of the points that you've made tonight.

And I wanted to discuss, as well, just get an opinion from you or see if you've done any work in regards to the removal of nitrogen from the wastewater treatment plant, as opposed to, I believe I said earlier, nitrates, but it's nitrogen that the government was proposing to remove and has taken that part out of the bill.

Do you have any thoughts on that as well?

**Mr. Bruce:** No specific comments related to that portion of the bill.

The one point I would like to drive home, given that you're setting me up with that, is the important role that wetlands have in terms of removing nitrogen as well. So regardless of what our objectives are or what percentage of nitrogen and phosphorus we want to take out, I'm here to tell you wetlands do both, and they do a lot more than that. So, again, it just underscores the need and the role of wetlands and conserving them on the landscape.

**Mr. Maguire:** Thank you very much and I appreciate your time taken to make your presentation to us tonight, Greg. Thanks.

**Hon. Christine Melnick (Minister of Water Stewardship):** Thank you for coming to present tonight. Just on a point of clarification, in fact, the removal of nitrogen is something this government still is committed to, and I was glad to hear your answer which talked about the removal of both and the necessity of removal of both.

So, thank you for your presentation this evening.

**Mr. Chairperson:** Mr. Bruce, did you wish to comment further, sir?

Thank you very much for coming out this evening and for making a presentation.

**Mr. Bruce:** Thank you.

**Mr. Chairperson:** Next out-of-town presenter I have listed is Garry Tolton, private citizen. Garry Tolton? Seeing that Garry Tolton is not with us this evening, the name will be dropped to the bottom of the list.

Next out-of-town presenter we have is David Kraut, private citizen. David Kraut? Seeing that

David Kraut is not with us, the name will be dropped to the bottom of the list.

Next out-of-town presenter, Matt Reimer, private citizen. Matt Reimer? Seeing that Matt Reimer is not with us, the name will be dropped to the bottom of the list.

Next out-of-town presenter is Robert T. Kristjanson, private citizen.

Welcome. Thank you for your patience. Good evening, sir. How are you?

**Mr. Robert T. Kristjanson (Private Citizen):** Good evening to you all. I'm not going to speak very quietly. My name is Robert T. Kristjanson. We have been in the fishing industry for 121 years. I'll talk to that big guy who's got the whiskers on there so he hears it all. We've been here an awful long time. I came—and this is the first time that I've had—be able to speak in this great House. And in this great House, for all of Manitoba here around us, is the laws of Manitoba, the greatest province in Canada. And I'm very proud of that.

Here we put the smartest people that we could put together, and we send them here, whatever they lean one way or the other, for the benefit of Manitobans all around us. By being all around us, that means the water rights, the air we breathe and the land we—and what we sow it and how we do it. No one has the right to pollute—what we call pollute—anyone else under our law. Here amongst me, as I look around, I see every walk of life—I don't see many fishermen—many walk of life. I'm very proud to stand here because I think that it is time that we woke up. Read Canadian national geographic this month. Anybody read it? It's time you did. We're right on the front page. Is that what you want? Do you want—here, the smartest people that we can put together, and put them together and we can't understand what's on the front page.

I am firmly behind the Province of Manitoba, what they are doing. Thank goodness somebody is. From 1992—I could have brought you all these pictures and you guys would have gone oh, ah, oh, ah, but it is true, it has to be done.

Somewheres along the line here, we have to be—stand up and be counted, regardless of what we like and how we don't like it. No one here—I don't care who you are—can walk out of here and say, I'm against cleaning up the waters in Manitoba. If you are, I don't want to know you.

Now it is time that we have to. Do we want Lake Winnipeg out there to be a garbage dump? Tell me, is that what we elect people to understand? When I—last time I was in Iceland and a lot of people came to me and said, you're having trouble on Lake Winnipeg. He says, don't you have a government that regulates the water? I had to turn around and walk away. What could I say? Now we have a government, and all governments have to realize our greatest resource, and I will stand on anywheres you want, the greatest resource is going to be our water.

Right now, I feel sorry for people who are being flooded, water in their homes and having—I feel terrible about it. But I want Lake Winnipeg—tomorrow morning at four o'clock, I'll give you a call, anybody want? That's where I'll be, with two other generations with me, three generations, regardless, taking the fish that we want with nothing in them, perfect to eat. We want to keep it that way. That's why I stand in front of you, to do the biggest thing that we have is to look after Lake Winnipeg or make it a garbage dump. Which do you want?

\* (19:30)

I can't stand, every time I go around the city, here is another line of another 10,000 houses. There's another line of another 10,000 houses. I hear the mayor, or whatever he is, stand up and say, oh, we don't have to take this out because we can save some money. I don't give a shit what it cost him. It is time that we did what is supposed to be done, whatever it costs and how we do it.

If them 700 little piggies leave here then they have to be treated as that, and that's how they have to look after what they're doing. I could go on here for hours and hours and you don't want hear that. I want every Manitoban here to stand up and be counted, but I'm looking at them right here.

This is the time now. Do you want to be on the page of every single—every book. Wherever I've gone and say, this is Manitoba but I'm—we're not doing anything about it. It is time right now that this great House put into line what should be done a long time ago.

I have a great partner, Kristofferson. This man's worked tirelessly. There's Pip's over here—worked tirelessly. You've got people in here who've spent their lifetime trying to put and say what is right and what is wrong. Now is the time. There is no other way to do it. I can't harp at you any more or any stronger than what I am saying.

Tomorrow morning I have to go and fight with sticks, fight with current, fight with algae. But a lot of people that are being flooded out all over—I just say I have to live with what I've got, and I'll put up with the best I've got. But I will not put up, from end to end, with algae. I will not, because people say, well, we can do it a cheaper way. We can't do it a cheaper way. We have to do it the right way. Thank you.

**Mr. Chairperson:** Thank you very much for your presentation, Mr. Kristjanson. Questions for the presenter?

**Mr. Blaikie:** I'll try and speak loud so that both of us with the grey beard can hear each other. Well, it doesn't mean there's anything wrong with our hearing, as far as I know.

But I just wanted to thank Mr. Kristjanson for his presentation and to say that, you know, the government agrees that it is time, probably the time was even earlier than now. But we've had a long-standing debate with the City of Winnipeg about whether or not to remove nitrogen as well as phosphorus and ammonia.

And what we are saying now is, it is time, and what we're asking of the City is that they build a state-of-the-art sewage treatment plant, based on biological nutrient removal technology that will be able to remove ammonia and phosphorus and recycle phosphorus. Remove it and in such a way as it's available for reuse for agricultural purposes.

And the question of nitrogen, we still believe it would be a good idea to be able to remove nitrogen. But to some degree we're saying, let's—the lake is more important than the argument. We need to save the lake and, therefore, all we're asking of the City of Winnipeg is that it build a state-of-the-art BNR plant, which at some point will be able to deal with nitrogen but very soon—as soon as it's built, will be able to deal with phosphorus and ammonia in an appropriate way.

And the point that you made, which I want to emphasize, is the city is growing. You know, you talked about 10,000 houses here and 10,000 houses there. We need to build a plant that can deal with a growing Winnipeg, with a growing population. We can't cut corners. We need to do it right, and I think—I don't want to put words in your mouth, but I think I'm saying—

**Floor Comment:** Exactly what I was going to say, Mr. Chairman, if I can.

**Mr. Blaikie:** Fair enough.

**Mr. Chairperson:** Mr. Kristjanson.

**Mr. Kristjanson:** Can I say something more?

**Mr. Chairperson:** Yes, please.

**Mr. Kristjanson:** Right here, the river is right down here. The bottom of the river, right down to so many miles out of—where it flows into Lake Winnipeg, is solid rock. How many people know that?

The biggest pipe you've got here is what's coming out of the city of Winnipeg 365 days a year. If the creeks dry up, water still flows out of Winnipeg here for 365 days a year with nitrogen and phosphorus and ammonia and everything else. Winter and all, it doesn't matter how hard it's frozen; the toilets never stop. Try it and see what happens—it keeps on going. That's why I've asked that the nitrogen and ammonia be taken out. I don't care what it costs. You put it there, you take it out.

Somewheres down the line here, somebody has to say, you did it, you take it out.

**Mr. Maguire:** Thank you very much, Mr. Kristjanson, for your presentation tonight as well, and—very passionate in your beliefs. So thank you very much.

**Mr. Chairperson:** Mr. Kristjanson, did you wish to comment, sir?

**Mr. Kristjanson:** No, I think I've—I think I've said enough. I covered everything—only a one part of it, and I'm really, really, really privileged to be able to stand here as straight as I can to this group and hope it goes someplace. Thank you.

**Mr. Chairperson:** Any further questions or comments for the presenter? Seeing none, thank you very much, Mr. Kristjanson, for your colourful presentation this evening. Good to see you, sir.

Next out-of-town presenter we have is Lois Wales.

Good evening, Ms. Wales, welcome. Do you have a written presentation?

**Ms. Lois Wales (Manitoba Government and General Employees' Union):** Yes, I do.

**Mr. Chairperson:** Just give us a moment, please, to distribute.

Please proceed when you're ready, Ms. Wales.

**Ms. Wales:** My name is Lois Wales, and I would like to thank the speaker in front of me. It's kind of a hard act to follow after all that.

Anyhow, again, my name is Lois Wales and I am speaking today in my role as president of the Manitoba Government and General Employees' Union, as a citizen concerned about the state of Lake Winnipeg, and also as a resident of Selkirk, Manitoba, one of many communities across our province that depends on Lake Winnipeg for jobs, business opportunities and recreational amenities.

I want to thank the committee for the opportunity to present today. It's incumbent upon me to state clearly at the outset that I am not a scientist nor have I personally conducted research into the science of what's required to return Lake Winnipeg's health and well-being to pre-1990 levels. But, like thousands of Manitobans, I am passionate about doing all we can to ensure we are acting in the best interests of the lake's health. I know, as do most Manitobans, that there needs to be swift and decisive action on this file. There is simply too much at risk for us not to act.

So I'm here to speak in favour of this legislation and I want to strongly encourage members of all political parties represented here today to act outside of their normal ideological constraints and work cooperatively to enact this legislation as soon as possible.

Like all of you, no doubt, I was shocked to learn that levels of phosphorus in Lake Winnipeg are currently three times higher than what they were in Lake Erie when people were talking about that body of water as dead. Those are harsh realities requiring strong action. I mentioned at the outset that I am not a scientist, but I do trust the advice of experts like Dr. Greg McCullough who are advocating for us to proceed in the direction that this legislation will take us.

I want to take this opportunity to commend those in the scientific community who've done so much already to chart a course forward recognizing the stakes for what they are and lending their collaborative expertise and experience in helping us meet this daunting challenge. I trust these experts and the individuals on the Clean Environment Commission when they tell us that we need to act in three key areas: keeping hog manure out of the lake, building better sewage treatment facilities and enhancing Manitoba's wetlands like the Libau-Netley

marsh which is just a few minutes drive from my home.

I recognize the parameters of this legislation will require difficult changes in sectors that have, no doubt, contributed to our growing economy, particularly in the livestock industry. I know many of the industry's representatives are here today. I would humbly suggest that most Manitobans understand the challenges these industries will be tasked with going forward, but they are changes that must be met. I believe most Manitobans support the need for tougher environmental practices and a ban on spreading manure in winter, but coupling these requirements with new funding, tax credits, will offset some of the challenges in the industry. It's the responsible, common-sense way forward.

In my role as president of the Manitoba Government Employees' Union, Manitoba's largest union, I have heard regularly from many of my members whose jobs are directly tied to the lake—from conservation officers to campground attendants—that they have seen the hurtful effects of the past 20 years and what that has meant to the people who use our parks and waterways. They've seen the disappointment on faces of families who come out to use the lake only to be met with posted warnings about safety of swimming and swallowing water.

\* (19:40)

We used to take for granted that this resource would be there. Now we have to check websites for both weather and the environmental warnings before heading to the beach.

I spoke with a friend recently who last summer had to explain to his three-year-old why he could not go in the water at Grand Beach. What struck me, of course, was what I imagined to be the child's bewilderment and disappointment. There was no way to explain the many aspects of this problem to him. He just knew that he couldn't cool off in the water.

We know this problem is bigger than recreation, of course. We know livelihoods are at stake, ecosystems for fish and other aquatic life hang in the balance, as well as investment in businesses supported by the lake and its surrounding areas.

This is tough stuff, but it is up to all of us to show some leadership. So I am here as well as a citizen to ask all those citizens who have a stake in this challenge to take individual responsibility. As has been stated repeatedly by many in the

environmental community, it's vitally important that we use lake-friendly products. This is something all Manitobans should be conscious of. It's something the government has put some teeth into by banning phosphates in dishwashing liquid. I want to issue a challenge to those in the corporate community to take responsibility as well.

Recently, the Manitoba Government and General Employees' Union announced a scholarship fund for graduate students. The scholarship is available to those who choose the Lake Winnipeg Research Consortium's research vessel *Namao* and Lake Winnipeg as their field of area of study. I know many of our friends in the labour community have also made commitments to becoming partners in important work being done by groups like the Lake Winnipeg Research Consortium and other advocacy groups.

Perhaps some of the advocacy groups within the business sector could also find their way to stepping up to make the lake a priority as well. Sometimes commerce must take a back seat to common sense when something like Lake Winnipeg is at risk.

As the Minister of Conservation (Mr. Blaikie) was quoted recently as saying, we brought back the Jets; now let's bring back the lake. There's also no shortage of people who want season tickets to Lake Winnipeg.

And to a large degree, they'll be looking for many of the people in this room and on this committee to show the leadership necessary to make that happen. Thank you.

**Mr. Chairperson:** Thank you, Ms. Wales, for your presentation.

Questions for the presenter?

**Mr. Blaikie:** Thank you very much, Ms. Wales. And just apropos of the comment attributed to me, I think I said that on CJOB, actually, but in saying we brought back the Jets, now let's bring back the lake, I think the point was that we brought the Jets back by making the kinds of investments that we needed to make in building the MTS Centre and that it's the same—it would be same kind of short-sightedness, if you like—*[interjection]* I'm being heckled by my own—it would be the same kind of short-sightedness that prevailed in some quarters at the time that said, let's not build the MTS Centre. Well, if we'd have listened to that sort of thing or if we'd have cut corners and we said, well, let's not—let's just build half an MTS Centre or let's just not have as many

seats or let's not do this or let's not do that, we wouldn't have the state of art—the state-of-the-art arena and we wouldn't have been able to bring back the Jets.

It's—I think the parallel is—it's not a stretch. It's a good metaphor. What we need to do is to have a state-of-the-art sewage treatment plant. We need to have biological nutrient removal that can do the appropriate thing when it comes to phosphorus, both in terms of removing it and recycling it. We need to have biological nutrient 'removials'—removal, sorry, so that we can do the right thing by ammonia in terms of the increasing population of Winnipeg and also what's expected to be even stricter standards for ammonia in the coming years, and we need to have biological nutrient removal so that at some point if there's a complete agreement or a consensus on the need to remove nitrogen that we'll have the technology in place to do that.

So all—these are all the ways of making the kind of investment that will help us bring back the lake in the same way that, you know, we laid the groundwork for bringing back the Jets. So thanks for, you know, taking note of that metaphor.

**Mr. Chairperson:** Ms. Wales, did you wish to comment?

**Ms. Wales:** No, I think that there's a number of factors here. Like I said, I am not a scientist.

I would just like to comment. My father was a grader operator for the RM of Hamiota, and—for 40 years—and he said, people are doing damage in my RM by draining their sloughs. And, as the Ducks Unlimited pointed out, we need those sloughs. And we used to be a province of potholes where those sloughs sucked up that—all that stuff, and now we've become more and more without that, which has probably led to some of the mess we're in today.

**Mr. Maguire:** Thank you very much for your presentation, Ms. Wales. I appreciate it, having been at Grand Beach myself just last fall and seeing the devastation of the—you know, I agree. There was nobody in the water that day when I was there because of the conditions of the water.

I didn't know that the minister was such an avid hockey fan, but I'd certainly like to say that, you know, infrastructure needs are somewhat a responsibility of government, that's for sure. And if it hadn't been for the foresight of the floodway being built by Duff Roblin in those days and some of the expansions, the projects that we've got throughout

Manitoba that have helped us, we would have a much more devastating impact here in Winnipeg than we have today as well.

So I think it's very important that we look at this overall. Certainly, there isn't anybody that doesn't want to clean up Lake Winnipeg and make it better so future generations can use it, and I appreciate very much your presentation, taking the time to be here tonight to give us your views. Thank you.

**Mr. Chairperson:** Ms. Wales, did you wish to comment?

**Ms. Wales:** Just thank you for your time.

**Mr. Chairperson:** Any further questions, comments? Thank you, Ms. Wales, for coming out this evening and for your presentation.

Next presenter I have listed, out of town, is Kristian Stephens, Canadian Fertilizer Institute. Kristian Stephens?

Good evening, sir. Welcome.

**Mr. Kristian Stephens (Canadian Fertilizer Institute):** Good evening.

**Mr. Chairperson:** Thank you for your patience.

**Mr. Stephens:** No problem. Thank you.

**Mr. Chairperson:** Do you have a written presentation?

**Mr. Stephens:** I do.

**Mr. Chairperson:** Just give us a moment to distribute.

**Mr. Stephens:** Sure.

**Mr. Chairperson:** Please proceed when you're ready, sir.

**Mr. Stephens:** Okay. Thank you, Mr. Chairperson.

Good evening, members of the committee. My name is Kristian Stephens and I'm the senior manager of technical affairs for the Canadian Fertilizer Institute. The Canadian Fertilizer Institute represents manufacturers, wholesalers, retailers of nitrogen, potash, phosphate and sulphur fertilizers.

Simply put, fertilizer is food for plants. Fertilizer is responsible for nearly half of the world's food supply and is the most important crop nutrient used by Canadian farmers.

The Canadian fertilizer industry is committed to being part of the solution to Lake Winnipeg. Our

members recognize the importance of environmental stewardship and our role in ensuring the proper use of fertilizers.

The Canadian Fertilizer Institute is working with International Plant Nutrition Institute scientists, the United States industry, crop advisers, agri-retailers and farmers to improve fertilizer efficiency to improve crop yields and to protect the environment. This work has produced the 4R nutrient stewardship initiative. The fertilizer industry believes this is the best way to protect the environment while at the same time improving farm profitability.

Four-R nutrient stewardship is an innovative best management practice system with four key pillars for fertilizer application, and that is applying at the right source, the right rate, right time, right place. This science-based approach helps farmers and the public understand how right management practices for fertilizer or manure can improve farm profitability while reducing losses of crop nutrients to the environment. It helps any farmer improve the use of fertilizer on their land, create greater yields, and do it in an environmentally sustainable way.

The right source means ensuring a balanced supply of essential plant nutrients, including granular or liquid fertilizers or manures.

The right rate is applying just enough fertilizer to meet the needs of the crop while accounting for the nutrients already in the soil. Farmers can use soil tests to identify nutrient shortfalls and then GPS systems to apply fertilizer at variable rates throughout a field.

\*(19:50)

The right time means applying fertilizer when the crop will get the most benefit and avoiding times when fertilizer can be lost to the environment. In the fall, for example, soil needs to be the right temperature to minimize losses into the atmosphere, to maximize crop nutrient efficiency.

The right place is where the plants can easily use it and where it is less likely to be lost to the water or air. A great example would be subsurface banding in the soil near the seed rather than surface application. In other cases, farmers may need to establish buffer strips near waterways.

Four-R nutrient stewardship is a flexible, unified approach with all the four Rs working together in a nutrient management plan. Our industry recognizes that every farm and every field is different. That's



why the 4R nutrient stewardship initiative promotes the use of experts such as certified crop advisers. They help farmers to assess soils and environmental conditions on their individual farms and develop a customized nutrient management plan that is most suitable to their site-specific needs.

Four-R nutrient stewardship clearly promotes sustainable development as it provides economic, social, and environmental benefits. Four-R nutrient stewardship increases crop yields, sparing land for other uses, and increases or maintains the organic carbon sequestered in soil, thus playing a critical role in helping to protect the environment. Proper nutrient management ensures that the farmland and the surrounding environment will remain healthy for the generations into the future.

The Canadian fertilizer industry has been working on these issues co-operatively with the Manitoba government as well as the Canadian Association of Agri-Retailers and the Keystone Ag Producers and their members. Canadian Fertilizer Institute was a participant in the development of a series of five learned articles on 4R nutrient stewardship, is developing training courses for farmers and certified crop advisers, and is sponsoring field trials in Manitoba and in other provinces on four Rs for greenhouse gas reduction.

Farmers have always known the importance of limiting their impact on the environment but more can always be done. Manitoba has been a leader in encouraging farmers to use nutrient management plans in crop production. We believe that 4R nutrient stewardship is an important tool to meet the province's agricultural and environmental goals. Manitoba's crop producers have a critical role in meeting world food demand, and fertilizer is a key ingredient in making that possible.

So with that, I'd like to thank you, and I look forward to the discussion.

**Mr. Chairperson:** Thank you very much, Mr. Stephens, for your presentation. Questions from committee members? Comments?

**Mr. Blaikie:** Well, just a word of thanks for the presentation by Mr. Stephens. I mean you don't address the bill specifically, but I think you provided us a lot of—with a lot of information about the use of fertilizers and phosphorus, and we appreciate that because the more we know, the better we'll be able to protect the lake and have thriving agriculture all at the same time. So thank you very much for that.

**Mr. Chairperson:** Mr. Stephens, do you wish to comment, sir?

**Mr. Stephens:** I thank you, Mr. Blaikie.

**Mr. Maguire:** Yes, I note with interest—Mr. Stephens, thank you very much for your presentation. In your first, virtually your first paragraph, you've indicated that fertilizer is food for plants and responsible for nearly half the world's food supply. I appreciate your comments on that and the package that you put together. I note that it says that you are working co-operatively with the Manitoba government on this, and I appreciate anything that can be done then to enhance the education around the product that you're using because we need responsible product of all of the—or responsible use of all of these products, and so I just wonder if you could elaborate on that relationship, and I thank you—outside of that, I thank you very much for taking the time to be here to make your presentation tonight.

**Mr. Chairperson:** Mr. Stephens, did you wish to comment, sir?

**Mr. Stephens:** Thank you. Again, I'd like to reiterate. Canadian fertilizer industry is prepared to continue work with the Manitoba government, agri-retailers, environmentalists, farmers, and other key stakeholders and to ensure nutrient management does not hinder water quality in Lake Winnipeg or in other water bodies in the province.

**Mr. Struthers:** Thank you very much for your presentation, and indeed we do—I think people from our department do think that we have a good relationship. I think working with the department and anyone from the private sector on these sorts of things can lead to some good decisions being made out on the land surface.

I was very interested in the four Rs you talked about, especially the two Rs having to do with rate—doing it at the right rate and the right time. Is there any advice you can give to this committee in terms of other measures that we could be doing to deal with the excess of phosphorus, excess of nutrients that can be applied to the land? Are there other things that we can be looking forward to working together on?

**Mr. Stephens:** Thank you for your question, Mr. Struthers. Again, my advice is to, again, adopt the 4R stewardship in your—in the province's extension materials, you know, continue working with the

industry and, you know, help maintain that relationship so we can get some really good data.

**Mr. Struthers:** Yes, thank you very much. Members opposite have tried to make the case that it's not a problem that we should be dealing with, that we can't—that anyone out there who's using these fertilizers, we can trust them to make the right decisions. And I guess that's partly based on, you know, if you have to pay a bunch of money—I'm not saying you're overpriced or anything, but maybe some of my farmers would tell me to tell you you are, but they say that the cost of it would be a natural restriction on overapplying and taking too much fertilizer and leaving it out on the fields to have it wash off and eventually end up in Lake Winnipeg.

It's been suggested to me that that's not a natural restriction on hog manure, that, in terms of hog manure, you want to get rid of the stuff as quickly as you can, and that's when we have problems. Does your institute have any thoughts on the difference between fertilizer being applied out on grain land as opposed to fertilizer from hog barns being cleaned out and applied out on the surface of fields from hog barns?

**Mr. Stephens:** Interesting point you raised, Mr. Struthers. Again, I would agree that every farm and fuel is different. Each farmer's specific needs can be different. You know, again, if the farmer would implement R4 nutrient stewardship, then they could assess what is, you know, based—take a soil test, what is their nutrient pool in the soil, figure out what options exist for me or for her, and you use which product, again, the other four, the other of the four Rs, to decide which action to take.

**Mr. Struthers:** Yes, I think that's excellent. Part of what we want to do here is put in place a different approach to handling the nutrients. We think that agriculture can grow, we think agriculture can prosper, we think it has a bright future in Manitoba, but we do think that there's some things that we can do to make sure that the excess fertilizer that we're dealing with doesn't end up in our lakes.

Is it your contention that if we don't handle it properly, that it could form part of the base upon which the green algae and other algae grow in Lake Manitoba—sorry, Lake Winnipeg. I've got Lake Manitoba on my brain.

**Mr. Stephens:** Good question, Mr. Struthers. Again, if farmers implement four Rs, that would help reduce nutrient—you know, potential nutrient losses into the

environment and further enhance crop yields. Crops do need a certain amount of nutrients to grow, to withstand stresses on them if they encounter any, and I think on implementing 4R nutrient stewardship definitely goes a long ways.

**Mr. Chairperson:** Any further questions. Seeing none, thank you very much for coming out this evening, Mr. Stephens.

**Mr. Stephens:** Thank you very much for your time.

**Mr. Chairperson:** Next out-of-town presenter I have is Sheldon Stott, private citizen. Sheldon Stott. Calling Sheldon Stott. Seeing that Sheldon Stott is not with us, the name will be dropped to the bottom of the list.

Next out-of-town presenter is Jeremy Janzen. Jeremy Janzen, private citizen. Jeremy Janzen's name will be dropped to the bottom of the list.

Next out-of-town is Clayton Block, private citizen. Clayton Block. Clayton Block's name will be dropped to the bottom of the list.

Next presenter is Sam Gross, private citizen. Sam Gross. Sam Gross's name will be dropped to the bottom of the list.

Next out-of-town is Allan Kristofferson, managing director, Lake Winnipeg Research Consortium.

Good evening, sir. Thank you for your patience. Do you have a written presentation?

\* (20:00)

**Mr. Allan Kristofferson (Lake Winnipeg Research Consortium):** I do not.

**Mr. Chairperson:** Please proceed when you're ready.

**Mr. Kristofferson:** Thank you, Mr. Chairman, and good evening to the committee. My name is Allan Kristofferson. I'm the managing director of the Lake Winnipeg Research Consortium, and I have to take this opportunity to say that I am genuinely proud to be a close associate of Mr. Robert T. Kristjanson. In my opinion, he is the sole individual who, through his own initiative, raised the red flag on Lake Winnipeg 15 years ago when the rest of us had no idea what was going on. I think he's—and I have to drive him home to get enough sleep—so he can get on the—then he can get on the—it'll be an interesting conversation on the way back, and we had a good one on the way in.

The Lake Winnipeg Research Consortium, as perhaps all of you know, is a not-for-profit organization that was funded in 1998, and it's a partnership, and it's a partnership that includes everybody, deliberately—all those who have stake or a responsibility or an interest in Lake Winnipeg. And it consists of government, many different levels of government—federal, provincial, municipal, First Nations, Crown corporations, cottage owners and commercial fishers and private citizens.

And our primary goal is to facilitate or make happen research that wasn't taking place on the lake for many different reasons. We need multidisciplinary research on Lake Winnipeg because it's a very complex body of water. We do this, we accomplish this in a number of different ways, not the least of which is that we own and operate a research vessel, the motor vessel *Namao*. It's a dedicated and capable vessel that allows us to reach every part of Lake Winnipeg effectively, and we host an annual science forum whereby research—we invite researchers, actually, to build capacity. We discuss research results. We identify research gaps and we help to set priorities on research.

And our activities can be divided, basically, up into two main categories. And the first one is monitoring. It's not a very exciting thing, but it's a very necessary thing. And essentially what it is, is we go to the same place at the same time year after year and look at the same things to see if, in fact, the lake is changing. We have 65 locations, GPS locations over the lake that we visit each year in the spring, in the summer and in the fall. It's very necessary to do that because we have to get an understanding of the seasonal changes in the lake, and we have to do it year after year to get an understanding of the natural—annual variation in the lake as well. And at each station we monitor chemical, biological and physical parameters, and we've been doing this every year since 2002.

Now, I wish I could say differently, but the results of that monitoring tell us that the lake isn't getting any better; it's, in fact, getting worse. We've seen significant increases in the concentration of both phosphorus and nitrogen since we started. And if we compare it to baseline information that was collected in 1969, it is, indeed, a significant increase.

So it's very clear to all and having listened to the presentations previously, I think there's a general consensus in this room that Lake Winnipeg is under stress from excessive nutrient concentrations. So the

initiative to—and it's generally recognized and accepted that there needs to be very, very soon a significant reduction in the concentration, particularly of phosphorus. The lake's algal community is dominated by cyanobacteria, 90 per cent now, compared to, say, 30 per cent in 1969, and one of the most effective ways of dealing with that in a short period of time, and this comes from experience on Lake Erie and other lakes around the world, is to significantly reduce phosphorus. And I certainly applaud the efforts of the government in moving in that direction.

Algal blooms continue to proliferate on the lake. Indeed, they foul swimming beaches, they clog fisherman's nets, but they've also been damaging the lake, and we have documented evidence that a large area of the north basin of the lake has suffered from oxygen depletion. When these large masses of algae die, they sink to the bottom, they decompose and they use up oxygen. And our researchers, particularly from the University of Manitoba, have seen a significant change in the composition of the benthos, the creatures that live on the mud. From those that—very important fish food, particularly for whitefish, the *Diporeia brevicornis*, a little scud, benthic amphipod, has been reduced in abundance and is being replaced by *Oligochaete* worms, which can survive depleted oxygen conditions.

So even though we don't see that, we certainly know that something's going on. Not a lot has happened in terms of positive things on Lake Winnipeg, but the damage is being done slowly, and that's why it's very, very important that we recognize that time is of the essence and something be done as quickly and as effectively as possible.

The other area of activity, of course, that we're involved in is research. This is a lake that we know very little about, and our research is—and many different aspects of research that need to be understood, but we're focusing on the nutrient issue and we're trying to get an understanding of how the lake processes these nutrients. From the time they enter the system, they are incorporated into the primary produces and they move their way up the food web to the top predators, which Mr. Kristjanson is going to be trying to catch tomorrow, the pickerel and the sauger and the whitefish.

The objectives are clear, then, and it isn't just one. The objectives are, certainly, we have to reduce the mass—biomass of blue-greens and this an important step forward in doing that, but we also

have to maintain a productive fishery. And when you start manipulating key nutrients like nitrogen and phosphorus, you can, in fact, have detrimental effects if you're not careful.

So what we're trying to do there is to model the lake. We're using two robust models that have been used effectively in other lakes. Indeed, there are similarities between lakes and we can take advantage of the knowledge we have on that, and one of the similarities is lakes have water, amongst other things, but there are very, very particular aspects of Lake Winnipeg that are unique to it: its morphology, its geochemistry, its thermal regimes, and so on and so forth. So we have to gather—and this is what we're doing as we speak, the ship is up the lake as I'm speaking—gather lake-specific information from Lake Winnipeg that we can plug into these models and hopefully, in the not-too-distant future, we can use these models to help us predict optimum levels of nutrient reduction. Indeed, we have to reduce the nutrient levels right now as quickly as we possibly can, but we also want to settle on where—what we call the sweet spots are. So, on the one hand, we can get rid of the blue-greens or at least reduce them significantly, you won't ever get rid of them, but we can maintain a productive fishery. And that work is in progress. So that's what we're working on.

Now the other role that the consortium has assumed and has been doing as effectively as it possibly can—is the role of education. We actually have an onboard program where we take classes of students out on the lake and they go through a hands-on field program, and the last couple of years we've taken over 500 students out for this issue. But it has to be far more reaching than this. The Lake Winnipeg watershed is almost a million square kilometres, 6.6 million people live in that watershed, five and a half in Canada and 1.1 just south of the border.

I was disturbed over the last little while that although a lot of people are aware there's a problem in Lake Winnipeg, they didn't understand the nature of the problem. The media was reporting the lake was dead or dying or polluted or contaminated or sick, *[inaudible]* maybe the lake is lost. What should we do?

So the first step is awareness. That seems to be widespread. The next step is understanding. The third step is individual acceptance of responsibility. And the fourth step, of course, is the willingness of all individuals, including myself, to do the right

thing. But you have to understand what the right thing is. And we've been involved in the production of a number of media productions, including most lately, the David Suzuki *Nature of Things* program called, *Save My Lake. Manitoba Moments, A Blooming Crisis*, a locally produced documentary called the *Fat Lake* and another one, by Jim Byrne out of Lethbridge called *Choking Lake Winnipeg*.

And I think those have reached a lot of people and they've helped people to understand the nature of the lake. And we're hoping through government action and individual understanding and acceptance of responsibility and willingness to do the right thing, we can turn the lake around. Indeed, the solutions are obvious: which treatment, best management practices, restoration of wetlands, holding back runoff, individual things as simple as conserving water, not over fertilizing your lawns, and there's a whole host of them, we have them on our website. And I feel that if we all, regardless of our backgrounds and our—whatever it is that we're concerned with, are willing to accept responsibility and turn things around.

I have no doubt, in the foreseeable future, that we can restore Lake Winnipeg to good health. Thank you.

**Mr. Chairperson:** Thank you very much for your presentation, Mr. Kristofferson. Questions for the presenter?

**Hon. Jon Gerrard (River Heights):** Yes, you say that—two points that the lake is getting worse. What's been the change in phosphorus levels over the last 10 years? And you made the observation about zones of oxygen depletion. Are those zones or areas of oxygen depletion in the north of the lake increasing, decreasing or staying the same over the last 10 years?

**Mr. Kristofferson:** First question, phosphorus levels—average phosphorus levels in 1969 were about 37 micrograms per litre. My understanding is they're now in excess of 55 micrograms per litre. There's been a significant increase there. And the trend indicates no apparent reduction at this point in time. Very likely, well, guaranteed, the lake is going to get a huge influx of phosphorus because of the runoff this spring.

\* (20:10)

Now, the second question is the extent of the oxygen depleted area. It has to do with thermal stratification in the lake. Lake Winnipeg is a very

shallow lake and, normally, shallow lakes don't thermally stratify. They're cold in the wintertime; in the springtime, the surface warms up and the bottom stays cold and it doesn't mix. And we didn't see that until 2003 when, in fact, we found a very well established thermal stratification. It was due to a low water year, warm temperatures, and not a lot of wind activity, and it was there that we detected oxygen levels near zero at the sediment level. They were well—the water column was well oxygenated, 9 or 10 ppm, from the surface down to about 13 metres, and then over the space of one metre, which was the thickness of the thermocline, they dropped to 2 ppm and, at the sediment level, we estimated at zero.

Now, the good news there, unlike Lake Erie with persisted dead zones to this day, that was episodic and the fall time—this persisted from June to about August and we went back in the fall and sampled it again—the lake experienced what is called the fall turnover. It's a diamectic lake and it did mix the surface and the bottom waters that reoxygenated, but it did leave an impact, and that impact was a change in the benthic fauna, and we haven't seen a significant recovery yet.

So it's episodic in Lake Winnipeg—it depends upon certain conditions—but it's not going to go away. It's going to happen again, and, again, if the algal biomass increases, it's that much more organic material that needs to deteriorate, and that's much more of a potential to deoxygenate the bottom waters.

**Mr. Blaikie:** Thank you, Mr. Kristofferson.

I just—I appreciate your analysis of what's going on in the lake, but in terms of the bill before us, I take it you think we're moving in the right direction. You commended the government at the beginning for moving in the right direction, so there are no particular problems with the legislation itself. Is that a fair comment?

**Mr. Kristofferson:** We have to do that. We have to move forward.

I can say that the nature of the consortium is such that it is in a sense not judgmental, but we all know the scientific community agrees that there has to be a significant decline in phosphate levels, and this is, in fact, what your bill is intending to do—in the right direction.

**Mr. Maguire:** Thank you very much for your presentation, Alan, tonight—Mr. Kristofferson. I had the opportunity of being with you on the *Namao* a

few summers ago in regards to the program that you brought forward in the Legislators Forum committee from Minnesota, North Dakota, South Dakota, here in Manitoba as well. It was a very informative session.

It's very important, I think, for people, as many as can be and so I congratulate you on getting as many students as you can in the summer program, to be a part of looking at the lake measures and providing an opportunity to look at the GPS sites to do the actual—it was a pleasure to be able to actually have you show us how you do those tests and results that day, and the findings.

And I think that's important in the education process, for Manitobans to be aware of the conditions—present conditions that we are dealing with and why it's so important, as I said earlier, with the beaches, to be looking at—didn't mention the Manitoba Government Employees. Ms. Wales indicated that they have a scholarship to put a person on board there as well, and I think that those kinds of initiatives are good in regards to helping you find the resources necessary to do the studies and anything we can do in that area as a support.

I had the opportunity personally of attending the Lake Winnipeg summit meetings in early December, late November, last fall and saw firsthand the video—or the movie, *Choking Lake Winnipeg* and know personally many of the people that were involved in the shooting of that film at least from the agricultural side and the research side, and I think it's imperative that they continue to look at those venues and be, as you say, all concerned about the cleaning up of Lake Winnipeg.

And so I appreciate your presentation tonight. I look forward to being able to interact more with you on this particular program down the road and look forward to being able to clean up the lake. And so I thank you very much. I just wanted to say thank you very much for all the work you do in a responsible mannership to provide the information that you do.

**Mr. Chairperson:** Mr. Kristofferson, did you wish to comment, sir?

**Mr. Kristofferson:** I just want to thank you again for this opportunity, and I have to say that it's vitally important that we continue to monitor the lake and provide everybody with feedback on its response because if we're going to do it, you have to know whether what you're doing is having the desired effect. So we, indeed, will continue to do that. Thank you.

**Mr. Chairperson:** Thank you very much for your presentation and for coming out this evening.

Next out-of-town presenter we have is Richard Prejet, private citizen. Richard Prejet? Richard Prejet? Name will be dropped to the bottom of the list.

Next out-of-town presenter is Sheila Kolesar. Sheila Kolesar, private citizen? Sheila Kolesar's name will be dropped to the bottom of the list.

Next name we have is Lorraine Langlois. Lorraine Langlois? Seeing that Lorraine Langlois is not with us this evening, her name will be dropped to the bottom of the list.

Next name we have is Norm Paisley, Pro-Ag Products Limited. Norm Paisley. Seeing that Norm Paisley is not with us, the name will be dropped to the bottom of the list.

Next name we have is Eugennie Mercredi, private citizen. Eugennie Mercredi. Seeing that Eugennie Mercredi is not with us, the name will be dropped to the bottom—pardon me?

**Floor Comment:** I'm going to register for tomorrow. I'll speak tomorrow because I just got in tonight. Thank you.

**Mr. Chairperson:** Okay, thank you.

Next name I have is Diane Desorcy, private citizen. Diane Desorcy. Seeing that Diane Desorcy is not with us, the name will be dropped to the bottom of the list.

Next name I have is Gary Stott, private citizen. Gary Stott. Seeing that Gary Stott is not with us, the name will be dropped to the bottom of the list.

Geroen VanBoekel. Geroen VanBoekel, private citizen. I hope I pronounced that name correctly. Seeing that Geroen VanBoekel is not with us, the name will be dropped to the bottom of the list.

Next name is Lionel Gauthier, private citizen. Lionel Gauthier. Seeing that Lionel Gauthier is not with us, the name will be dropped to the bottom.

Next name is Rose Klippenstein, private citizen. Rose Klippenstein. Rose Klippenstein's name will be dropped to the bottom of the list.

Next name is Michelle Martel, private citizen. Michelle Martel. Michelle Martel's name will be dropped to the bottom of the list.

Next name is Kevin—or Ken Martin. Ken Martin, private citizen. Ken Martin's name will be dropped to the bottom of the list.

Next name is Tom Waldner, private citizen. Tom Waldner. Seeing that Tom Waldner is not with us, the name will be dropped to the bottom.

Next name is Steven Hofer. Steve Hofer, private citizen. Steve Hofer's name will be dropped to the bottom of the list.

Next name is Mark Lanouette, private citizen. Mark Lanouette. Mark Lanouette's name will be dropped to the bottom of the list.

Next name is Heinz Reimer, private citizen. Calling Heinz Reimer. Heinz Reimer's name will be dropped to the bottom.

Next name is Paul Beauchamp. Paul Beauchamp, private citizen. Paul Beauchamp's name will be dropped to the bottom of the list.

Next name is Lindsey Banman, HyLife. Lindsey Banman. Lindsey Banman's name will be dropped to the bottom.

Next name is Albert Dacquay. Albert Dacquay. Albert Dacquay's name will be dropped to the bottom of the list.

Dennis Kornelsen, private citizen. Dennis Kornelsen. Dennis Kornelsen's name will be dropped to the bottom.

Next name is Jackie Klassen, private citizen. Calling Jackie Klassen. Seeing Jackie Klassen is not with us, the name will be dropped to the bottom of the list.

Next name is Keith Waldner, private citizen. Keith Waldner. Seeing that Keith Waldner is not with us this evening, the name will be dropped to the bottom.

Next name is Richard Badiou, private citizen. Richard Badiou. Richard Badiou's name will be dropped to the bottom of the list.

The next name is Robert Radawetz, private citizen. Robert Radawetz—Radawetz. Robert Radawetz's name will be dropped to the bottom of the list.

David Hildebrandt, private citizen. Calling David Hildebrandt. Seeing that David Hildebrandt is not with us, the name will be dropped to the bottom of the list.

Next name is Andy Cardy. Andy Cardy, private citizen. Andy Cardy. Andy Cardy's name will be dropped to the bottom.

Jason Falk, private citizen. Jason Falk. Jason Falk's name will be dropped to the bottom of the list.

\* (20:20)

Next name is Richard Taillefer. Richard Taillefer. Richard Taillefer's name will be dropped to the bottom of the list.

Don Carganillo. Don Carganillo, private citizen. Don Carganillo's name will be dropped to the bottom of the list.

Ben Hofer, private citizen. Ben Hofer. Ben Hofer's name will be dropped to the bottom.

Enoc Gonzalez, private citizen. Enoc Gonzalez. Enoc Gonzalez's name will be dropped to the bottom.

Karine Talbot, private citizen. Calling Karine Talbot. Karine Talbot's name will be dropped to the bottom.

Ernie Kehler. Calling Ernie Kehler, private citizen. Ernie Kehler's name will be dropped to the bottom.

Next name is Chief Adrian Sinclair, Lake St. Martin Indian Reserve. Chief Sinclair. Seeing that Chief Sinclair is not with us this evening, name will be dropped to the bottom of the list.

Next name is Cheryl Kennedy Courcelles. That name is added to the list, for the information of committee members. She was a late addition to the list.

Cheryl Kennedy Courcelles. Good evening, ma'am.

**Ms. Cheryl Kennedy Courcelles (Private Citizen):** Hello.

**Mr. Chairperson:** I hope I've pronounced your name correctly.

**Ms. Courcelles:** Yes.

**Mr. Chairperson:** Do you have a written presentation?

**Ms. Courcelles:** I do.

**Mr. Chairperson:** Okay. Please proceed when you're ready, ma'am.

**Ms. Courcelles:** Thank you. I'd like to thank the Chairman and the standing committee for the

opportunity to speak. My name is Cheryl Kennedy Courcelles, and I'm from St. Adolphe, Manitoba.

I am the daughter of a commercial fisherman. I am the daughter and granddaughter of a mixed family farm. I am the daughter-in-law of the industrialized farm, as well as industrialized hog industry. I am an activist, an artist. I've been a financial planner where we run the Investors Group office; we're in the financial community, and I just wanted to share my views with you today, just to give you a viewpoint. I've been flooded five times and I've been in the ice storm without any power for 12 days. So I think water energy is always trying to get my attention, so here I am.

First of all, water is sacred. Water is life, and without good, clean water, most life on this planet would die, including you and me, our families, our domestic animals or wildlife, and our ecosystems. Sadly and tragically, we, the people, have sat back and allowed our cumulative efforts of draining every drop of sitting water off of our yards and our communities. We've drained it out of our fields and wetlands and into our human-made diversions, our canals, our drains, our floodways, and we send it at horrific speeds to either destroy or to harmfully alter our precious, sacred lakes.

In the heart of the continent, we have put ourselves into congested heart failure with our megasizing of our unnatural drainage. We have topped this up with industrial farming and our outdated water and waste-management practices. The natural reacts to poisons and overabundance of toxins just like you or I would. So it is no big surprise to see the slow, tortuous death of our sacred lakes. But to sit back and do nothing about it is unbearable; it's even unthinkable for an educated and wealthy country like Canada.

As a mother, I am pleased to see Bill 46 save lake-Save Lake Winnipeg Act. It is a good start, and I fully support it. I at least can feel as if we've taken the sick to the doctor and now we have a bit of a game plan. We have some dos and don'ts, some restrictions and banning of our collective actions and future intentions. Is it enough, really? No, it's not, but it is a start.

As a voice for our future generations, for our wildlife and ecosystems, and for our sacred water energy, I would like to see this type of protection and regulation include Lake Manitoba, who are we—who, as we are currently witnessing, is also being destructively megasized with artificial flooding to

save Winnipeg and Lake Winnipeg, and is not—and it is not immune to our industrialized farming and/or our lack of proper water and waste practices.

At this point I also forgot to say I am the daughter of a mother who ran the lodges at the University of Manitoba Research Station and the Delta Waterfowl Research Station for 25 years. So marshes are also in our family.

We are living in very changing and exciting yet stressful times. We have built these waterway systems for the past 50 years, and it's taken a few wet years in a row to see what our actions have produced, so we saw, then, 2009-2011, having been perfect examples of what that wet future has in store for us.

We have industries such as agriculture, forestry, fishing and the general economy all butting heads with the energy sector; that is, that fast-moving dirty water being drained and stored in our sacred lakes and waterways for hydro production. Our families, communities, animals and ecosystems who all live outside the floodway gates or beside waterways and diversions are actually being terrorized by this modern-day human made tsunami of water, as we quickly drain it to our congested lakes. Most of this water would've sat naturally on the landscape where the toxins would've been ingested by the land and the ecosystems if our actions had not redirected it in the first place.

When we built the railways and the highways, we had to buy out the stakeholders to realize such a great feat, and now that we are investing into hydro energy and our big cash cow is water hydro, we certainly will have to buy out those people to protect them, their families and animals as well as for the long-term health of the lake.

At the end of the day, we cannot kill our sacred water energy by trying to make a fast buck, for water is life and it is a free right for all on this planet and we do have that duty and that responsibility to protect.

We are the leaders in the heart of the continent and when we put our hearts, mind and spirit into it, there is no stopping the good that we can do for our collective and sustainable future.

We say let's be tough on crime. Well, we are now forced to be tough on environmental crimes, too. We have no choice. Our sacred green algae waters are begging for help, and the fear of our babies never getting the opportunities like we did to play in our amazing lakes, never being able to go

fishing or enjoy a fish fry, never watching a mama piping plover protect and raise her babies on the incredible white beaches of Grand Beach or Delta, the fear of deadly toxic algae overtaking our sacred lakes has finally stirred us into action and policy and regulations.

None of this is one government's in the making or one industry. We all own it; we all consume; we spend and we utilize our goods and services. We are proud of our so-called green energy, hydro. We all eat, drink and flush the toilet. We can all make a difference and we should feel compelled to and passionate enough to clean up our acts for our future generations' safety and sustainability. Our babies are actually counting on us to do so.

I am thrilled to see us restoring wetlands in a huge way. This action will make one of the fastest differences that we can do as a society. As we put a little wild back into our lives, perhaps our sacred waters may once again sparkle as they did for me when I grew up on the amazing sand beaches of Delta or vacationed on the world-renowned beaches of Grand Beach, and I, like Ducks Unlimited, would like to see more action put on private property to restore and protect wetlands. That's a missing link here. We'd be missing the boat. To me, if you're going to get on the boat you might as well get on the whole boat and, you know, not leave half the boat, you know, someplace. Do it all.

We have asked for a full ban on hog production a few years ago already, and I am happy to see it going forward now. It may have to be extended, though, to other large industrial farmers who don't have adequate waste storage, treatment facilities or spread acreages, such as the cattle, dairy, turkey, chicken and the hen-intensified operations, especially those in the Red River Valley and the Assiniboine corridors and the special management areas.

\* (20:30)

A permanent ban on peat moss production should also be put into place, as well as the banning of goods and services that we know to be extremely toxic to our lakes, like our pesticides, herbicides, detergents and so forth. The eagles made a comeback when we controlled DEET, so there is hope in our collective actions for our sacred water.

Of course, we all have to do—we have to do all we can to upgrade our waste and water facilities, ensuring that they are state-of-the-art and not the



cause of future generations' nightmares but once again are the leading edge of doing what is right for our future generations.

I look forward to the future actions by our Clean Environment Commission for assisting us in being better stewards for our sustainable, healthy future for all.

All for one and one for all. Water is our sacred life. Please continue to help protect it in our healthy, sustainable, lucrative future right here in the heart of the continent, the best place to live and raise a family.

I thank you for your time and attention on this very important Save Lake Winnipeg Act, Bill 46. Thank you.

**Mr. Chairperson:** Thank you, Ms. Courcelles, for your presentation. Questions for the presenter?

**Mr. Struthers:** Yes, thank you. Sorry. I guess you got me choked up.

**Floor Comment:** Good. Because the lake is.

**Mr. Struthers:** Thank you very much for your presentation. I enjoyed that.

I—a few short years ago, our government brought forward Bill 17. It provided for the moratoriums in about three different areas of the province, and we had some reasons to do that. It was predicated on a pause that was put in place by our government before that.

Members of the opposition, the Conservative Party, were quite animated in their opposition to those measures, as they have been on every single water protection issue, water protection measure that we've brought forward in 11 years of government. Out of the blue, last Thursday, the Conservatives decided, though, they were going to vote in favour of Bill 46, the one that we're debating tonight.

In your opinion, is that a conversion on the road to Damascus or is that a shallow political move simply designed to get them through the next provincial election?

**Ms. Courcelles:** Yes, good question. I don't think it's either one of them.

I think, at the end of the day, as a person, as a dad, as a brother, as a sister, as a mother, we got to get it, for goodness' sake, right? You know, at the end of the day, we all want to make a living, and

when we get a break, we want to go to the lakes. We really do.

And so, you know, I'm glad they're on board, then, if that's what it took. Bravo. And I can't—honestly, I can't see any party going down the wrong road by supporting this.

And you see the hog producers, I mean, you're naming their names by about 50 of them who aren't able to show up tonight, right? And part of them not being here is the acceptance of that. Maybe they'll show up, 50, tomorrow night, but coming from the industry, you know, you can only call the kettle black for X amount of time and then you got to look yourself in the mirror. You really do.

So I think all parties are looking themselves in the mirror and realizing, as brothers and sisters and mothers and fathers and grandfathers and grandmother, we got—you know, we have to do the right thing. We really do.

**Mr. Maguire:** Thank you for presentation, Ms. Courcelles. I, too, have grandchildren and I was also impressed by the picture that your sister took here of Grand Beach from last July on the back. That's exactly what I saw last fall when I was there in some of those areas.

And so I think that the minister is—I don't know, he's trying to be surreptitious in regards to what he's trying to say that we're saying, but clearly I'll say on behalf of our caucus that we want to save Lake Winnipeg. It's time to clean it up. We've got to make these initiatives and move forward. And so, you know, I know that the NDP find it awfully hard to believe, because they didn't think that anybody else would care, but we do. And I guess that's the new reality. We are in a world where we have to make sure that there is water there for the future and for all of us to be able to enjoy as well. And, you know, there are bills that have come through the House that try to improve some of these areas and they have been very well received.

And so I appreciate your comments and your presentation tonight and for taking the time to be here to do that.

**Mr. Chairperson:** Ms. Courcelles, did you wish to comment?

**Ms. Courcelles:** I'm just thrilled, I really am, about, you know, the timing of the lake as well.

I just really hope that you do hear that it really should be extended to Lake Manitoba as well,

because, as the people who spoke before me, that lake is only about 15 years behind, right? So, you know, we should be jumping on that wagon and saving it, and Mother Nature has shown us the blueprint of what is yet to come, so—and it doesn't mean—people don't have to get put out of business to do this, right? We're just asking for a little bit more riparian areas, a little more wetlands. And we all have to eat. So if that means that we have to build some mega-super-size treatment plants to deal with our waste, well, I guess we're going to do that. That's all, right?

**Mr. Chairperson:** Any other comments or questions for the presenter? Seeing none, thank you, Ms. Courcelles, for coming out this evening and for your patience.

**Ms. Courcelles:** Thank you.

**Mr. Chairperson:** Now, that concludes the list of names of out-of-town presenters I have before me. Are there—order, please. Are there any other members of our audience here with us this evening that are out-of-town presenters that would like to present this evening?

**Floor Comment:** I am, Mr. Chairman.

**Mr. Chairperson:** Please come forward, ma'am, and introduce yourself, if you would, please, for the record.

Are you Dr. Eva Pip?

**Ms. Eva Pip (Private Citizen):** Yes, I am.

**Mr. Chairperson:** We've got you listed as an in-town presenter, ma'am.

**Ms. Pip:** But I don't live in Winnipeg.

**Mr. Chairperson:** Okay. But you're next on the list to be called anyway. So give us a moment to distribute your presentation, then I'll give you the signal.

**Ms. Pip:** So that's right. So instead of being first, I'm last now. Okay.

**Mr. Chairperson:** First shall be last. Last shall be first. Please proceed, Dr. Pip.

**Ms. Pip:** I would like this evening, Mr. Chairperson and ladies and gentlemen, to speak on the nitrogen and phosphorus as it relates to the waste-water treatment plant, and, as a background, we know that eutrophication of Lake Winnipeg and our other lakes has drastically accelerated in the last few years. I personally have been working in this area now for

about 45 years, and so in that span I have seen the tremendous changes that have happened, especially on Lake Winnipeg. I remember, in the 1950s, that water was crystal clear and those pebbles on the bottom, they were like jewels, and now everything is covered in that horrible crud, that periphyton, and the lake is overrun with algae, and we now have this discussion where phosphorus is deemed to be the primary culprit and we seem to be backing away on nitrogen removal.

And so, today, I would like to speak a little bit about how both of these nutrients are important but in different ways, because I think that the phosphorus steamroller has minimized the impact that nitrogen has. There is a very large body of evidence globally that illustrates how important the nitrogen and phosphorus are, not just the phosphorus. And, specifically, the phosphorus, it does address the cyanobacterial problem, primarily, and that is a huge problem currently in Lake Winnipeg. But we have to remember that Lake Winnipeg is not just algae. In order to have a healthy lake, we have to have a healthy entire aquatic ecosystem, and that means all of the other components of the system, not just the algae. And so it so happens that, for the other components, the animals, nitrogen is very important because it can be a toxic material for them.

Now, we know that in Lake Winnipeg we have already lost a very, very significant amount of biodiversity, some of which we will never be able to replace now, some of those species that have disappeared. As an illustration, for the freshwater mussels, just for example, the freshwater mussels in North America are the single most endangered group of animals in North America, and about 85 per cent of the freshwater mussel species in North America are extinct just within the last two decades.

In Lake Winnipeg, we used to have, I remember, 11 species of freshwater mussels. Now we only have five remaining, and, of those five species, two species, the roughest, toughest ones, now constitute 98 per cent of the freshwater communities; the other three are now almost gone as well.

\* (20:40)

And so I come here having worked with this nitrogen and phosphorus issue, specifically as it relates to cyanobacteria. Over the past five years, we have studied how the soluble nitrate and the soluble phosphate relates to not just the algal blooms as a whole in the south basin of the lake but also to the

toxicity of the algae, because the toxicity, as you know, is a very significant public health problem.

And so skipping ahead here, I've given you in my written presentation the more details when you want. But what we found was, first of all, when you talk about the algal blooms as a whole, we have to remember that algal blooms are composed not just of cyanobacteria, which are the blue-green algae, but there are also eukaryotic algae that do not have the ability to extract atmospheric nitrogen. They are dependent on soluble nitrogen for their nutrition.

And we also have to remember that there are many cyanobacteria that also do not have the capacity to obtain atmospheric nitrogen. And so for them, the soluble nitrogen is important, and if you increase the amount of the nitrates, and well—and ammonia and nitrite, they will be able to assimilate this and grow. And so what we found was, taken as a whole, as represented by chlorophyll *a* concentrations and that summarizes the entire algal population. We found that both organic—I'm sorry, well, organic matter but also the phosphate and the nitrate, they were significantly correlated with chlorophyll *a*, which meant the blooms as a whole.

We also found that the ratio of nitrate nitrogen to orthophosphate phosphorus had no impact on the chlorophyll *a*, because if you remove the phosphorus, yes, you are impacting those cyanobacteria that have the ability to extract atmospheric nitrogen. But at the same time, you are creating an advantage for all the other kinds of algae that can step in now and they can utilize that nitrate that is dissolved. And the only impact that we did find for phosphorus was, of course, aside from reducing those cyanobacteria that can—that have the nitrogenase to extract atmospheric—that also the reduction in phosphorus levels did have an impact on reducing microcystin, which is a primary toxin. But aside from that, though, if you're talking about blooms as a whole, if you do not remove the nitrate, you will still have algal blooms.

And the bottom line is that the blooms will simply be—they'll have a different species composition. They will have a higher proportion of those other algae that are not the nitrogen fixers. So it is important for us to remove both the nitrate and the—as well as the phosphorus.

And another issue here, of course, is even though we are removing ammonia, that is not good enough. Because once the nitrate gets into the lake,

we know that with these high algal blooms, that we're going to have anyway and that high biomass, when that decays and decomposes, it depletes the oxygen and under those oxygen depletion conditions, the—you have denitrification, microbial denitrification, that will convert the nitrate to ammonia in the lake. And this is why removing it only at the treatment plant is not good enough.

And so my very strong opinion is that, you know, it's a comparatively minor additional cost for us to be able to do it. Why, in heaven's name, are we not doing it when we will have to do it eventually anyway? At that time, it's going to be even more expensive for us to do it, and so why don't we get with the program and seriously address what is wrong with Lake Winnipeg instead of only going half way?

And so I will leave it there. Thank you.

**Mr. Chairperson:** Thank you very much, Dr. Pip, for your presentation.

Questions for the presenter?

**Mr. Blaikie:** Thanks to Dr. Pip for her presentation today and for reminding us about the complexities, but also, ultimately, the necessities of the nitrogen question.

And I just wanted to say that from the point of view of the government, we haven't abandoned the view that nitrogen is something that we have to deal with. But we realize also that nitrogen has been the source of a long-stand—the removal of nitrogen or not, has been the source of a long-standing debate with the City of Winnipeg and has really been holding up progress.

So our view has been, and this legislation reflects it, that the most important thing is to move ahead on a state-of-the-art biological nutrient reduction sewage treatment plant which would enable the City to deal with phosphorus and the recycling of phosphorus and able to deal with ammonia—

**Floor Comment:** But we also have to have the nitrate. I'm sorry.

**Mr. Blaikie:** —and also, enable it, at some point in the future, to deal with nitrogen. In other words, if we're going to argue about nitrogen forever, we're not going to be able to build the plant. We want to build the plant and we want to build it in a way that it can deal with nitrogen.

But the important thing is, certainly pursuant to Dr. Leavitt's study, is to reduce phosphorus by 50 per cent and to deal with ammonia. We understand that ammonia standards are going to be more stricter in the very near future, and we want to be able to have that state-of-the-art technology so they can do all three things, including nitrogen.

And that's where the rub is, as far—I think, as far as I understand it, though we'll hear from the City of Winnipeg later, where the rub is there. We say, you can't cut corners. You can't do something that's not going to enable you to do all these things to the very best—in the very best possible way. So you need to build that state-of-the-art BNR plant.

So, I'm just, you know—I'm just trying to see what you think of that particular approach because it does create the opportunity and the technological possibility of dealing with nitrogen in a way that no other option would. Am I correct in that observation?

**Ms. Pip:** Well, my response to that is, you know, you're talking about creating the opportunity in the future. That's not good enough. We should have done this 10 years ago, 20 years ago, then we would not have had the problem that we have now. But, to me, I simply view this as a wimping out, as a kind of procrastination that maybe, you know, it's going to be somebody else's problem down the line. And that's why we have all these issues that we have now. That we haven't had the courage, we haven't had the conviction to go ahead with what is the right thing to do. We've been arguing all the time about nickels and dimes, and I think that our future is far more important than arguing over a little bit of additional cost and not doing it now.

**Mr. Blaikie:** So, what's your opinion then of the argument offered, not by politicians, but by other scientists, that there's no need to remove nitrogen, that it might even be harmful to the lake or that if you remove the nitrogen, the remaining nitrogen will be able to take nitrogen out of the air—I mean, the algae would be able to take nitrogen out of the air. What's your view of that argument?

**Ms. Pip:** As I had said, our findings have been that you will still have algal blooms in the lake, only they will be different kinds of algae. So you will still have that biomass production that you have now but it will be produced by different algae—algae that are using the soluble nitrogen and that will still lead to the oxygen depletion problems. And that will, in turn, fuel the nitrification of the nitrate to ammonia, which is very toxic to fish and other organisms.

And then, the other thing I can add here is, if nitrogen is so irrelevant, then I guess worldwide we've been—we've wasted trillions of dollars putting nitrogen in fertilizers. Because I guess nitrogen doesn't stimulate plant growth. Are algae not plants?

\* (20:50)

**Mr. Blaikie:** So, while I think, you know, that Dr. Pip has made the case for nitrogen, it's a case that has been made before, and I hope it has the desired effect on people that have been skeptical about that from the beginning. We continue, as I said before, to think that removing nitrogen is the right way to go, but on the other hand, we think that moving now, rather than trying to necessarily win that argument in the short term, is important, but, you know, your advice on the importance of actually dealing with nitrogen when you're removing the phosphorus and when you're removing the ammonia at the sewage plant—appreciate very much the—your emphasis on just how important that is.

**Mr. Chairperson:** Dr. Pip, did you wish to comment?

**Ms. Pip:** Well, I just wanted to say that it is very important for us to move on this, not at a glacial pace. We've had over the past years and years these periodic announcements that we're going to help Lake Winnipeg, we're going to help Lake Winnipeg, and then nothing happens, nothing happens. Meanwhile, it continues to deteriorate, and it's not like we don't know what the problem is.

And the other thing I wanted to add here is that, you know, that removal of both nutrients, that is not such a minority view as has been put about publicly and in the media. That is actually a very widely held view and for that reason, there are hundreds of cities across the world in developed countries that remove both, and, surely, they're not just doing it because just out of some kind of a whim. And in Lake Winnipeg especially, as I say, removal of the phosphorus, that is not going to address the problem. It will only address the problem of those cyanobacteria that have nitrogenase and that also are the toxin producers.

**Mr. Chairperson:** Any other questions for the presenter?

**Ms. Melnick:** Yes, I'm just wondering what your response would be to folks who would say that the removal of nitrogen is just too expensive, and I think the member from Tuxedo said it's actually a waste of

money. Members of the opposition seem to agree with that position.

**Ms. Pip:** As I said just a few seconds ago, if so many other cities around the world can find the means to do it, it's not like the technology doesn't exist. Like, if we want to have a state-of-the-art treatment plant, let's really let it be a state-of-the-art treatment plant, not something that's just cobbled together out of bits and pieces that seem to be the most expedient politically and also, you know, whatever we can find at Giant Tiger and Value Village and get by with that. You know, either we're serious about the problem or we're not, and what I see is we're not.

**An Honourable Member:** Well, we are.

**Ms. Pip:** Well, show it.

**Mr. Chairperson:** Any other comments, questions? Seeing none, thank you very much, Dr. Pip, for coming out this evening.

Next presenter I have on the list is Vicki Burns, private citizen. Vicki Burns?

Good evening, Ms. Burns. Do you have a written presentation?

**Ms. Vicki Burns (Private Citizen):** Yes.

**Mr. Chairperson:** Give us a moment to distribute, please.

Please proceed when you're ready, Ms. Burns.

**Ms. Burns:** Good evening, and thank you very much for the opportunity to speak about this very important issue. I am presenting tonight as a private citizen, as an animal welfare advocate and an advocate for Lake Winnipeg.

First, I want to commend the government on bringing forth this legislation aimed at restoring the health of Lake Winnipeg.

As the 10th largest freshwater lake in the world and Canada's sixth great lake, Lake Winnipeg is of, you know, huge value to all of us in Canada, but it's also an iconic symbol of Canadian lakes. And although the Lake Winnipeg watershed does go across four provinces and touches on four American states, we Manitobans really must take the lead on the actions that are required to restore the health of the lake. It's really clear that if we can't take the lead on that, how can we possibly persuade others who are much farther afield to do the right thing? So we need to start really demonstrating that leadership, not just talking about it.

Now, I'm going to comment on three particular aspects of the legislation: the aspect pertaining to the hog industry, wetlands and the municipal wastewater treatment. And I'm also passing around a few pictures, just to remind you of what we're actually talking about here.

So, first of all, the part that relates to the hog industry. I do support the moratorium on any new development in the hog industry but, really, that alone will not make a difference. Now the excess phosphorus and nitrogen that are getting into our waterways will continue to do so, unless we can make very significant changes in how we actually conduct the hog industry.

Now it's probably no surprise to some of you that I'm going to talk about the animal welfare—actually, I won't talk about animal welfare; I'll just talk about the basic housing system. The intensive confinement system for the pigs is really at the root of a lot of the problems that we are facing here today. And I think that the alternative systems, the smaller farms, the straw-based systems, getting rid of the intensive confinement, we already have farms doing that here in Manitoba. We always have had. There's really no excuse for us not to push the industry, in fact, to say the industry must go in that direction, and if economics are the argument, then I say to hog farmers and hog producers, charge a fair price for your pigs so that you actually get paid what it costs you. And if we, the consumer, have to pay more, then so be it. I don't expect hog farmers to lose money, but we have to do it right.

Now, for some years, I've actually been trying to persuade government and industry leaders to start paying attention to some of the international scientific reports that have been issued in the last decade that are all calling for very major changes in how we are conducting industrialized agriculture, because there is wide recognition amongst scientists that they're not sustainable.

I'm just going to read you the names, I'm not going to read you the quotes that I've included in the report, but it's terribly important that we pay attention to this. The Pew Commission on Industrial Farm Animal Production, which is a project of the Johns Hopkins Bloomberg School of Public Health and The Pew Charitable Trusts, both highly, highly respected organizations. The Millennium Ecosystem Assessment that was a report called for by the United Nations. The IAASTD, International Assessment of Agricultural Knowledge, Science and Technology

for Development, compiled by scientists from 61 countries around the world. Eating our Future: the environmental impact of industrial animal agriculture, compiled by Dr. Michael Appleby for the World Society for the Protection of Animals. And Livestock's Long Shadow, Environmental Issues and Options, compiled by the Food and Agriculture Organization of the United Nations.

And I'm just going to read to you the quote from that final one: The livestock sector emerges as one of the top two or three most significant contributors to the most serious environmental problems, at every scale from local to global. The findings of this report suggest that it should be a major policy focus when dealing with problems of land degradation, climate change, air pollution, water shortage, water pollution and loss of biodiversity.

Now all of these organizations are very, very credible and they're all reports done by scientists. So my feeling about this is, if we continue to ignore the evidence that's being promoted by scientists around the world, I think we really are guilty of wilful ignorance. And that will be responsible for causing immeasurable damage for future generations to deal with. So I personally don't want to be guilty of that and I think if you really think seriously about this, none of you do as well.

Further to those scientific reports, there are also moves happening around the world in relation to getting rid of the intensive confinement systems that I've long been preaching about. And I just want to remind you of that because, again, we are very having our heads in the sand if we think those moves aren't going to come to Manitoba.

First of all, a number of American states, individually, have banned the intensive confinement systems, not only in the hog industry but also in the egg-laying industry and, in some cases, in the veal industry. You'll see the list there of the American states that have done it already and those moves are growing.

\* (21:00)

The entire European Union, all 27 countries in the European Union, by the end of 2012, have to get rid of their sow stalls. In Australia, the state of Tasmania recently banned sow stalls. As far as the retail and commercial operations, you probably know that Maple Leaf, in Canada, Smithfield Foods and Cargill have all announced that they are phasing out their sow stalls. And, Maple Leaf, which is the main

operator in Canada, has set the year of 2017. Now that's not far off. We'd really—some other—Safeway, Burger King, McDonald's in the States, not in Canada yet, but in the States, they've all announced that they're going to continue to buy more and more of their pork products from farms that don't use these intensive confinement operations.

So, my point to you is, we are not doing our hog industry, our hog farmers, any favours by trying to protect them from these moves. We'd be doing them a favour to say get going on it as soon as you can. And Manitoba Pork's recent announcement that they want to get rid of sow stalls by 2025 is simply not good enough. That's far too long down the road. So that's it about the hog industry.

I'll quickly talk about the section of the legislation related to wetlands which, again, I totally support what's in the legislation. Terribly important, but it does not go far enough. We know that across the Prairies 70 per cent of our wetlands have been drained over the last century. If I told you that 70 per cent of your kidney function was gone you'd be darn worried, and that's what we should be worried about with our wetlands. Because wetlands are nature's kidneys. They really are sucking up a lot of the nutrients and other things that we don't want getting into our waters.

The other really important thing about wetlands is they act like a sponge. So this year, when we're facing this tremendous flooding everywhere, it's very clear that we need to make a huge investment, not only in preserving the wetlands we have on private land and Crown lands, but investing in restoring them. I mean, aren't we going to be spending almost \$200 million, or something in that neighbourhood, to compensate people for flood damage? Let's make a big investment in prevention for the future, otherwise these kind of floods are going to carry on and on.

And the final thing is the section relating to waste-water treatment. I very much support the government's move to require the City of Winnipeg to upgrade their waste-water treatment to full biological nutrient removal. I know that you've had a presentation from—submitted from Ostara Technologies, but we need to get our city to get going on that to remove the phosphorus. Use this technology of Ostara to create fertilizer and sell it so it can be a revenue generator for the City of Winnipeg. Other cities around the world are doing that. Let's hurry up and get going on it.

Now the argument of nitrogen or phosphorus removal. I am not a scientist, but I refer to what Dr. Pip referred to and that is thousands of other cities around the world are removing both phosphorus and nitrogen. In fact, all the major cities in the Lake Winnipeg watershed are either currently doing it or—the only exception is Regina, and they are required to do it by 2016, if not sooner.

Now, personally, I've been going around the province and across the Prairies, actually, over the last three years, doing a lot of presentations about Lake Winnipeg. Whenever I'm in rural communities I am always asked, why are you not pushing the city to do a better job? Why are you pointing the finger at agriculture and the City of Winnipeg is getting away with this? Quite frankly, I have no answer for that, and I'm very embarrassed about it. And I think a lot of you live in the city of Winnipeg. We should all be making sure that that happens right away. We're the closest city to Lake Winnipeg. We are contributing a significant part of the problem—5 to 10 per cent according to Dr. Peter Leavitt. That is—I don't care what it costs. We're going to have to pay the costs somewhere down the road. Let's get going and pay the cost now.

So, anyway, thank you so much for listening to me and I'll answer any questions if I can.

**Mr. Chairperson:** Thank you, Ms. Burns, for your presentation. Questions, comments for the presenter?

**Mr. Blaikie:** No questions, just thank you very much for the—for your presentation and for the obvious passion with which you care about both the animals and the lake.

**Mr. Maguire:** Thank you as well, Ms. Burns, for your presentation tonight, and look forward to being able to look at these types of suggestions down the road. So thank you very much.

**Mr. Chairperson:** Ms. Burns, did you wish to comment?

**Ms. Burns:** No, I just will say thank you for listening.

**Mr. Chairperson:** Okay, thank you very much for coming out this evening and for your patience to present.

Next presenter we have is Josh Brandon, Green Action Centre.

Good evening, Mr. Brandon. Do you have a written presentation?

**Mr. Josh Brandon (Green Action Centre):** I do.

**Mr. Chairperson:** Give us a moment to circulate, please.

Please proceed, Mr. Brandon, when you are ready.

**Mr. Brandon:** Sure. Green Action Centre, as you may know, is a non-profit environmental organization. We have 800 members across the province, and we promote greener living through educational programs as well as encouraging practical green solutions for homeowners, workplaces, schools and communities, and we co-ordinate many public education programs like the commuter challenge that many of you have recently participated in. I hope you get your results in by tomorrow, I think they're due.

Our vision is a Manitoba where we can all live green and well, and I'm speaking today in support of Bill 46, The Save Lake Winnipeg Act. Lake Winnipeg is a globally significant ecological resource. It's the 10th largest freshwater lake in the world, and most Manitobans, I think, are aware of how important that resource is for recreation, for the ecological goods and services it provides, for fishing, and all the values that it has.

On the east side of the lake, the heart of the boreal region, it's been nominated for UNESCO Heritage designation, and so protecting Lake Winnipeg is one of the most important responsibilities this government and the people of Manitoba face together.

However, Lake Winnipeg is in trouble. A century of agriculture, industrial development, as well as urban and rural development, have all put pressure on the lake, adding to increasing levels of nutrients including phosphorus and nitrogen, and these nutrients have altered the natural condition of the lake, resulting in what has been characterized in the report by Leavitt and others as a sudden ecological-state change. According to that report, this occurred around 1990, and so it strikes me that, you know, if we're undergoing a state change, that Lake Winnipeg today is not the lake that many of you or your parents grew up knowing, and that's troubling to me.

Algae blooms have become common on both the north and south basins in recent years. Some of these blooms contain toxic cyanobacteria that are hazardous to lake residents, their pets, to wildlife that come in contact with it, and some of the algae

blooms, while not directly toxic to humans, can create conditions that choke out aquatic life. As the masses of algae decay, they use up oxygen in the lake, making it inhabitable for many fish and other lake organisms.

Many scientists have warned that it'll take decades to fix the lake. It won't be easy, but it's our duty to start working on repairing those problems today and not leave them for a future generation to have to deal with.

And I think that The Save Lake Winnipeg Act does take some steps in the right direction, and I'll just comment quickly today on a few of the steps I think that it is taking in the right direction and ways I hope the bill could be improved or that further steps could be taken.

Protecting our province's wetlands, which is one part of the bill, will have several environmental benefits including flood mitigation, reducing greenhouse gases, promoting biodiversity, and significantly in this context, wetlands are also important filters of our watersheds. Well-maintained wetlands can play an essential role in reducing the growth of nutrients in our lakes.

Unfortunately, we are losing wetlands at too high a rate. Every year, 2,000 hectares of wetlands are lost in southwest Manitoba alone, and we've lost up to 70 per cent of our wetlands in some areas already and this, of course, must be reversed.

Coastal wetlands that the bill deals with are particularly at risk, and I note that Manitoba's great lakes contain more coastal wetlands than all the Great Lakes in the Laurentian Great Lake system, combined.

\* (21:10)

Netley Marsh has been transformed in recent decades. It's lost thousands of hectares of critical bull rush habitat and it's been gaining an equivalent area of open water since the 1970s, so that's really troubling, and it's important to deal with that problem. But other coastal wetlands are also at risk, and so I hope this legislation does provide a powerful tool to protect those important areas.

More should also be done to protect the wetlands that are not on Crown land, as well as inland wetlands, and I hope that this—that the government makes proposals in the near future to deal with those areas as well.

The second part of the bill will regulate livestock production by extending the moratorium on confined—on expanded—expanding confined hog production to the entire province, and this is an important step that puts the entire industry on an equal footing. Some of the external factors that have slowed the growth of the hog industry in recent years look to be coming to an end. So we're hearing that there could be an increase of demand for increased production of hogs in the coming years, and we've heard from some of our members in western Manitoba that they fear that if we don't extend this moratorium to the rest of the province that a lot of that development could occur in areas that aren't currently covered by the moratorium and could affect them adversely.

The bill's The Save Lake Winnipeg Act, but it's important to remember it's not just Lake Winnipeg that's suffering these ecological problems of eutrophication and algae blooms. I recently attended a public forum in River Heights highlighting the problems in Killarney Lake, and there they're suffering some of the same problems, maybe even worse than we're seeing here—seeing in Lake Winnipeg. And all across the province, we're seeing lots of waters—bodies of water being affected, so it makes sense to apply similar rules across the province.

There'll also be a ban under this bill on the winter spreading of manure. This spring's floods have given profound evidence of the importance of this. You know, I was driving through western Manitoba recently, and just astounded at how much water there is on the land, and you think any nutrients that were applied there during the winter are going to be washing off into our waterways. And given our predicted shortages of phosphorus globally, we need those nutrients for our crops, not for polluting our lakes and rivers.

I understand that under the legislation there is a reprieve until 2013 for small farmers on this part of the bill, and this makes sense as small farmers often have the fewest resources to adapt to changes. But I would like the Province to go further and provide concrete assistance for some of the small farmers to help them implement part of this—this part of the regulation, because I know that there's a lot of small farmers that are really trying hard to practise ecological agriculture where they're integrating crops and livestock in an ecologically sound manner. They're—they have free range and their animals are—have access to the field throughout the year, and you



think about a natural ecosystem, the animals are spreading manure throughout the fields throughout the year. And so farmers that are trying to mimic those natural ecosystems and practise an ecological form of agriculture, they may need help to comply with the—with this regulation, and I just hope that the Province really does work with those farmers, because we don't want to see the industry become even more concentrated and lose a lot of some of those small farmers that add so much biodiversity and, you know, contribute so much to our ecosystems here.

I don't have much to say about peat mining. I note that Canada's national greenhouse gas inventory for 2010 found that emissions from managed peatlands increased 46 per cent since 1990, amounting to 1.2 megatonnes by 2008. So it occurs to me that, as with wetlands, there's a lot of multiple reasons for protecting these sensitive areas.

We also have part of the bill dealing with drinking water and waste-water plans for Canada's capital region. The Green Action Centre has been a strong proponent of sustainable urban development. We have argued that all development should meet the criteria of fitting with our commitments to reduce greenhouse gases and with the reality that we may already be approaching or exceeding peak oil levels globally. So water supply is—and treatment is among the most energy costly aspects of urban infrastructure, and I hope that when we look at the sustainable development plans for new expansion, we look at new waste-water treatment plants and new waste-water treatment plans for those regions, that we consider all the effects of new development and how, if you're building new water infrastructure into an area to allow development, what's the effects on other aspects of the sustainable development plan, like transportation and that kind of thing.

The final section of the bill deals with the North End treatment plant, and I think this is probably one of the most important aspects of the bill, both because of the scale of the nutrient emissions from Winnipeg and also the symbolic importance of Manitoba's capital and largest city showing leadership on this issue. When the aging treatment plant there failed in 2002, hundreds of millions of litres of untreated sewage escaped into the Red River, and so this facility really must be upgraded before we allow a disaster like that to occur again. And moreover, until we do, it will be difficult to make the case to other municipalities in the province that we should take action to improve their facilities.

I was recently at a meeting in Morden and discussing the problem of releases of that community's sewage lagoon into Deadhorse Creek, and the number one question that residents there in Morden had was, you know, how do we compare to Winnipeg. And until we're able to answer in a positive way, it's going to be really difficult to convince places like Morden and other communities across the province that they need to adapt and make practices that will improve water quality also.

And, finally, I just want to touch on the nitrogen and the phosphorus issue. You know, there's been a lot of talk about it, and both sides seem to be arguing about different things. You know, I've never seen anyone argue in favour of removing nitrogen as a remedy for preventing cyanobacterial blooms, but that's what we hear so often in the media. And those who wish to remove the nitrogen argue that it's necessary to prevent the non-toxic algae blooms, which are important, and also to minimize the toxic effects of too much nitrogen in our waterways.

And so, while the priority of preventing toxic cyanobacteria is primary, as an environmentalist, I would not condone a solution to this problem that brings our ecosystem further out of normal, and I know Mr. Blaikie mentioned earlier about, you know, how maybe we should be increasing the amount of phosphorus. And we hear that from a lot of sources, that we should be increasing the levels of nitrogen in the lake—not the phosphorus, rather—nitrogen in the lake to maintain the ratio of phosphorus and nitrogen at a level that's less conducive to the growth of cyanobacteria. Dr. Schindler suggested that 15-to-1 ratio is optimum, but I don't think we want to do that by elevating the nitrogen levels. You know, this would be—the solution would be geoengineering on a massive scale, given the size of Lake Winnipeg, and we don't really have the evidence that it would be safe to allow nitrogen in the lake to climb even higher, given that they're already so far out of sync with historical levels. Rather, to reach a safe state in the lake, the responsible measure is to bring down the levels of both nutrients in the lake, minimizing the likely occurrence both of toxic cyanobacteria blooms and also the non-toxic but dangerous algae blooms.

As I understand it, this bill is going to require the City of Winnipeg to—not to remove nitrogen immediately, but it will require the City upgrade its facilities so that nitrogen removal is possible at a later date. And I think, you know, I've seen this figure of \$30 million out of the total of \$350-million

budget. It seems like a good compromise to me to require that that possibility of being able to remove the nitrogen—that we build a first-rate treatment plant is a good one because it allows us to concentrate on the 93 per cent of the solution, which, I've heard, everyone seems to agree on at the table here. And so refurbish the plant so that future disasters like the one we saw in 2002 need not occur. Thanks.

**Mr. Chairperson:** Thank you very much for your presentation, Mr. Brandon.

\* (21:20)

**Mr. Blaikie:** Yes, thank you, Mr. Brandon, for your presentation, and thank you for, in the last paragraph of your presentation, I think, for summing up the Province's position very well. This is something I've been trying to do over and over and over again, but I think you've got it just right there in the last paragraph. And I think the point that you make earlier on is another important one out of your experience in Morden, you know, where people say, how does our community compare to Winnipeg. I think what we're doing here is we don't just want to do the right thing by the environment here and by the lake, we also want to have, if you like, the environmental high ground.

If we're going to ask others in the Lake Winnipeg basin, you know, which stretches all the way to Alberta and into the United States, whatever the sector is, whether it's the hog industry or whatever it is, we can't be demanding of others that they do what needs to be done if our major city is permitted by the Province or by itself or whatever to cut corners. We're just not going to be in a position to require or to ask of others that they do the right thing if we're unwilling to do the right thing ourselves.

So it's not just the right thing to do, it's also, if you like, an appropriate strategy for not being that—for not being vulnerable when we go to ask other people in other sectors to do the right thing.

So I just wanted to say I'm very glad that you made that point because it's partly, you know, one of the rationale behind our own actions on this front.

**Mr. Chairperson:** Mr. Brandon, did you wish to comment?

**Mr. Brandon:** Well, just to say that that seems like the right way to go. So I hope that that's successful in providing the leadership that we need to get everybody in the basin on the right track.

**Mr. Maguire:** Yes, thank you very much for your presentation, Mr. Brandon. I appreciate you taking the time to put your views forward on this important issue.

**Mr. Chairperson:** Any further comments or questions for Mr. Brandon? Seeing none, thank you very much for coming out, sir. I appreciate your presentation and your patience.

Next presenter we have listed is Bill McDonald, CEO, Winnipeg Humane Society. Bill McDonald. Bill McDonald's name will be dropped to the bottom of the list.

The next presenter we have is Kevin Rebeck, Manitoba Federation of Labour.

Good evening sir, welcome. Do you have a written presentation?

**Mr. Kevin Rebeck (Manitoba Federation of Labour):** Yes.

**Mr. Chairperson:** Give us a moment to distribute and then I'll give you the signal to proceed. Please proceed, Mr. Rebeck.

**Mr. Rebeck:** Thank you, and I consider it a priority to be here tonight. I'd rather be—or I'd also want to be on a couch checking out the game, although, I hear with Boston at 4-0, you've spared me an experience and I appreciate that. But it's important that we're here.

The Manitoba Federation of Labour is pleased to add its support for this bill. It's already shown by many Manitobans who are concerned about the health of Lake Winnipeg. The working families represented by our affiliated unions have told us at conferences and conventions for years now that something has to be done about the deteriorating environment in our province, particularly Lake Winnipeg.

The condition in the lake has a direct impact on many of our members of our affiliate unions. Our members have principal residences on or near the lake. They own vacation properties there. They work on the lake. They're engaged in occupations that monitor its condition and they enjoy its many recreational opportunities.

At one time, Lake Winnipeg was clean and healthy. Today, it sags under the weight of too many nutrients which promote the excessive growth of algae and other less visible changes to the lake ecosystem. Other serious issues include climate

change, the invasion of exotic species and habitat degradation associated with the loss of wetlands and shoreline development.

Recently, I read a story in the *Winnipeg Free Press* that underscored the seriousness of the situation. It compared the health of Lake Winnipeg to that of Lake Erie when the great lake was widely described as dead. The comparison wasn't favourable. It actually assessed our lake as being worse off than Lake Erie was before it was rehabilitated through joint Canada-US action.

The unhealthy state of Lake Winnipeg is not an emerging issue or a new story. Public concern about algae blooms and beaches littered with dead fish has been with us for decades.

The flood that continues to unfold in Manitoba has preoccupied us for months now and demonstrates graphically the need to us to focus more of our attention on our lakes and streams and the huge role they play in our lives. It's demanded Herculean effort from provincial and civic workers, our soldiers, our union members and the people that each of you represent in the Manitoba Legislature. Even now, the widespread flooding in the province washes nutrients from what is usually cropland and deposits it in our lakes and streams. A great deal of those materials will wind up in Lake Winnipeg where they'll have an effect for years to come.

Last fall, the Manitoba Government and General Employees' Union approached the Manitoba Federation of Labour and asked us to help organize a support campaign for the Lake Winnipeg Research Consortium, an important element of the fight to restore Lake Winnipeg to health. This proposal resonated with other MFL affiliates because it's echoed what we've been hearing from our rank and file members.

You've heard already tonight from Dr. Kristofferson, who is from the research consortium that was established in '98, whose aim is to co-ordinate scientific research of Lake Winnipeg in order to gain a better understanding of the biological, chemical and physical processes that are critical to its well-being. Its aim is to create educational opportunities and increased public awareness, and it's done that through a variety of means. The consortium's work is even made more critical by what is now being called the flood of 350 years.

A month ago, I participated in an event that outlined the support of organized labour for the

research consortium. It made public our commitment of financial support for the Lake Winnipeg Research Consortium from the MFL and a number of affiliates, including: the MGEU, United Food and Commercial Workers 832, the Canadian Union of Public Employees and the Allied Hydro Council of Manitoba.

In addition to those donations, you heard earlier this evening, as well, from Lois Wales, president of the MGEU, who took it a step further, and they announced a second measure providing a \$20,000-over-five-year scholarship for a new grad student to support and do their research on Lake Winnipeg. The new scholarships will support them being—using the *MV Namao* as a place for 2012 field research.

The government of Manitoba and all of its members who supported the measures are to be commended for voting financial support for this important research effort. But more is needed, particularly in light of recent indications that it will be affected by federal government budget cuts.

We need more water inspectors to monitor the quality of our lakes and drinking water.

We need to avoid short-sighted errors made in the past in Manitoba and in other jurisdictions in Canada when testing laboratories were privatized.

We need to be particularly concerned about the City of Winnipeg's focus of entering onto a partnership with a multinational corporation for water treatment services, and that's been a focus of a great deal of concern.

We need better water-treatment facilities to deal effectively with the waste produced by our cities and municipalities—water-treatment facilities that are focused on state-of-the-art biological nutrient removal.

We need to be cognizant of the importance of the livestock industry to our agriculture sector and the role it plays in our food supply, but not at an unacceptable cost to our environment and to jobs.

Bill 46 is an important step forward in addressing these concerns. It gives Cabinet the power to designate Crown lands as significant wetlands and to regulate their use. It maintains the ban on new or expanded hog barn facilities and the ban on spreading livestock manure on land during the winter.

Several measures are focused on the capital region around Winnipeg. Specifically, the bill

regulates the subdivision of land in the capital region by prohibiting the creation of new septic fields in the Red River corridor of the region.

The bill also requires planning authorities in the capital region to prepare drinking water and wastewater management plans to confirm that future developments can be serviced by existing infrastructure.

The bill directs the City of Winnipeg to either replace or upgrade the City's North End Water Pollution Control Centre by the end of 2014 in order to comply with the specified phosphorus and other limits on effluent discharged from the centre. The City must also ensure that its nutrient removal and recycling methods at the centre comply with specified requirements.

These measures, in addition to the others I've outlined, are a significant step down the road to restoring Lake Winnipeg to its former glory. It carries on the work already accomplished to improve the condition of the lake, including the limits placed on the generation of nutrients that make their way into the lake. If the measures in Bill 46 are successful, it will be a template for effective environmental rehabilitation efforts elsewhere.

This goal is something we owe Manitobans today. A clean, vibrant environment is the cornerstone of our quality of life. Attaining that goal is our responsibility to meet for our children and all future residents of Manitoba. Undoing as much of the damage as we've done to the environment as possible is a debt we owe to the global village we live in.

We live on this planet, but we don't own it. It belongs to those of us who will come. Thank you.

**Mr. Chairperson:** Thank you very much, Mr. Rebeck, for your presentation.

\* (21:30)

**Mr. Blaikie:** Just a word of thanks to Mr. Rebeck and for his remarks on behalf of the Manitoba Federation of Labour, and we're glad to have your support in this particular legislation.

Others may have questions for you, but I'm happy the way it is.

**Mr. Maguire:** Thanks very much for your presentation again tonight, Kevin. Thank you for your views, and these are also views that I'm pretty

sure will help make a stronger bill and a better lake. So thank you very much.

**Mr. Chairperson:** Mr. Rebeck, did you wish to comment?

**Mr. Rebeck:** No, thank you. I think it's important work and I commend us moving forward on this and getting it done, it being the first step of many needed.

**Mr. Chairperson:** Thank you for coming out this evening and for your presentation and your patience.

**Mr. Rebeck:** Thank you.

**Mr. Chairperson:** Next presenter we have on the list is Don Flaten, Professor. Dr. Don Flaten, professor, chair of the National Centre for Livestock and the Environment at the University of Manitoba.

Good evening, sir.

**Mr. Don Flaten (National Centre for Livestock and the Environment, University of Manitoba):** Good evening, Mr. Chair, and other members of the committee.

**Mr. Chairperson:** Please proceed when you're ready.

**Mr. Flaten:** I apologize, I don't have any written notes to hand out, but the good news is I have no intention of administering an exam at the end of the session either.

I do sincerely want to thank you for allowing me the time to exchange some ideas with you today. My purpose is to discuss with you some of the basic scientific principles for sustainable nutrient management practices, since the policies developed by the Province will, indeed, help to improve water quality in Lake Winnipeg.

Some of these ideas are based on our own research conducted at the National Centre for Livestock and the Environment based at the University of Manitoba. We aim our efforts to further the sustainability of livestock production systems, but some of these ideas are based on knowledge acquired elsewhere, including the type of information our group gathered together and summarized for the Clean Environment Commission during their review of the sustainability of Manitoba's hog industry several years ago.

Basically, my comments can be summarized into two key messages: One, I guess this is the good news, support for the concept of encouraging the retention and recycling of waste-water nutrients;

secondly, though, a concern for the concept of further regulating Manitoba's pork industry in isolation from other contributors to nutrient loading in Lake Winnipeg's watershed.

First of all, the support: I would like to applaud the Province's efforts to look at what, from our perspective in agriculture, is the far end of the agrifood system to ensure that phosphorus, for example in waste water, is captured and recycled back into our end of the food production system. The world has extremely limited reserves of mineral nutrients, such as phosphorus, for manufacturing synthetic fertilizers which, as Kristian Stephens mentioned, are responsible for feeding about half the world's population currently, and given that phosphorus is an absolutely essential nutrient for human life, we must recycle and not simply dispose of this nutrient.

However, I have some concerns about the bill related to the concept of further regulating Manitoba's pork industry in isolation from other contributors to nutrient loading in Lake Winnipeg's watershed. I'm not speaking against the concept of improving our environmental stewardship in agriculture or in livestock production or in pork production, but, as noted in the WHEREAS statements in the introduction to the bill and in the various reports from the Lake Winnipeg Stewardship Board, in which I participated, it's a well-documented fact that nutrient loading, especially phosphorus, from land to water contributes significantly to the risk of algae growth, and it's noted in those reports that this nutrient loading comes from many urban and rural sources not only and not even mainly from pig farms in the province.

In fact, the risk is equally large whether a kilogram of nitrogen or phosphorus comes from eroded soil or lawns around cottage developments, sewage lagoons for small towns, inadequately treated waste water discharged from cities or runoff from crop and livestock farms, therefore if we're going to make significant progress on improving water quality, each of us, and all of us, should do more to reduce our share of all of these nutrient losses.

So, in spite of these overall observations, the proposal to expand the moratorium for expanding pig farms is a very serious regulatory intervention that is targeted to only one of these many small contributors. Most of the justification for this legislation seems rooted in the notion that nutrients from pig farms present an extraordinary threat to

water quality in the province, even though application of pig manure accounts for much less than 10 per cent of phosphorus applied to agricultural land in Manitoba and also equivalent to a similarly low percentage in the amount of phosphorus removed when Manitoba farmers harvest their crops.

The problem with employing a strategy of isolating pig farmers alone for this type of regulation is not only the prejudicial nature of how the moratorium is developed and applied, but also the fact that this approach does nothing to encourage the many other small contributors, who, collectively, are responsible for most of the nutrient loading to Lake Winnipeg, to reduce their share of the nutrient load.

So, although I could go on with some other technical aspects about some of the things we need to do, I'd like to summarize by saying sustainable nutrient management throughout the entire agri-food system, from the farm right through to towns and cities, requires us to make careful use of all forms of nutrients, whether they're in the form of municipal waste water or livestock manure or synthetic fertilizers.

The principles of sustainable nutrient management should form the basis for public policies governing the development and operation of any potential source of nutrients, whether from a city, town, cottage, livestock farm, or grain farm. Building a comprehensive suite of policies on the scientifically sound principles is essentially—essential for developing real solutions to the real challenges of managing nutrients to—that will truly improve our agricultural and our environmental sustainability. Thank you.

**Mr. Chairperson:** Thank you, Professor, for your presentation.

**Mr. Blaikie:** Thank you, Professor Flaten. I'd heard reference to your work in a number of the discussions that we had, so I'm glad to have the opportunity to meet you and to hear what you have to say about this.

I guess the one thing that I would—just, you know, I don't expect you to be persuaded otherwise, but certainly our view of the legislation is that it doesn't single out the hog industry. It does, in the sense of—in the sense that it mentions it, but, you know, we do deal with the waste-water treatment, sewage treatment. We deal with planning for—new mechanisms for planning for septic fields and new

subdivisions. There's things in there about wetlands and peatlands, and so it is—it does attempt to be comprehensive. I'll grant you it doesn't deal with everything that needs to be dealt with.

But I think to suggest that it's, that it doesn't try to attack the problem on a number of fronts, you know, I think that's true. So I'm assuming then that what you're saying about, to the extent that your position is that somehow the hog industry has been isolated, is that you think we should have moved in respect of other livestock operations as well. Or is that—what is your view on that?

**Mr. Flaten:** In response to your question, I guess what I'm encouraging us to think about is what sort of degree of a political intervention through policy and regulation would we want to apply to everyone in the province, you know, equally if we wanted to have moratorium as our tool for public policy.

Is there a special reason why it would apply only in the hog industry or could it apply to urban development or industrial development or all types of agriculture? It's just a question I have—like for me, from a technical perspective, I'm no policy expert, from a technical perspective though, a kilogram of phosphorus is a kilogram of phosphorus. And whether it came from a pig farm or a wheat and canola farm or from the town of Morden or the city of Winnipeg makes little difference to me.

So when I see a label, as in, you know, to stop hog manure from running into Lake Winnipeg, then I see rhetoric that gives the public and probably legislators the wrong impression about the degree to which the hog industry alone, you know, accounts for nutrient loading. And my preference, from a technical perspective, is that we have, like I say, a very comprehensive approach.

**Mr. Blaikie:** Yes, well, just on that point again, I'm not trying to be argumentative here. I'm just trying to make it clear what's all in the legislation. There's two moratoriums; there's another moratorium on the granting of peat licences. So it's, if there's, it's just my way of making the point that there's not an attempt to isolate or demonize or blame any one particular so we've got to—we have to move on a number of fronts here, and there is another moratorium in the bill having to do with peat, so that we can have the two years that's required in the legislation, to think through how it is we need to treat peat differently, to see it as the ecological goods and service that it is, instead of, you know, we've had a

tendency to regard it as if it was gravel or for that matter, a mineral, when, in fact, it's, it has this filtering capacity. It's a carbon sink, et cetera.

\* (21:40)

So I just make the point that I think the legislation is comprehensive, but, you know, the arguments about the hog industry notwithstanding.

**Mr. Chairperson:** Professor, did you wish to comment?

**Mr. Flaten:** No, that's okay.

**Mr. Maguire:** Thank you very much for your presentation, Dr. Flaten. And, certainly, it's, I think, very interesting from your—to hear a perspective from your perspective and with the experience that you have in the livestock and the environment as well, and so I think it's important that we do remember what you indicated and that is that there are many responsible players and many responsible solutions. So thank you for your presentation.

**Mr. Chairperson:** Any further comments or questions for the presenter? Seeing none, thank you very much, Dr. Flaten, for your presentation this evening and for your patience waiting.

Next presenter I have is Jon Boyko, private citizen. Jon Boyko? Jon Boyko's name will be dropped to the bottom of the list.

Next presenter I have shown on the list is Glen Gratton. Glen Gratton, private citizen? Glen Gratton's name will be dropped to the bottom of the list.

Next name I have is Mike Teillet. Teillet? Mike Teillet. Practise my French. Mike Teillet's name will be dropped to the bottom of the list.

Next presenter I have is Kelly Funke, private citizen. Kelly Funke? Kelly Funke's name will be dropped to the bottom of the list.

Next name I have is Arne Thorlacius, private citizen. Did I pronounce that correctly? Arne Thorlacius? Arne Thorlacius' name will be dropped to the bottom of the list.

Next name I have is Cyndy Goos, private citizen. Cyndy Goos? Cyndy Goos' name will be dropped to the bottom of the list.

Next name I have is Susan Riese. Susan Riese? Susan Riese's name will be dropped to the bottom of the list.

Next name I have is Laurel Lyons, private citizen. Laurel Lyons? Laurel Lyons' name will be dropped to the bottom of the list.

Next name is Jeff Clark, private citizen. Jeff Clark? Jeff Clark's name will be dropped to the bottom of the list.

Next name I have is Jason Care, private citizen. Jason Care? Jason Care's name will be dropped to the bottom of the list.

Next name I have is Ron Marchenski. Ron Marchenski, private citizen? Ron Marchenski's name will be dropped to the bottom of the list.

Next name I have is Scott Fielding, city councillor, City of Winnipeg.

Good evening, sir. Welcome. Thank you for your patience. Do you have a written presentation?

**Mr. Scott Fielding (City of Winnipeg):** I don't, but I do have one piece of information depending on what questions are asked and that sorts.

**Mr. Chairperson:** Okay, please proceed when you're ready.

**Mr. Fielding:** Well, first of all, thank you for having me here. Just an update on the hockey game. It is 4-1 right now, so there's a—

**Floor Comment:** Five-one.

**Mr. Fielding:** Five-one. Sorry, 5-1. So there's a bit of a comeback coming, which is a very good thing.

This issue is a very important issue to the City of Winnipeg. I'm missing my daughter's—coaching my daughter's soccer game tonight, so it shows you how important it is for me. And I usually like to get the pole position at three and a half hours into the committee, so thank you anyways for your presentation. I know it's been a long day here.

First of all, I'd like to thank Minister Blaikie and your committee for allowing me to come out to speak. It's a very important issue.

We know sometimes, I know at least from our level, from the City, reluctant sometimes to hear other levels of government. It kind of seems like we're coming and preaching one way or the other. I try and follow that as much as I can, but this issue is a little bit different because there is a direct impact from the City of Winnipeg and our operations from water and waste, most importantly in terms of the health of Lake Winnipeg, and also there obviously is a financial position with some of the ratepayers.

My presentation before you really consists of two main points: first, our environmental concerns with removing nitrogen from Lake Winnipeg, and second, the requirements of the City to build a new, unnecessary \$400-million nitrogen removal facility.

So I'd first like to start by saying the City of Winnipeg does share with the Province your passion and your goal, as all Manitobans do, to improve the quality of Lake Winnipeg for future generations. In fact, there has been some talk in terms of what the City's commitment to this. I can very happily and proudly say that the City of Winnipeg has spending close to \$1 billion over the next number of years to completely upgrade our sewer water systems. We respectfully suggest that some changes to the legislation are needed to protect Lake Winnipeg while protecting ratepayers and taxpayers.

Nitrogen removal. Well, in terms of the nitrogen removal argument, we believe that the proposed legislation to force Winnipeg to pay close to \$350 million on tax-of tax-supported money to remove nitrogen from the North End water treatment plant is misguided in a step to improve the quality of Lake Winnipeg. I think it's done for the right purposes, but there is some concerns.

This is not just our opinion, but really is the opinion of a variety of experts that are out there. The scientific community and world leaders are disagreeing in terms of the removal of nitrogen from Lake Winnipeg. Dr. Schindler, who's a world leader in terms of fresh water production, as long as—as well as 63 leading concerned scientists, wrote to the province's Clean Environment Commission to offer an educated opinion on how to address Lake Winnipeg's water quality and to disagree with the government's plan to improve the health of Lake Winnipeg by making minor reductions in both the phosphorus, as well as nitrogen, rather than making much larger reductions in phosphorus alone.

So quite clearly the world leaders and experts in the scientific community believe that at least there is a negligible effect in terms of this and, possibly—quite possibly, could cause serious harm to the lake. We understand and share the goal together with your government in terms of the phosphorus removal, and recovery is a good thing.

Based on some media reports last week, it does appear the Province has acknowledged, somewhat—and we do appreciate that—the accepted view that to improve Lake Winnipeg, our primary focus should

be on phosphorus, not nitrogen removal, and that nitrogen removal, in fact, could further harm Lake Winnipeg. Sadly, we know, you know, there was some comments to clarify that, in terms of the type of plant that are requiring to remain—the type of plant that we need to do any nitrogen removal remains the same. So essentially what we have to do is spend \$350 million plus \$9 million annually on this.

What this is saying to us, this is something like in your home—in your own household, saying that you need to install central air conditioning but you don't necessarily have to turn it on. I know if you look at what doctors—what they say in terms of the Hippocratic oath, the big thing is do no wrong. And I think what clearly can be stated with the scientific community, I know there was Dr. Pip, I believe her name was, she was a proponent of that. But clearly there's a difference in terms of the community. There is not a consensus in terms of the nitrogen side of things.

So in terms of the evidence, it's really a wash. We don't know if it's going to be good; we don't know if it's bad. There just isn't the evidence to say there. So removing nitrogen could really be a bad thing for the lake. We don't know. Wouldn't it be at least to make sense to hold off on the nitrogen removal part until we have a consensus from the scientific community, basically, to do no harm, similar to that?

When a doctor—the City of Winnipeg believes that the current proposed legislation will mean a waste of millions of taxpayers' dollars with no clear benefit and a possible further damage to Lake Winnipeg.

I would like to state that the City of Winnipeg does support the majority of the legislation and your goals that are out there. The City has demonstrated that the North End water pollution control centre can successfully achieve the most stringent ammonia compliance limits by adjusting our existing operations. Previous work commissioned by the Clean Environment Commission assured that the City would need to implement nitrification processes of ammonia, removing the North End treatment plant and therefore would be a low, incremental cost to adding nitrogen. But this is not the case in reality. The cost premium for nitrogen removal at the North End treatment centre is estimated to be \$350 million of upfront costs and \$9 million of operating on a yearly basis.

In other jurisdictions—you know, once again, the City of Winnipeg also remains committed to removing phosphorus. In fact, the City has, at the North End plant, been reusing nutrients for decades through applications of treated biosolids to the land and under very controlled conditions.

In other jurisdictions, licences indicate requirements based on meeting specific levels and guidelines which are always achieved. What the Province is telling us is that we need to meet these guidelines as well as effectively eliminate our staff from using discretionary and/or innovation.

\* (21:50)

If we were to meet the most stringent levels as set forth in the 'ammodium' and phosphorus, which we all agree upon, we could accomplish this by upgrading the plant by \$50 million, to further chemically reduce phosphorus. If we were to move towards a biological nutrient removal of nitrogen and phosphorus, it would imply the cost of, essentially, a new facility altogether, in the tunes of \$400 million.

Bill 46, really, what it does, it ties our hands and it forces us to build a \$400-million facility, but we are passively being told that you don't—you might not have to use this capacity.

So the bottom line is the legislation would dictate to us how we build our facility, not just meet the guidelines, even though we can meet most of these stringent guidelines with more efficient manner. This is a decision to be debated by the scientific community and agreed upon by the scientific community. And I'm a politician and you are as well, and we're not going to have all the answers to it. But we do have to listen to the scientific community.

So, in conclusion, I'm here today representing the City's position. I'm the chair of finance in the City of Winnipeg. I'm a city councillor for St. James-Brooklands. More importantly, I'm a father, someone who goes to Lake Winnipeg on a weekend basis when I'm not going to a constituency's event. Lake Winnipeg is a very important place to me. My children play in the water. We want what's best for the lake.

The past—you know, in terms of the legislation, the part of the legislation covering the North End water treatment pollution centre is not needed and, if passed, requires the City to remove nitrogen at the cost, as I mentioned, of \$350 million that, in our opinion, won't have a benefit.



The City has made the point, if nitrogen wasn't required, \$350 million of the \$400 million could be saved by using chemical phosphate removal on these portions of the phosphorus that escape. If chemical removal is not possible—if it's not possible, the City, without the requirements of legislation, would still have the option of a biological phosphorus removal that costs considerably less than the \$400 million.

So we respectfully request the part of the legislation that pertains to the North End pollution control centre be deleted and the environmental licence be used as set as requirements.

So with that, I do conclude my comments. You know, if there is any questions, I'd be free to answer them at this point.

**Mr. Chairperson:** Thanks you very much, Councillor Fielding, for your presentation.

**Mr. Blaikie:** Yes, well, thank you, Councillor Fielding. And you and I have been playing telephone tag for the last few days. I don't know whether you were calling me to give me a heads-up about how you were going to have my name all over CJOB today or whether you were calling about something else. But we'll talk about the ads maybe a little later.

You know, you say there's no consensus on nitrogen. That's fair enough. But there is a consensus on biological nutrient removal. There is a consensus on biological nutrient removal as the far superior way to deal with ammonia, particularly the higher and more stricter standards of ammonia that are coming. And there is a consensus on BNR as the best way to remove phosphorus and to recover phosphorus into recycled phosphorus.

Now, the thing here is that the City hung its argument on nitrogen because that's where there was no consensus. So what we've done is say, all right, you don't agree on nitrogen? We'll take nitrogen off the table. But you still have to build the BNR plant because that's the best way to do phosphorus and that's the best way to do ammonia, and it leaves open the possibility of doing nitrogen if, indeed, at some point down the line, there is a consensus about nitrogen. That's the argument for the BNR plan.

So for you to still maintain that somehow, it's the Province—is requiring you to spend \$350 million or \$400 million or whatever the figure is in order to remove nitrogen, it's just not true. We are requiring you in the legislation to spend \$350 million or \$400 million or whatever it is to build a plant that

has biological nutrient removal as its technology, so you can do phosphorus and ammonia properly.

And the nitrogen, it would be an extra expense if you upgraded it in order to do that at some point. Some people say it's 6 per cent; some people say it's 7 per cent. Some people say it's \$20 million; some people say it's \$30 million.

That's the—that was the argument that the City hung its hat on. That hook is—you know, your hat's not hanging on that hook anymore. Now your hat's hanging on whether or not you want to build a biological nutrient removal plant; whether you want to build a state-of-the-art plant; whether or not the City is going to have—Winnipeg and Manitoba are going to have the environmental high ground when we're dealing with hog producers or whoever else, people in Saskatchewan, in the United States; whether we're going to imitate cities right across western Canada—Edmonton, Calgary, Red Deer, Prince Albert, or whether we're going to have a kind of a second-class sewage treatment system.

And people are going to say, you know, if these people are really concerned about the lake, I mean, what price, the lake? What price, Lake Winnipeg? Because I think the people of Winnipeg and the people of Manitoba are prepared to pay a premium, if you like, in order to have a state-of-the-art sewage treatment centre so that they can be guaranteed that future generations will have a Lake Winnipeg that they can swim in, a Lake Winnipeg that they can catch fish in, a Lake Winnipeg that they can be proud of, rather than looking back on this particular time, God forbid, and saying, well, the City of Winnipeg won the argument, they got to cut the corners, they didn't do the job that was needed, and we're suffering the consequences now.

So I just want to say, you can't hang your hat on the nitrogen thing anymore. You got to state why you're against biological nutrient removal. You got to state why you're against a state-of-the-art process, why you want to cut corners and do things in an old-fashioned way when you got an opportunity to do it properly.

**Mr. Fielding:** I guess I'd have to say is I disagree with the premise of the question, although I'm not sure there was a question there. But to be fair and respectful to this, the City isn't here, and our arguments in terms of phosphorus or ammonia removal is not in question.

What we're arguing is in terms of the nitrogen removal, and what we're saying is the evidence is not there. There's no—[*interjection*] Hang on. It's not on the table, but you're asking us to spend almost \$400 million to build the facility that may or may not cause the lake to have further—[*interjection*] Well, it's the truth. I mean, Dr. Schindler is the world leader in freshwater [*interjection*] I listened to you, so please listen to me, Minister.

You know, Dr. Schindler is a world leader in this expert. There's 63 scientists that disagree, so suffice it to say, and I think we both can agree, that there isn't a consensus from the scientific community in terms of the science for nitrogen removal. Would you agree with that?

**Mr. Blaikie:** I said that.

**Floor Comment:** Okay, but to be fair then—

**Mr. Chairperson:** Hold on, gentlemen, hold on. Mr. Fielding. Please, as Chairperson, I have to have control of this committee. I'm asking for the comments, both of you, please, through the Chair. Okay?

Are we agreed on that? Thank you. Please proceed, Councillor Fielding.

**Mr. Fielding:** So I guess what our concerns, once again, is that the evidence is not there for the nitrogen removal. We're not talking about the other pieces of the legislation. In fact, I think if the nitrogen was off the table, the City of Winnipeg would probably support the rest of the legislation that's there.

But the concern is, in terms on the nitrogen removal, the science is definitely not there. It's awash. You know, there's a number of world leaders that suggest that nitron will actually have a worse effect. What happens five, 10 years from now if that happens and you've got an algae issue—further issue in Lake Winnipeg. I just—I don't think we should roll the dice on that, sir.

**Mr. Blaikie:** Well, it's not so long ago I was getting heck from a presenter for taking nitrogen out of the mix. So, I mean, we've made the point that you don't have to build a plant that will remove nitrogen. You have to build a plant, a biological nutrient removal plant that will do phosphorus and ammonia in the way that we think it has to be done in order to be done properly. And, in doing so, you will build a plant that ultimately can deal with nitrogen.

But the cost is not associated with nitrogen. The cost is associated with biological nutrient removal of phosphorus and ammonia. But you don't want to go there, because you're trying to hang your opposition to this expense, which is what you're really against, on a controversial issue, i.e., nitrogen. The controversial issue isn't there any more. You have to explain why it is you don't want to do BNR on phosphorus and ammonia.

**Mr. Fielding:** Sure, I'd like to say that, you know, to be fair, Minister, the issue that the City of Winnipeg has and consistently have, I've got, you know, our correspondence back and to—back and forth from the Province. There's been almost 32 times where we've raised this issue.

The mayor of the City of Winnipeg has raised this issue numerous times in the media that's there. To be fair, we don't feel that we're being heard. We've got the expertise in terms of the wastes management. The solid waste folks that are there—the evidence is not there. What we're concerned about it's going to cause a worse problem in terms of nitrogen removal for Lake Winnipeg. We don't want to roll the dice on this.

This is an important issue for us. We've got no problems with the other elements of the legislation that's there, but this is just something that's unacceptable to us at the City of Winnipeg.

**Ms. Melnick:** It's interesting that you must think every other city in western Canada is wrong with the upgrades they've made to their waste-water treatment.

But more to the point, I know there's some ads running now on CJOB. I'm just wondering if all of EPC has endorsed both your presentation and the ads that are currently running?

**Mr. Fielding:** Well, No. 1, from my understanding, because when we did receive the letter from the minister this afternoon, so I did go back and ask our staff. My understanding is that the only one to this level in terms of nitrogen removal in western Canada and a variety of the states is one plant in Calgary. There is some that is removing nitrogen, but to not that level. So, to be fair, that's not an accurate statement in terms of what other levels are doing. What the letter indicated was in terms of the ammonia elements that are there, and that very much is truthful.

In terms of the ads that we run, we feel passionately about this. This is something that

Mayor Katz feels passionately about. It's something that we've talked about in the media forever and ever and ever on this equation. So I guess, in terms of the asking other EPC members, I would ask them, you know, their opinions on it. I can tell you what my opinion's on; they're very strong in terms of this approach. And to be quite honest with you, I think this is good legislation beyond the nitrogen issue that the City of Winnipeg has a serious concerns with.

\* (22:00)

**Ms. Melnick:** So you're saying EPC may not be agreeing with this, and the mayor and you are running these ads yourself?

**Mr. Fielding:** No. I didn't say that at all. What I said is I'd ask each EPC member their opinions on it. It's been well documented; it was well debated at the City Council. I'm here representing the City's position on it. I'm here just talking about my feelings on the subject as being not only just a father and a people that go to Lake Winnipeg but someone who cares deeply about Lake Winnipeg, and my concern is the nitrogen portion of things twofold is going to cause further damage to Lake Winnipeg and is going to cost hundreds of millions of dollars for taxpayers.

**Ms. Melnick:** Was this discussed at the EPC level? Was there disagreement? Was there agreement?

**Mr. Fielding:** This is something that's been debated on the floor of Council in fact.

**Floor Comment:** The ads?

**An Honourable Member:** And agreed to by council?

**Mr. Chairperson:** Hold on here. Hold on folks. Hold on, please. Microphones won't go on until I indicate they do. Please direct your comments through the Chair so that the Chair has an opportunity to give the indication to turn the microphones on and off, please. Okay?

**Ms. Melnick:** So this has been agreed to by EPC?

**Mr. Fielding:** This is something that's been debated on the floor of council. You know, I encourage you, Minister, if you've got—you know, you want to find out where everyone is just to maybe call each of the councillors, and they'll be able to tell you their position. I'm telling you what my position is. I'm telling you what the mayor's position is on the subject.

**Mr. Gerrard:** You know, I think what you're—what I'm hearing you say is that the choices are whether

you spend an extra \$350 million and plus \$9 million a year, which over 20 years would be \$180 million which is basically a little bit over \$500 million, to use biological nutrient removal or to use an alternative chemical process. And the—one of the questions has been whether the phosphorus is recyclable from the chemical process and, you know, I've heard that, in spite of what some people have said, that it's difficult to recycle it, that, in fact, currently it is quite easy to recycle it from the chemical process and so that this—is this an obstacle?

**Mr. Fielding:** No. I mean what our issue once again is about the nitrogen removal. So, you know, obviously that isn't a portion of that. The phosphorus that we're talking about, I think everyone is in agreement that that's something that needs to be—is a laudable goal and needs to be addressed. So, you know, the City of Winnipeg is taking direct response for that and, you know, in terms of this, what our main opposition to this is in terms of the nitrogen removal portion of things.

**Mr. Gerrard:** The—one of the compounds which contains nitrogen is the ammonia and—but it's my understanding, and I've seen some written documentation that you've actually been able to change the process—existing process, at the City so that you can—have already met the ammonia targets for reduction.

**Mr. Fielding:** Sure, that is the case. If it's okay with the Chair, I can hand out this distribution and what this is this takes a look—Let me hand this to the—I'll keep one just so I can explain it. This is a—oh, I'll wait until everyone just have a peek at this. But this talks about the ammonia in terms of the levels. The concern was that are we meeting the levels and whether it would be on a—kind of on a peak-day basis or kind of an average, if you will, and what the—once everyone gets the charts, I can kind of just explain it to you.

It's kind of a busy slide, but, essentially, what this shows is the City of Winnipeg, for the last 18 months, have hit the levels that are appropriate. We spent close to \$30 million already upgrading and doing upgrades for this. So we believe that our existing systems that are in place can hit both ammonia and phosphorus levels that we're talking about.

What the issue, once again, squarely is in terms of the nitrogen removal, spending this \$350 million on something, you know, rolling the dice on the

science, in our opinion, doesn't make a lot of sense, and you know, so that's our position.

**Mr. Gerrard:** So essentially, what you're saying in this graph, that for the removal of ammonia, you can do it now. You don't need the biological nutrient removal. Is that correct?

**Mr. Fielding:** What the chart says, this is indicated, and I believe some of our staff have spoke with your staff on Friday, I believe it was. So this documents this. This shows exactly that, that we have been able to obtain those levels.

**Mr. Maguire:** Thank you, Mr. Fielding, for your presentation. Appreciate the views that you've had in regards to your personal use of the lake and the personal concern for the types of systems that we need to make sure that the lake is kept in the best condition or gotten back into the best condition that we possibly can, and so I think that your presentation tonight has added a good deal of information to the session.

And I'm sure that the government will—I hope they will, at least—heed some of it and take it into consideration, so thank you very much.

**Mr. Fielding:** Thank you very much. Any other questions?

**Mr. Struthers:** Yes, thank you, Councillor Fielding, for your information tonight. I want to give you an opportunity, though. If I don't give you this opportunity, you're going to leave the impression that EPC is running ads that I heard this morning on CJOB, that those ads do not have the approval of EPC.

Is that true, or can you fill me in as to the process you use at City Hall to make those kinds of decisions, and, really, I'm appalled, absolutely appalled, that somehow we'd be sitting here today with ads running, and you can't even tell us whether or not EPC has approved those ads.

**Mr. Fielding:** What I would suggest is, you know, this has been debated on the floor of council many times, so everyone's voting records, as elected officials, as you are—you can stand up and be counted on this issue. So you can go back on the floor of council and find out who voted for what. I'd encourage you, if you're saying that there's some sort of disagreement in terms of this subject, I would suggest that you talk to those individual councillors. I'm here representing my view. I'm here representing

the mayor's view and the consensus of council on this item.

**Mr. Chairperson:** Thank you, Councillor Fielding, for your presentation here this evening. Time has expired.

Next presenter I have is James Beddome, Green Party of Manitoba. James Beddome?

Good evening, sir. Do you have a written presentation?

**Mr. James Beddome (Green Party of Manitoba):** I do.

**Mr. Chairperson:** Just give us a moment to distribute.

Proceed, Mr. Beddome, when you're ready.

**Mr. Beddome:** Thank you very much Mr. Chairperson. My name is James Beddome, and I am the leader of the Green Party in Manitoba, and I'm presenting on Bill 46 tonight, the so-called Save Lake Winnipeg Act, which essentially amends five acts within the province.

Now, firstly, I want to say that I do appreciate that the government's attempting to take actions to reduce nutrient loading in the body—or nutrient loading in our water bodies. However, I would note, as Dr. Eva Pip said, it only goes halfway, or to rephrase perhaps what Mr. Blaikie said earlier tonight, it's a little bit like building an MTS centre without a skating rink.

So I think what we need to look at is we need a much more comprehensive strategy. I remember sitting in front of this same review committee in 2008 presenting on The Phosphorus Reduction Act with some similar points that I once again will bring forward again tonight.

Basically, my thought on this act, if I might be frank, is that this act is more about political distraction than it is about sincere action on Lake Winnipeg. I mean, we're following one of the worst floods in 350 years. Let's not kid ourselves. All that water flow is going to mean nutrients going into our water bodies, and the result is likely going to be a higher probability of algal—algae blooms

Now, let's just look at the title of the act itself. To me, it is a clear indication of the political simplification of the complex issues of nutrient loading in our watershed. It's not just about Lake Winnipeg. It's about all of our water. It's about our watershed in general. It's what us Greens would call

a lack of ecological literacy or to put it alternatively, a lack of understanding as to how ecosystems actually function. Sure, we all want to save Lake Winnipeg. No one is going to dispute that, but we also want to save the other lakes across the province—the problems—the province.

So to this end, I'll turn your attention to part 1, clause 2 of Bill 46 under the heading Considerations 7.1.1(2)(a): the minister must consider (a) whether the wetland is a coastal marsh directly linked to a large Manitoba lake.

\* (22:10)

So I would note that this section needs amending. Contrary to public perception, size isn't everything. Firstly, there's no operational definition in regards to what is surface area or the volume of water, other metrics. So how do we define what's a large Manitoba lake and what's a medium Manitoba lake?

Furthermore, I think it's abhorrent to sort of look at one large lake as more important than the other lake. All of our lakes are important, and I would note that, as has already been mentioned tonight, lakes like Rock Lake, Killarney Lake and various other water bodies in the province have considerable problems with eutrophication. And you know what? It's just as important, the tourism industry is just as important to the people of Killarney as it is to the people of Victoria Beach or any other community. The algae bloom problems and the impacts it has on ecosystems is just as severe. So what we need is a comprehensive strategy that, you know, addresses all water, and I think that the act—the title of the act should reflect that, that it's protecting all of our watersheds.

Secondly, I'll note with section—and I guess just as a subheader that I'll address, with section 5.1 or sorry, 7.1.1(2), I would note that when you guys go forward amending acts, just—it's probably better if you consecutively number it, rather than creating sub, sub, sub. It just makes it easier for people to list the act. It's a small point but just one I felt I would make.

So looking back at that same section, it also places a higher priority on coastal marshes. Now I certainly agree that coastal marshes are certainly important. But remember, Manitoba is, after all, in the Prairie Pothole Region. Small, isolated wetlands are also important.

So I've put some information in there and you'll notice just behind on, I guess page 3, I've included two of the graphs of the Broughton's Creek watershed. So we see here 1968; we see here 2005. You can see all the water channels that are drained. You can see how much of the water that's drained. Some of the other presenters have given you some of the information on this but 6,000–70 per cent of the wetland basins were lost. Yes, only 21 per cent of the area but that's the problem. The faster channelling results in faster water flow and larger wetlands.

Now, the amendments to The Crown Lands Act, of course, aren't going to stop this type of wetland degradation because why? Because The Crown Lands Act applies to Crown lands within the province. I would also note that section 5(1)(h) of the Crown's act explicitly allows projects for draining and reclaiming Crown swamp land, subject to section 5(2), which requires ratification by Legislature if the lands being drained equals or exceeds four townships.

Once again, this is indicative of the mantra that bigger is better and, *ergo*, more important. You'll see that I'll repeat this. I don't think that's the case. I think, once again, small, isolated wetland basins are just as vital. I would submit that sections 5(1)(h) and 5(2) of The Crown Lands Act should be repealed and included in this bill.

And I would also say that Manitoba needs to make a commitment to protect all of our Crown wetlands and restore degraded Crown wetlands. But, furthermore, we need to look that while 90 per cent of Manitoba is Crown land, that 10 per cent of it, it's mainly in the southern portion of the province, and it's in the hands of private landowners. What we need to be doing is we need to be working with these landowners.

And there are a couple model systems that I will give the government some credit here. They've piloted the pilot program, also in the RM of Blanshard where the Broughton's Creek watershed is, for \$1.2 million for the alternative land use system, and recently they've introduced the Wetland Restoration Incentive Program, which is about \$2 million over four years. But that's about less than \$4 million over close to a decade. Cuba Gooding, Jr. had a really good line in *Jerry Maguire* when he said, show me the money, show me the money.

We want producers to get on board. We had hog producers come on here that are worried about it. Let's make it work for them. ALUS had a 70 per cent

voluntary adoption rate from the producers inside the Blanshard RM. Why? Because it paid them \$5 to \$25 per acre to restore valuable ecosystems including, of course, wetlands. So what the end result is, if we look at an April 2007 Delta Waterfowl Foundation, they estimated costs \$738 million to implement that type of program across Canada. I don't have specific Manitoba numbers but it's worth noting that it delivers \$820 in benefits. Also worth noting, a Conservative MP who is one of the pioneers of it, a present Conservative MP. So there's room to work across the House on here and not to politicize this issue, but rather to find ways that we can work with producers so that they can protect our valuable ecosystems.

I would also just note that it's been a lot of public money that's created the drainage channels, that's created the culverts, that's promoted the hog industry in Manitoba and given the massive subsidies. So then there's a responsibility on our part, if we're going to throw the money upfront to develop this and we—you know, I'm not pointing fingers. We didn't know all the things we knew when we—you know, my family came across and settled the Prairies too and we drained a lot of wetlands, I'm sure. And, you know, we made that mistake. We didn't know what we know now but now we know what we know now, and we need to act on it and we need to act immediately and it needs to be a comprehensive strategy.

I'll now turn you to the 2006 *Restoring the Health of Lake Winnipeg, Technical Annex*. According to them, scientists attribute the north-blooms in the northern basin of Lake Winnipeg to the interaction of three human-induced factors: excess quantities of phosphorus entering the lake from the sub-basin, and this comes from many sources, and I'll get to that—agriculture, livestock, including livestock in crop production, also including sewage, natural runoff, et cetera.

Another thing worth noting that this act doesn't address is the regulation of the—hydroelectric regulation, which, through the Jenpeg dam, affects the levels of Lake Winnipeg. It's worth noting that we're at the edge of the regulation, perhaps about 1.2 inches away from the 717 feet in the regulation, as noted in the ads in the *Winnipeg Free Press*. And also it notes that the damming of the Saskatchewan River upstream of the north basin cause sediment loading. So if anyone's seen the David Suzuki *Nature of Things, Choking Lake Winnipeg*, they note that, that the damming itself may have some impact on the

flow of nutrients, and one of the suggestions, ideas, periodic five- to seven-year drawdowns to sort of try to mimic some of those natural cycles.

I'd also note that on January 4th, Bruce Owen of the *Winnipeg Free Press* reported that Premier Selinger was going to commit to public hearings on the Lake Winnipeg regulation. But we've heard nothing further about that, and I'd say this needs to be done before the election. It's part of a comprehensive strategy that looks at managing our watershed.

I'll now move over to, sort of, livestock operations. This act looks at regulating livestock operations, and I—certainly, the Green Party has long been critical of intensive livestock operations, but I think, further to what the last presenter said, it shouldn't just work on pigs. We need to look at all intensive livestock operations. We have live-intensive poultry operations, intensive cattle operations, et cetera. We also need to look at other forms of agricultural runoff, including over-application of fertilizers. The point being, to just pick one industry isn't much of a comprehensive strategy.

I was joking with the previous presenter Mr. Flaten. He explained to me a very interesting thing that I'll relate to the sewage thing. He said the city of Winnipeg is the largest confined animal feeding operation in the province. I thought that that was pretty funny, but it helped to drive the point home that there are multiple sources for this. That's not to say I don't support the moratorium on new intensive livestock operations across Manitoba; I certainly do, the Green Party certainly does, but we want to see it expanded to other livestock operations.

We want to see it be comprehensive, and then we won't have such acrimony between one industry that feels that perhaps it's being picked on. Granted, the number of hogs has increased substantially in the province and the impact is substantial and shouldn't be overlooked either.

I think the big thing that we need to look at is we need to change our agricultural system. We need to promote smaller, small-scale farmers. This is what some of the things like ALUS promised to do. They promised to get farmers on board. They get—they promised to ensure that we can have a more locally-based food production system. Despite being the third largest producer, exporter of pork in Canada, Manitobans only consume—10 per cent of the pork we consume is from here in Manitoba. Something seems wrong about that, right? We put a bunch of

provincial money in a Maple Leaf plant that can't even run to full capacity because of the way that we've set up our agricultural system. We need to change it now because it'll have broad impacts moving forward.

I think the two-year banning on peat is a good first start, but I think the extension should be mandatory. I also think—a review of the public registry turns up several peat mines that are still in the licensing process. Assuming that this bill passes, I'd like to know—have a clear indication of whether those ones that are partway through the licensing process will be allowed to finish or whether they will not.

I think, before I start addressing The Planning Act, we had a public land-use policies review, PLUPs for short, review in the fall of 2008. Draft public land-use policies were reviewed. I had a number of concerns, including extension of wastewater infrastructure in Winnipeg. Worth noting, they were never enacted. So now we're making changes to The Planning Act, but we've never updated the PLUPs.

So now let's go into some of the sections. I'll—I would note that 51(1.1)(b)(ii) needs to be edited. It uses the words "sustainable and financially viable." This is redundant. By definition, in order to be sustainable, something must also be financially viable as well as ecologically and socially viable too. So I think that could be removed with minimal impact.

Am I running out of time? I apologize. Okay. I—there were a few more points I wanted to make.

**Mr. Chairperson:** Just conclude if you will please, Mr. Beddome.

**Mr. Beddome:** Okay. I'll just conclude with my last one.

\* (22:20)

I've outlined our six-point strategy for ecological sanitation, basically one of the new ways that we think we should go. We want to reach far and ahead. Yes, maybe it's hard in the city of Winnipeg, but in all the small municipalities where we've mandated N and P removal, it might make more sense, and I've put the six-point policy in there. You can refer to my April 28th, 2008, submission on Bill 8, The Phosphorus Reduction Act, for further information.

That concludes my presentation, subject to any questions you may have.

**Mr. Chairperson:** Thank you very much, Mr. Beddome, for your presentation. Questions?

**Mr. Maguire:** Thank you, Mr. Beddome, for your presentation and for taking the time to be here tonight to put forth your views on this important issue. So I just wanted to have the opportunity to thank you for waiting and thank you for the time to—that you've taken to put this together as well.

**Mr. Chairperson:** Mr. Beddome, did you wish to comment, sir?

**Mr. Beddome:** Yes, well, I mean, I would be more than happy to meet with you and discuss matters further and go into more details. This is something that I think is extremely, vitally important, and I am sorry that I went over time, but there were a lot of issues to address.

**Mr. Gerrard:** Thank you for coming and for your presentation.

You describe this as a political distraction leading up to a general election. One of the things that the government has claimed is that they're going to reduce the phosphorus in Lake Winnipeg by 50 per cent. Would you feel confident in saying that these efforts would reduce this phosphorus in Lake Winnipeg by 50 per cent?

**Mr. Beddome:** Well, first thing I should say, I'm not a lake scientist, so, you know, I can only give you so much information. But I can tell you I'm completely not confident that this is going to add up to a 50 per cent reduction.

I think a better strategy would be to drastically invest in our wetland reclamation. I'm not talking \$4 million, I'm talking 100, 200, 300 million. We're spending \$4 billion on our roads over five years; I think our wetlands are worth every penny if not more. And just further to that, I think it's also worth noting that although the 50 per cent reduction is the target, there's no timeline for said target.

**Mr. Chairperson:** Any further questions?

**Mr. Gerrard:** Yes. And so, I mean, basically, this is a political bill which has no chance of achieving the stated target, and that's really why you're saying it's politically motivated rather than realistic.

**Floor Comment:** Well, I think—

**Mr. Chairperson:** Mr. Beddome.

**Mr. Beddome:** I'm sorry again, Mr. Chairperson.

I think, yes, I think the end result will be—a tough question comes at some point this summer when the algae blooms get bad or next fall during the election, it gives the government something to say: well, we did enact The Save Lake Winnipeg Act—perfect title, right, for rhetoric—we did enact The Save Lake Winnipeg Act and the intention is to reduce phosphorus by 50 per cent.

And if I may add just a few more things, I think it's worth noting, in 2003, in a press release, then-Water Stewardship minister, Steve Ashton, said he was confident that with the then-Lake Winnipeg Action Plan, they were going to get levels below 1970s levels. Now we're promising to go below 1990s levels.

And I also would note that there was a press release coming out from the current Minister of Water Stewardship, Minister Melnick, who claimed that she had 94 per cent completed all the recommendations of the Lake Winnipeg Stewardship Board, or acted on them, 94 per cent acted on them, sorry. Let me correct the phraseology there. But yet we still see a declining lake. So I think we do need much more comprehensive strategies.

**Mr. Struthers:** I enjoyed your presentation. Just noted on the questioning from the member for River Heights, that the very bill that you two are just making fun of, he voted for last Thursday. So are you surprised when those kinds of actions are taken in this Legislature?

**Mr. Beddome:** No, not at all. If I was in the Legislature, which I hope to be someday, I would probably vote for this act as well. I would probably support this act as well, but I would also put my reservations on the record, as I'm doing tonight, that it doesn't go far enough. You know, I think—you know, we talked about—if we build the environment to bring the Jets back, well, this is an environment that's going to give us the Stanley Cup.

**Mr. Struthers:** So it's unanimous. Everybody around this table thinks this is a good bill then.

**Mr. Chairperson:** Any further comments or questions for the presenter? Seeing none—Mr. Beddome?

**Mr. Beddome:** I think it's a good bill, I would say, I will just address that further. I would say I would support it, but I think it needs further amendments and further clarification. To go that it's good, I would say that it is mediocre. Mediocre is perhaps a good word. Thank you.

**Mr. Chairperson:** Thank you, Mr. Beddome, for your presentation.

Next presenter I have on the list is Caitlin McIntyre, private citizen. Caitlin McIntyre—just give us a moment to distribute please.

Please proceed, Ms. McIntyre, when you're ready.

**Mr. Caitlin McIntyre (Private Citizen):** Before I proceed, may I petition the committee for permission to include my handout in addition to the written or the oral or the transcription of my oral presentation?

**Mr. Chairperson:** That's fine.

**Ms. McIntyre:** Thanks. There's a table that my transcript won't make much sense without.

All right. So, again, my name is Caitlin McIntyre. Thank you for allowing me to present to you this evening. I know the hours are ticking by and I appreciate your patience as well.

I'm a private citizen. I'm speaking to you as a concerned citizen today, as a taxpayer and, as well, as a graduate student at the University of Manitoba and a former candidate for the Green Party in the federal riding of Winnipeg South.

I'm here to address the proposed amendment to The Environment Act under subsection 41(1), which would enshrine a prohibition of confined hog livestock areas in all areas of Manitoba. This act centres on hog production so—and so will I, but I echo some of the concerns of my fellow participants this evening that all confined animal-feeding operations, per the Leavitt report, have an impact on degrading water quality. This includes not only cattle and poultry production but even intensive farming operations that are monocrop grain agriculture.

So I do commend you on initiating this moratorium, yet there is need for further action as current levels of hog production have impacted the eutrophication of Lake Winnipeg as it is so far.

I note that the—in the hog production in Manitoba as such—the environment for hog production in Manitoba is such that the blame or responsibility does not lie with the producers or the pigs themselves, but, as Leavitt notes, the Manitoba government has consistently promoted the Manitoba advantage of low food grain costs, intensive forage cultivation, 5.4 million hectares for waste assimilation, a probusiness attitude to both regional farmers and international hog producers facing severe environmental and regulatory constraints.



So I'm delighted that these international hog producers who are facing environmental and regulatory constraints in other jurisdictions have received 40 per cent of \$7 million in targeted advance payments through AgriStability in October 2009. They receive manure management funding, and Hytek themselves hit the jackpot in 2008 when the Neepawa waste-water treatment facility received \$11.8 million of provincial money in order to accommodate their production, as well as \$10 million in loan and \$600,000 in training. I'm sure my boss and my job would like that kind of money as well.

The perversity is—and I'm sure you've heard these numbers before, but maybe if you hear them again, they'll sink in—the number of producers are declining steadily since 1971, so the number of producers taking advantage of this money is ever fewer. Stats Canada reports 14,200 producers in 1971, and as of January 1st, 2011, there are 745.

The added perversity is that Manitobans don't even eat Manitoba pork: 5 to 6 per cent of the total pork slaughtered in the province and only 3 to 4 per cent of estimated Manitoba-origin pork is bought and eaten by Manitobans. In fact, we produce and make a huge mess in our province for our US market, and it's comforting.

Instead of actually consuming Manitoba pork products, no—we're in the weanling business. We like to send our baby pigs off. So Manitoba boasts, actually, the highest percentage of farms which produce only weanling pigs—these are under 23 kilograms—than do other provinces. A result of this is an increased sow population. The census in 2006 reports 111 pig facilities of our 745, which is up from 75 in 2001, with more than 1,000 sows per unit.

The average of these farms is 2,396 sows. That represents 72.4 per cent of all the sows in our province and 40 per cent of the total pigs. Yet more than half of the pig farms in 2006 did not have sows. That means the sow populations are not only intent—and confined in their own local operations, but they're concentrated largely in geographical areas.

Janet Honey reports in the report put out by the Department of AgriBusiness and Agri-Economics from the University of Manitoba, that the total sow population as of April, 2011, was 314,800; and in 2010, the population of 325,000 represented 25 per cent of Canada's sow population.

\* (22:30)

This is leading to a manure crisis, in my opinion, and in many other opinions documented throughout the academy. As I'll draw your attention to table 1 on my handout, lactating sows produce more nutrient-rich manure than their other pig counterparts. And then I've highlighted the line for your ease and convenience for lactating sows. And sows produce an average of 2.4 litters per year, so a generous estimate is that many of the sows in our province are in or around the lactating stage 365 days a year. So I took the liberty of multiplying 314,800 by the kilogram output for an average sow of 29.8 for nitrogen and 21.5 for phosphate, and that turns into 9,350,200 kilograms per year of nitrogen and 6,768,200 kilograms per year of phosphorus. That's an alarming amount for just 314,000 animals and doesn't even—not even a drop in the bucket.

Leavitt notes that—in his report—Leavitt notes that excessive livestock densities can lead to manure production that overwhelms both storage capacities and regional crop requirements, especially when animal population greatly exceeds humans. And I think with the pig population in Manitoba, we've gotten to that point.

An article by JoAnn Burkholder, et al., regarding the impacts of waste from confined animal feeding operations on water quality, notes that the siting of livestock operations in areas prone to flooding or where there is a shallow water table increases the potential for environmental contamination. I scarcely need say that we live in a flood plain. *Ergo*, when we have invested in nutrient-rich—or pigs that produce the most amount of nutrients and we're in a flood plain, we have built ourselves up for serious problems.

So, therefore, I've submitted four specific recommendations to the implementation of The Save Lake Winnipeg Act. Number 1 is to amend the Livestock Manure and Mortalities Management Regulations under The Environment Act to include a phosphorus output—I'm missing some words here—to include phosphorus output for the definition of an animal unit in a 12-month period. As you note, I've included the definition of the animal unit as it is currently enshrined, which means the number of animals of a particular category of livestock that will excrete 73 kilograms of total nitrogen in a 12-month period. I think this one has an obvious—and indeed the intent behind this recommendation is obvious in the act. Otherwise, The Save Lake Winnipeg Act does focus on phosphorus output.

My second recommendation is to amend the Livestock Manure and Mortalities Management Regulations under The Environment Act to include a separate definition of one animal unit for pigs to correlate to the nutrient output of a lactating sow. For example, in the case of pigs, one animal unit means the number of animals that will excrete 29.8 kilograms of total nitrogen and 21.5 kilograms in total phosphorus in a 12-month period.

Again, I think the rationale speaks for itself that pigs have been noted to have contributed largely to the contamination of Lake Winnipeg and other watersheds in the province, and again, I think we—I encourage you as a government to be looking at other confined animal operations.

But in terms of singling out pigs in this instance, there are separate manure licensing requirements already in existence for pigs so under the same regulations, under subsection 16(2.1), it currently reads: "In the case of pigs, no person shall construct, modify, or expand a confined livestock area capable of housing 10 animal units or more except under the authority of a permit issued by the director under section 16.1." I note that while 10 animal units is the threshold for pigs, it's 300 for other kinds of livestock.

I'll move on to my amendment No. 3 to amend a definition of the confined livestock area to include indoor facilities in the Livestock Manure Management Regulations. I note that currently the definition of a confined livestock area is—it reads as it means an outdoor, non-grazing area where livestock are confined by fences or other structures and includes a feedlot, paddock, corral, exercise yard, holding area and hoop structure. Again, this may be a quibble, but I think indoor should reflect the realities of hog production in the province, especially since the indoor facilities are creating much of the nutrient buildup.

I also note that the definition of a livestock operation in The Planning Act stipulates any operation that is at least 10 animal units, and it does include the stipulation of indoors versus outdoors.

And 4, my amendment 4 is to initiate a five-year program to cap the number of allowable pig animal units in all livestock operations in Manitoba with a view on confined livestock areas. I think this is the crux of why I'm here today. I echo the concerns of Ms. Burns, from the Humane Society. I believe that

initiating a cap on the number of allowable pigs, in consultation with ecologists—we have a wealth of academics here who can contribute to this—and other relevant stakeholders to determine appropriate populations for a sustainable industry. But the number of pigs we have in the province right now is clearly unsustainable.

This move, I envision, will also help to eliminate the practice of sow stalling, and it will help the industry move towards group straw-based housing by 2017, as per welfare groups, accelerating Manitoba Pork Council's goal of achieving the same by 2025.

I also envision that reducing the population of pigs and how we do business here in the pig business in Manitoba would be to promote a localized value-added industry in Manitoba that's better for the environment in which Manitoba pork products will actually feed Manitobans.

I think it's time to seriously crack down on this industry, to act with responsibility as your government and initiate policies that will benefit Manitoba instead of another piece of feel-good legislation and political posturing. Thank you very much for your time.

Table 1. Daily production of the major nutrients in the manure from various species and weights of animals (freshly excreted manure).

Animal	Size (lb.)	Total Manure ft.3/day	Water (%)	Nutrient content (lb./day)		
				(N)	(P <sub>2</sub> O <sub>5</sub> )*	(K <sub>2</sub> O)*
<b>Dairy cattle</b>						
Heifer	150	0.2	88	0.05	0.01	0.04
	250	0.32	88	0.08	0.02	0.07
	750	1	88	0.23	0.07	0.22
Lactating cow	1,000	1.7	88	0.58	0.3	0.31
	1,400	2.4	88	0.82	0.42	0.48
Dry cow	1,000	1.3	88	0.36	0.11	0.28
	1,400	1.82	88	0.5	0.2	0.4
Veal	250	0.14	96	0.04	0.03	0.06
<b>Beef cattle</b>						
Calf	450	0.42	92	0.14	0.1	0.11
	750	1	92	0.41	0.14	0.25
High-forage	1,100	1.4	92	0.61	0.21	0.36
	750	0.87	92	0.38	0.14	0.22
High-Energy	1,100	1.26	92	0.54	0.21	0.32
Cow	1,000	1	88	0.31	0.19	0.26
<b>Swine</b>						
Nursery	25	0.04	89	0.02	0.01	0.01
Grow-finish	150	0.15	89	0.08	0.05	0.04
finish	275	0.12	91	0.05	0.04	0.04
Gestating	375	0.36	90	0.18	0.13	0.14
Lactating	350	0.12	91	0.05	0.04	0.04
Boar						
Sheep	100	0.06	75	0.04	0.02	0.04
<b>Poultry</b>						
Layer	4	0.004	75	0.0035	0.0027	0.0016
Broiler	2	0.003	74	0.0023	0.0014	0.0011
Turkey	20	0.014	75	0.0126	0.0108	0.0054
Duck	6	0.005	73	0.0046	0.0038	0.0028
Horse	1,000	0.8	78	0.28	0.11	0.23

\*Phosphate (P<sub>2</sub>O<sub>5</sub>) = 2.29 x P. Potash (K<sub>2</sub>O) = 1.21 x K

Source: MWPS - 18, Manure Management Systems Series, Section 1, Manure Characteristics

Notes: Values do not include bedding. The actual nutrient content can vary + or - 30% from table values. Increase nutrients by 4% for each 1% feed wasted above 5%.

Use only for planning purposes. These values should not be used in place of a regular manure analysis.

*Lactating sow:*

*Production of N: 0.18 lb \*365 days = 65.7 lb/year  
= 29.8 kg/year*

*Production of P205: 0.13 lb \*365 days = 47.5 lb/year  
21/5 kg/year*

*“animal unit” means the number of animals of a particular category of livestock that will excrete 73 kg of total nitrogen in a 12 month period.*

*–The Livestock Manure and Mortalities Management Regulation of The Environment Act*

*Specific Recommendations:*

- 1) Amend The Livestock Manure and Mortalities Management Regulations under The Environment Act to include phosphorous output in a 12 month period.*
- 2) Amend Livestock Manure and Mortalities Management Regulations under The Environment Act to include a separate definition of one Animal Unit for pigs to correlate to the nutrient output of a lactating sow, i.e. “In the case of pigs, one Animal Unit means the number of animals that will excrete 29.8 kg of total nitrogen and 21.5 kg of total phosphorous in a 12 month period.”*
- 3) Amend the definition of a “confined livestock area” to include indoor facilities in The Livestock Manure and Mortalities Management Regulations under The Environment Act.*
- 4) Initiate a 5-year program to cap the number of allowable pig Animal Units on all livestock operations in Manitoba, with a focus on confined livestock areas.*

**Mr. Chairperson:** Thank you very much for your presentation, Ms. McIntyre.

**Mr. Struthers:** Thank you very much, Caitlin. Certainly I note the enthusiasm by which you've dug into these numbers. *[interjection]* I note the enthusiasm which you've dug into the numbers, and I commend you for the kind of thought that you put into what is a very important industry in our province, an important industry in a number of ways but certainly one in which we need to understand the impact of that industry on our environment.

So thank you very much for your advice tonight.

**Mr. Maguire:** Just wanted to say thank you, as well, for your presentation, for taking the time to put it

together and be here to present it to us this evening. Thank you.

**Mr. Chairperson:** Ms. McIntyre, do you have any further comments?

**Ms. McIntyre:** Well, further to Mr. Struther's comment, I note the numbers speak for themselves, and it's a clearly unsustainable industry, and I hope legislation will reflect that. Thank you.

**Mr. Chairperson:** Thank you for your presentation and for your patience this evening.

**Ms. McIntyre:** Thank you.

**Mr. Chairperson:** Next presenter, we—

**An Honourable Member:** Mr. Chair, on a procedural matter.

**Mr. Chairperson:** Oh, yes.

#### **Committee Substitution**

**Mr. Tom Nevakshonoff (Interlake):** Yes, on behalf of our whip, Mr. Martindale, I'd like to put a substitution in: Mr. Wiebe for Mr. Chomiak.

**Mr. Chairperson:** For the information of the members of the committee, Mr. Wiebe is substituting for Minister Chomiak.

\*\*\*

**Mr. Chairperson:** Next presenter on the list to call is Matthew Klippenstein, private citizen. Matthew Klippenstein, private citizen? Seeing Matthew Klippenstein is not here this evening, the name will be dropped to the bottom of the list.

Next presenter is Gaile Whelan Enns, Manitoba Wildlands.

Good evening, Ms. Enns. You have a written presentation?

**Ms. Gaile Whelan Enns (Manitoba Wildlands):** I have some backgrounders with me which I would like to distribute.

**Mr. Chairperson:** Yes, just give us a moment to distribute, then I'll give you the signal to proceed.

*Mr. Vice-Chairperson in the Chair*

**Ms. Whelan Enns:** Thank you, and if I may, I'm not able to speak as quickly as the previous speaker, particularly at this time of the evening, but I'll do my best. I also wanted to make sure that we had in the record what these backgrounders are.

So there's a 2006 backgrounder regarding the Lake Winnipeg Implementation Committee and then a set of three of the reality checks for 2011, as a momentous year in Manitoba, that Manitoba Wildlands has been producing. One of them, then, RC-13 is: Does Manitoba have a Lake Winnipeg action plan? RC-09 is: Are Manitoba heritage marshes protected? And RC-06: Are Manitoba waterways, rivers and lakes protected? So that's what's being handed out.

I'm going to try to do two main things in the time and energy available. I think people are doing really well to still be at it at this point in the day.

\* (22:40)

I want to go through the act, and various members of the committee have heard me run through an act as quickly as I can before. I have some positive things to say, for sure, about the act, and also some concerns. There is—and I'm working from handwritten notes and flags on pages so, again, we'll move as fast as we can.

Two speakers back, there was a reference to the PLUPs. So we are three years later where the land use policies for The Planning Act are still stuck, and that's a difficulty, in terms of just understanding what public policy is. Okay? And we are—you people in this committee, members at this committee have heard me say in the past in respect to—in response to new bills that we have been spending a great deal of public funds in Manitoba over the last decade or so to expand waste-water systems, to improve a certainty on quality of water, without any water conservation standards.

So one of the first things I was looking for in this act and did not find is that there would be required water conservation standards, for instance, in these waste-water management plans in a variety of things that the City is going to need to do and the municipalities and the Capital Region municipalities are going to do. So, so far, still, no water conservation written in.

A facetious question would be: If one is amending five acts, how many more are going to need to be amended? And I would suggest to you that there's either—there's easily another four, five or six acts that are probably going to need to be amended if we're going to save Lake Winnipeg.

So, again, you've heard me say in the past in relation to new bills, the definitions are missing. They aren't here. And there's some things even if

you're used to writing—reading new bills, there's some things here that are very different and very unique because it's two main ministers. It's more than one department. It's very, very clear that there's—that this is going to be different in terms of how it will be administered but it's not so clear how it's going to be administered.

So I believe that the bill could be stronger and clearer in that regard, and I wanted to follow up on the comment about what's a lake, what's a large lake, what's a medium lake, and indicate somewhat specifically that I had—our office had a very good response from the Water Stewardship Department this winter when we asked for some help in terms of what we were doing in GIS with lakes and rivers in the province. The response was immediate, it was good, except the database was highly flawed, okay? So this is the database of rivers and lakes in Manitoba, and it's alpha and it doesn't take you very long to know that there's lakes and rivers missing from it. So we're available to assist with that but I'm not pointing fingers. I'm basically saying if we're going to save the lake, we need a lot of things lined up and working very well together between the departments, between these five acts and probably more pieces of legislation.

Okay, trying to turn quickly. So, The Crown Lands Act needs a lot of amendments, but in 7.1.1(1), the thing that was really intriguing to me is you're missing (c), because (c) has to be about protecting wetlands. So if your press release, your backgrounder, if what you say in *Hansard*, you're saying in the House, about what you're going to protect, if that language is there, then this bill has got to be stronger on protection and protection standards. So I looked for (c) and it isn't there, so I wrote it in. And the reality of it is that the protection standards, public policy in this province, the regulatory framework is very clear. You've got all kinds of tools. It's there, easy to use.

It's interesting, this government's told me pretty consistently that you can't use The Crown Lands Act for this kind of stuff when it comes to community pastures. So I'm really, really interested in how this is going to work but you've got to basically expand and amend and get more specific in terms of your wetlands.

7.1.1(2): of course, has the reference to whatever a large Manitoba lake is, and then in 7.1.1(2), I looked for (e) and did not find it, and it is in your press release, it's in your public statements, it's

probably in *Hansard* and so on, and that is carbon stocks. So if you're going to talk about wetlands and protecting and maintaining and how important the boreal carbon is in this province, you've got to basically put it in as a main consideration, I would think.

I sort of had the same thing happen in 7.1.1(3) because there's a specific reference here to the powers and duties of the minister responsible for The Water Rights Act, I think you need (d) and you need to cross-reference that in terms of the powers and duties of the minister responsible for The Environment Act. You know, it's two departments, five acts, going to be more, a whole set of arrangements and responsibilities including licensing and permitting. Then, again, (d) should be there and should be cross-referenced to the second minister.

Now, I am here as the director of Manitoba Wildlands this evening, but I'm also a private citizen and I also live in the Red River Valley. So I thought I'd tell you all that 40.2(1) is already gone. The horse—the saying is the horse is out of the barn. It isn't going to be good enough to not spread manure on land between November the 10th and April the 10th, and this year proves it. So anybody who was out there on frozen land before all the flooding, spreading manure after the 10th of April—legal—it's all in our waterways.

We have a thing we do in the kitchen at home. We have a calendar and we mark our hog days, so we have a sort of an internalized ranking in terms of how bad the odours are. We have no—there's no—in our ward, in our municipality, nothing. This is all coming from the east and it's, you know, 8, 10 kilometres away. They have lots and lots of willow trees, though, but what they do is they move the slurry when they think people are asleep at night and they're spreading it on that land right now. And we're having all these heavy rains, so it's the new normal. This isn't just a short-term wet cycle we're in. This is the new normal, and it's going to be dramatic changes, a whole range of ways in how we do business, how our communities function, and what we're going to do about the environment and the water in Manitoba. And I just thought I'd say, 40.2(1), that's already past. It's gone. It's got to be stronger than that.

I also thought I probably should put on the record what I said in the past in terms of speaking to bills here, and that is I was involved in all of the public policy work and political policy work to

arrive at The Environment Act we have in Manitoba, and that was part of my job. This act is old. We're band-aiding it. It's early—it's late-1970s, early-1980s thinking, and we're basically dropping more amendments in it because that's one way to get things done. I would strongly recommend really thorough, open-handed, open-eyed review. We do not have an environmental assessment regulation; we do not have a clear regulation on access to information in the public registry—all kinds of things that basically add risk.

Okay. It's a little hard to know what a disposal field is in this act. That's just one example. It's like, what's a large lake? You really need some definitions, which, of course, if it's all going into all different acts is a little complicated. I get that.

I would agree with the previous speakers. I don't know why you have a two-year moratorium in here in terms of peat. Clearly, obviously, it can be continued. I get the language. Why you're going for two years, I don't understand. Anybody who's been on a small plane that's taken off from St. Andrews at any time on a clear day, any time in the last five years—I mean, this isn't just about wetlands. This is about the mess we have from peat mining in this province where there's no restoration requirement at all. And you fly over dozens of them if you're going to the east side of the lake, if you're going to Norway House; no matter where you're going, it is a mess.

So, 128.1(1)—I'm very glad to see this moratorium, albeit it's short, but you need (d) and (e). You have to have something here about what happens at the end of the permit. And (e) is restoration. And both of these changes would be consistent with your stated intent in terms of the act.

I am not going to say much about The Planning Act other than where is the PLUPs, and we really do need, when you get into 51(1.1), there needs to be more than what's here in (a) and (b). Sorry. Okay. I'm having a trouble—I was having the problem of finding it and then it's on the following page.

So I started to write notes about the fact that there weren't clear standards or formats in terms of the expectations for these plans, and then I turned the page and got to 62.2(3) and it's not enough. And there's already a problem in the province in terms of municipalities having clarity on what's supposed to be in a development plan. We've got planning district boards running around in a whole lot of different kinds of circles in terms of the kinds of product they're coming up with. There needs to be much

more support and clarity in terms of what needs to be in these plans. So I'm making references to other kinds of plans but it's the same problem—

\* (22:50)

**Mr. Vice-Chairperson:** Excuse me, Ms. Whelan Enns. You are at 11 minutes now. You're only allowed 10 for a presentation.

**Ms. Whelan Enns:** Well, and I'm going to—not to be ironic on privilege, I'm going to point out that Josh Brandon had 20 minutes, considerably more than the two minutes when Minister Rondeau pointed it out to him, and I'm going to try to talk very quickly, thank you.

Okay, so, I also want to say that it's unclear what the role of the Public—or not clear enough what the role of the Public Utilities Board is.

**Mr. Vice-Chairperson:** Excuse me, Ms. Enns. Your time is up, but I'm going to put it to the committee to see if they will grant leave for you to conclude your remarks. How does that sound?

**Floor Comment:** And I will certainly do it shortly and quickly.

**Mr. Vice-Chairperson:** Do we have leave from the committee?

**Mr. Maguire:** I'd certainly grant leave.

**Mr. Vice-Chairperson:** Is that agreeable to all of us? *[Agreed]*

You may conclude your remarks.

**Ms. Whelan Enns:** Thank you, and I will, like I say, move quickly.

I have some cautions and the cautions are closing comments that are meant to be in support of saving the lake, protecting marshes, though, again, you got all the tools you could possibly need. You've had them for 20 years in terms of marshes, and you haven't been protecting them, so let's get on with it. And that includes wetlands.

A government takes on risk when you fail to bring forward your own policies, your own previous investigations, research and commitments. So the fact that you're hived off everything before about Lake Winnipeg is unfortunate. The implementation committee, the work that was joint, federal and provincial, in the middle of the decade, it's got all kinds of strong stuff in it. I think the lake needs a charter, and the lake needs an independent commissioner agency, and I'm hoping the thinking

goes there. You have a real high risk of a tremendous amount of confusion in terms of how many acts, how many departments, who's in charge, who does what, and so on.

So, otherwise, the only other thing I wanted to say is that it's 2011, and it's—maybe it's a 300-year event; maybe it's just the beginning of how wet we're going to be. But the levels of water in Lake Winnipeg, mentioned earlier this evening—as of July the 8th is the current projection—are going to be at the maximum allowable under the regulation for the lake, and Manitoba Hydro's ads are in every Saturday paper and the number is changing, if you compare them. So this is huge. This is about liability. This is about the regulatory regime that's been in place for 35 years. This is about what are we going to do. And all of the business owners, cottagers, communities, First Nations, everybody affected around that lake, after 717, it's a public liability.

The same thing is true on the other side of Jenpeg. Now, I'm not an engineer—and there's good engineers in the room. I'm not an engineer, but the same caution applies. We are either at or going to be past the legal level of water under the Northern Flood Agreement, and it's a treaty. It's Canada and Manitoba and the utility, and that is the reality that we're looking at in terms of the lake and the water levels right now. And that is primary.

So the—what's the liability going to be? What's the compensation going to be? What's the government going to do about these water levels, not just on the west side, not just in the Red valley, not just in the Assiniboine corridor. This is something that really needs to be in the record.

I'd also wanted to basically say it's unclear how this is all going to be paid for because you're talking about—it's going to cost a lot of money to fix the lakes, plural, you know, and that's why I'm repeating myself about how many ministers, how many departments and where's the responsibility going to fall.

I also—again, I will stop, other than a lot of people, not just environmentalists, have been waiting for the Premier of Manitoba (Mr. Selinger) to take the next step since his New Year's commitment to have hearings regarding the lake. So it's got to happen. Follow through on that January commitment and some clarity. It could have come at the same time as this plan, press release and this bill. But it's urgent and, again, I appreciate the extra time. Thank you.

**Mr. Vice-Chairperson:** Okay, thank you, Ms. Enns, and we'll move to question and answers. The floor is open.

**Mr. Maguire:** I just wanted to thank you, Ms. Enns, for your presentation this evening and certainly the work that you've put into bringing these points forward. I hope that the minister looks at some of those suggestions for improvements and additions to his bill. Thank you.

**Mr. Blaikie:** I wasn't here for all the presentation, but I undertake to have a look at it, you know, so.

**Mr. Vice-Chairperson:** Seeing no further questions, thank you for your presentation, Ms. Whelan Enns.

Call Mr. David Mackay, private citizen.

Good evening, Mr. Mackay. I see you have some written materials for the committee. Our Clerk's assistant will distribute them.

**Mr. David Mackay (Private Citizen):** Thank you. Given the state of nutrient depletion that most of us are under right now, and nutrient loading you want to do pretty soon—[interjection] You have a long memory.

I'm not going to make you suffer through my notes; you can always read those. I think what I'd like to do tonight is actually just make a commitment because having—I actually believe I'm the last presenter, and, as a result, I've had the opportunity to listen to a lot of what you've had to listen to tonight, and, you know, it's frankly amazing a lot of people prefer to stand up here and shake their finger at you and tell you what you're doing wrong and tell you what you're doing right, and I wonder how you tolerate it sometimes.

But, as a result, I'm not going to sit here and wag my finger at you. I think what I would better behoove to do is tell you what I'm prepared to do and what commitments our organization has to try to help Lake Winnipeg get healthier.

I represent the Canadian Association of Agri-Retailers. We have a network of approximately a thousand dealerships across the country. We are the rubber on the road that works with farmers from an agronomic perspective. We have crop input dealerships across the country in just about all the provinces, and rather than tell you the science behind everything, I think it comes down to us actually getting on the road and using the sound science with the growers to implement and, for the lack of a better

branding term, a 4R nutrient stewardship program with growers because we can do better.

*Mr. Chairperson in the Chair*

A lot of people have said that they don't really have a solution. I'm prepared to suggest we need to do better and we've got a potential solution, not just in Manitoba, because, as I read some of the data here, it suggests that a lot of our issue is due to upstream from the United States, Alberta, Saskatchewan and Ontario. A lot of the nutrient loading each year is occurring from upstream. If we're the last mile of this, we've got a lot more work to do than just Manitoba.

I happen to be fortunate that I'm in the position to work with other provinces, to work with my members in other provinces, to work with sister associations in the United States to make sure that we actually have a comprehensive approach here. So I'm willing to tell you that we're part of the problem, and I'm also willing to tell you we're part of the solution, seriously.

What I would like to commit to do is to, through an extensive training program, implement through online—working online as well, is take the agronomy, the CCA, the boards and all the CCA agronomists within our organizations, collectively work with them to make sure that they are educated so that we can bring the appropriate message to farmers because, let's face it, some of you are in the industry. If you're a farmer you don't want to be overapplying nutrients to begin with. They cost you money. The last thing you want to be doing is forking out more money just to make sure that that water ends up in a— or that nutrient ends up in a watershed and washed away.

So I think it's important that we actually put our money where our mouth is and implement these programs through appropriate training, CCA boards working with our stakeholder friends at the Canadian Fertilizer Institute, our friends at the Keystone Agricultural Producers. We have the network in place to attempt to get this off the ground.

So, rather than just empty rhetoric, I'm prepared to commit to that. I would really appreciate the government's assistance. I'd appreciate some returned phone calls because I don't seem to be getting those either. But if I'm prepared to implement this solution on behalf of, not just Manitoba, but the entire network of watersheds around Manitoba, I'd like your co-operation.

\* (23:00)

So we're prepared to pony up with the necessary resources, financially, to make sure that our network gets out there to appropriately train our agronomists to make sure that they're in front of all the farmers with the appropriate message, and it's one that they're going to like because it's going to mean they're saving money, and it's going to mean optimum yields for their crops, and it will mean, obviously, environmental sustainability for Lake Winnipeg.

So I'm prepared to put my money where my mouth is here. Again, I'd like the government's co-operation and I'm serious about the phone call. Why don't I get my phone calls returned?

Having said that, I'm quite prepared to answer any questions.

**Mr. Chairperson:** Thank you, Mr. Mackay, for your presentation.

Questions for the presenter?

**Mr. Maguire:** Thank you very much, Mr. Mackay, for your presentation and for the information that you've put forward.

As for your last question, I'll turn that over to the minister, and I very much appreciate your offer to the government to look at co-operating and trying to inform many of your partners in the industry about the responsible actions that you were talking about in regards to the management of products in rural Canada, really, and particularly as it applies to this bill in Manitoba. So thank you very much for your time and presentation and for waiting to make it tonight.

**Mr. Blaikie:** Thank you, Mr. Mackay—Mackay or Mackay?

**Mr. Mackay:** Mackay.

**Mr. Blaikie:** Anyway, just—I don't know who's not returning your calls, but give me a shout and—we've met before.

**Mr. Mackay:** Soil science is the key here, folks. Every farmer has got a different scenario in front of them, different soil, different, you know, local climate issues. We've got to work with each of them to make sure they have their own formula for success here. That's the difficulty. Otherwise, if this were a blanket approach and easy to do, we'd have done this already. We've got to get out in front of every single farmer with their own customized solution for them in terms of the phosphorus levels. I'm not just talking

phosphorus; I'm talking all nutrients here, all nutrients including nitrogen and ammonia, of course, where nitrogen is primarily a—that's the major component of ammonia is nitrogen, so we will stake our claim to make sure that all the nutrients are looked at in this model, based on sound science, however.

**Mr. Chairperson:** Thank you very much, Mr. Mackay. Thank you for your patience, too, in awaiting your opportunity.

Next presenter I have on the list to be called is Mark Peters, private citizen. Mark Peters? Calling Mark Peters. Seeing that Mark Peters is not with us this evening, his name will be dropped to the bottom of the list.

Next name I have is Julianna Klippenstein, private citizen. Julianna Klippenstein? Seeing that Julianna Klippenstein is not with us this evening, her name will be dropped to the bottom of the list.

Next name I have is Jean Prejet, private citizen. Jean Prejet? Jean Prejet's name will be dropped to the bottom of the list.

Next name I have on the list is Greg McIvor, private citizen. Greg McIvor.

Are you Mr. McIvor?

**Mr. Greg McIvor (Private Citizen):** Yes.

**Mr. Chairperson:** Welcome. Thank you for your patience.

**Mr. McIvor:** Actually, I had all my homework here. I was going to present tomorrow night.

**Mr. Chairperson:** That's an option.

**Mr. McIvor:** Well, it's just the Clerk's office said that they had so many people that it would probably be tomorrow night, so.

**Mr. Maguire:** Well, given that we're not anywhere near midnight yet, Mr. McIvor, I'd certainly welcome your presentation. If you care to go ahead and do it, we've got lots of time tonight to do it.

**Mr. Chairperson:** Okay, Mr. McIvor, please proceed when you're ready, sir.

**Mr. McIvor:** I don't know if all of you guys, any of you, recognize me from the hog barn moratorium a couple years ago, but I think some of that is worth repeating, that, you know, some of this legislation or this act that you're introducing is another shot at the hog farmers, the agricultural producers.



You know, this act that you're putting forward couldn't come at a worse time. I think this government had an option to look at the 50-year licence on CRD first, Churchill River Diversion, 50-year licence on the Lake Winnipeg regulation, and also the 50-year licence renewals on the Grand Rapids Generating Station because, you know, what you're putting forward right now, like many of the presenters before me have indicated, that it's only halfway. It's not even going to get you past the 50-year line in terms of achieving what you're planning on or saying you're going to accomplish. You know, pointing fingers at the City of Winnipeg on nitrogen removal. I mean, it's not—I don't think it's going to make any difference, because, you know, as the fellow said from the Green Party, that, you know, the David Suzuki video shows that unless you regulate the water in a manner that is going to respect all of the other issues that you've put forward in this act, you're not going to accomplish half of what you guys have put forward.

You know, when you look at the system that we're currently dealing with now, the flooding in the south, like, we've lost, you know, half of our agricultural lands to flooding. You know, we've got First Nations communities that are completely washed out, you know, and you have your deputy ministers sitting there giving them ultimatums, you know, if you want us to do this, you've got to give us easements on your land, you've got to allow us to cut channels on the east end of Lake St. Martin. I mean, you've got all these issues that the—you're putting forward and it's all related to water management.

You have to look at a water management regime that will bring the system in Manitoba down to closer to a more natural level. Because right now, you have three major regulated lakes: South Indian Lake, as part of the Churchill River diversion, you have Lake Winnipeg regulation and you have the Cedar Lake reservoir. Your utility's also counting the electricity capacities available to them in Lake of the Woods because it's a regulated lake. They count the electricity capacity in Lake Manitoba because it's a regulated lake.

You know, with the waters being so high on Lake Winnipeg right now, you know, we had to advise your Aboriginal Affairs Minister in May that, you know, Jenpeg's gates should be open. They should be wide open. There was two gates closed. You know, your utility was taking advantage of these poor folks in the south that were facing all this

flooding when that may have minimized some of the impacts on some of the communities.

You know, and this process of environmental assessments for all these projects that I mentioned earlier, you know, should have been done 10 years after each of those projects, but, you know, Lake Winnipeg regulation has been on interim licence for 38 years. You know, maybe in this act you should put a definition on what interim means. Same thing with the CRD, 36 years.

You know, it's not good enough for Hydro to regulate all this water and then point their finger up in the sky and say it's an act of God. You know, when you're managing this system and you're not managing it well, you know, when you got your Portage Diversion pumping twice as much as it should, Fairford control structure not being able to manage what it has, all the overland flooding that's occurring in the Interlake, you know, the overland flooding in the Interlake area, the northeast side of Lake Winnipeg and in the north.

You know, we have information that shows that that overland flooding, when it starts to drain, the impact and the contributions to greenhouse gases is 60 times higher than operating a Lake Winnipeg regulation project or a Cedar Lake. And just in the Interlake alone, there's 33,000 kilometres that are either directly or indirectly affected. Just on the northeast side, one area that we measured, there's over 14,000 kilometres that's either directly or indirectly affected.

Now, I got nothing against, you know, the research consortium and what they do, but, you know, measuring the water on the lake when all the contributing factors are coming overland, off the land, through the bush, into the lake through the rivers, I mean, they should be extending that research inland as well, on either side of these reservoirs.

\* (23:10)

I mean, it's not—you know, you don't have to be a scientist to understand that when your bowl is full, there's no place to put water, and when your jug is full, there's no place to put water. Where does it go? Well, you're seeing it. You're seeing it in southern Manitoba.

I mean, we suffered this for 40 years already, flooding every year. You know, there's 16 First Nations in the south that are going through that right now. I mean the municipalities that are experiencing

this—I mean Brandon's—you know, their sandbags are up to 12 feet high.

You know, they call it a one-in-300-year flood, but this flood happened in 1955, same level, you know, and the benefit for a lot of the people in the south is that they've had 100 years to build up their lands and their homes and ring dikes around their communities. And what are we left with? We're left with—well, you know, if you guys give us more easements on the riverbanks, then maybe we'll, you know, look after your emergency needs. You know, if you let us cut channels or if you let us move further north to cut channels then, you know, maybe we'll give you this, you know, and I think Gaile is right when she says that, you know, what you guys are approaching right now in the south, you know, is a lot of risk regarding the Crown utility, because it's artificial flooding. And you've exacerbated that flooding in the south simply because the unwillingness of this government, you know, to look at manageable levels on the lake.

You know, the amount of water moving in Lake Winnipeg, you know, you could still operate your facilities even at 712 and a half on Lake Winnipeg. You know, Hydro's got a—on their website a range between 708 and 718. You know, the optimal level that they've identified is a six-foot range. Well, what's optimal about that? The high range is optimal for Hydro, the low range is optimal for probably tourism, cottage development, cottage owners, swimming. I mean, those are the differences in what you guys are putting forward in terms of, you know, the utility maximizing their resources, their revenues.

You know, now you want to add more projects to that in the north along with your Bipole III. You know, when you have a capacity in the south for 8,100 megawatts of wind energy, you know, that was given to you in 2007. You know, if you look at the capacity of wind energy and your capacity of run-of-the-river projects right now, even if you reduce that capacity by 500 and took Brandon and Selkirk out of the mix, you know, you'd still have 4,500 megawatts, an estimate around 4,500 megawatts. You could firm up, you know, another 2,500 megawatts of wind energy with that and still maintain your export sales, reduce costs to Manitobans, because that 2.9 cents a kilowatt that you dump in the States in the summertime can be converted back to savings for Manitoba, for us, as users of the electricity, the utility.

You know, you can convert Brandon coal-burning generating station, use that to clean up a lot of the mess off the farms. Because you've got gas and coal: convert it to a biomass. Clean up some of that stuff that you guys are talking about. You know, that would assist with, you know, what we're doing in terms of agricultural management or hog farm management. You know, I don't think that our environment should come down to, you know, us versus them or what's the best price on the market. You know, pretty soon, to become a hog farmer, you'd have to be like the Chipmans and be able to afford a hockey team, and not very many people can do that. You know, it's the same thing as farming: pretty soon, you're going to have to look at an elite group of people that are the only ones that can afford to do that.

You know, and you're losing half of our lands and you're looking at the issues of saturation, ground saturation, high water tables. I mean, all of these can be, you know, minimized by reducing the water on Lake Winnipeg, thus allowing us to reduce water on Lake Manitoba, plus, you know, the Winnipeg River systems. You know, we can accomplish all of those, you know, if we look at, you know, what is really contributing to the demise of Lake Winnipeg, and it's not just the farmers in the south or the hog barns or city of Winnipeg. You know, when you have a system that is an integrated power system that relies on maximum volumes of water in the lake so that they can, you know, be assured that they can maximize their revenue every year. And right now, the water levels, right now, are going to add an extra \$400 million to those coffers.

So instead of \$2 billion, they'll make \$2.4 billion this year, and they'll do it again next year because right now we're predicting that the water levels are not going to recede until at least the winter, only because it's going to freeze. But then it's going to melt again and you're going to end up in the same position.

But I think if we took proactive measures and looked at, you know, a more manageable system, which we can do because you got five large reservoirs and you got, you know, certain amounts of precipitation that are going to come every year, just like they have in the past. The cycle is not going to be 10 and 20 years. It's going to be, you know, five and seven years, and you've seen good examples of that in the last five or seven years.

You know, so I just wanted to, you know, bring those issues to this table because, you know, we can do this. We can manage the lake. We can save it and we can reduce the amount of eutrophication, the amount of algae blooms, you know, that are on there because all we're doing is moving everything into the Hudson Bay, you know. And I think that glacial paste that somebody referred to earlier is going to speed up because I think everybody knows that, you know, the ice is melting a lot faster and the oceans are going to rise and the climate is going to change and you know, we're contributing more greenhouse gas in Manitoba than people care to take notice of or care to measure. And it's not just confined to, you know, the regulation of the three major reservoirs.

There's a lot more area that hasn't been measured, that for some reason won't be measured, but we can show you where it can be measured and there's people that can do it. And I think if we take a more proactive position on all of this stuff, we can save our agricultural industry, our hog farm operation. You know, I think we got to quit taking half measures and look at the whole picture, and let's do a licensing first before you introduce any acts like this. Because if you do the licensing first, I think you'll find you'll get better results in terms of proposing legislation that you got right now on the table, and I think that's something that has been mentioned by previous presenters as well.

**Mr. Chairperson:** Thank you very much, Mr. McIvor. Questions for the presenter.

**Mr. Maguire:** I just wanted to say thank you for your presentation, Mr. McIvor. Very informative and very—you're very knowledgeable on it. I noticed you never had a note and you continued to put your views forward very forthrightly, so thank you.

**Mr. Blaikie:** Yes, Mr. Chairman, I just wanted to add my thanks to Mr. McIvor for his presentation and also for being willing to do it somewhat extemporaneously because he was planning to do it tomorrow, so thank you for that.

**Mr. McIvor:** I had some really good pictures that would, you know, basically support a lot of what I'm saying, along with references to, you know, academic studies and various other documents that, you know, I think you would find interesting and that would support, you know, some of the work that you're putting forward, along with the recommendations that have been made by various presenters.

**Mr. Chairperson:** Thank you very much for your patience and for coming out to make a presentation this evening.

Next presenter I have listed is Grand Chief Shannacappo, Southern Chiefs Organization. Grand Chief Morris Shannacappo, Southern Chiefs.

Seeing that the grand chief is not here, his name will be dropped to the bottom of the list.

Next presenter I have is Jack Hofer, private citizen. Jack Hofer. Jack Hofer, private citizen. Jack Hofer. Name will be dropped to the bottom of the list.

Next name I have is April Klippenstein, private citizen. April Klippenstein. April Klippenstein. Name will be dropped to the bottom of the list.

\* (23:20)

Next name I have is Ross Eadie, private citizen.

Good evening, Mr. Eadie. Welcome. Thank you for your patience.

**Mr. Ross Eadie (Private Citizen):** One thing I did learn when I ran in politics, I knew that I would have to be patient and put in long hours, so I'm not going to really thank you for being here all night, but I will say that it is a very important discussion that we are having, and I did register as a private citizen because I'm unable to speak on behalf of City Council because I personally—well, I haven't voted on anything in regards to the decisions on the sewage plant, other than there was a capital budget which I was trying to avoid paying for a certain level of—or a certain successful kind of technology, important technology for the future, because one of the things I have learned is—well, I am at a political committee and, yes, this act is—or this bill is a political bill but, you know what, every bill that comes through the Legislature is political.

I was once asked about disability and disability issues, and they said, well, that shouldn't be political, but the trouble is when it's entered into a political system, it's political. So whether there's an election on now or not, the point is—well, in my civic election, on my pamphlet, I mentioned something that's very important that we should all remember, and I know that all parties want to make sure that we save Lake Winnipeg, but there's a concept that we should all remember, as well, because over the last number of years, we've seen where we've been ignored, and this is it.

If we are unwilling to protect and take care of the water that goes to other people down the way, why should the people who are upstream from us give a—about what we think we need for our water. I still remember the Shoal lake debates and building a gold mine and putting arsenic into the water that would come into Winnipeg. I still remember those days. And if we don't make decisions about making sure that water that other people have to use and, actually, I use every day—I mean, I would hate to go to Gimli Fish and find that the fish was unedible. I know there's lots of fish in the lake now. I think that's very important.

So as a person who lives in the city and as a city councillor on City Council, I—it's kind of interesting, and, you know the n's are all driving me crazy—nutrients, nitrates, nitrogen—but, really, as I see it with this bill, Bill, is that—is, yes, we need to build a sewage plant that can take care of the sewage that we are producing now, and we can do it with the newest technology, like Calgary does, and we can determine what to do later on with nitrogen and how we deal with that in the lake.

And I'll remind people about anything, and the doctor will always tell you this—well, actually, there's a study, right? One beer a day is healthy; 20 beers a day is not healthy. So just think about that. Nitrogen, nutrients, nitrates are all good except if you overdo it, it's not good, and we will have to take care of that.

And I would also point out that scientists never 100 per cent agree on anything, and that's because of the nature of science, and I would point out that there are a whole bunch of scientists who still believe that climate change is not happening, and I did hear about the melting of glaciers. I don't know, the Arctic is melting fast, so this is happening, right? There are scientists, though, that would disagree, that our human imprint is not influencing it, but it is.

And so I think that we need to make—I know we're making some decisions here to move things along quickly because—well, the whole process and everything is short term and I hate to say it, even on City Council, we make a lot of short-term decisions when we really should be looking at the long term to make sure that we don't have to deal with problems in the future that we can't foresee.

And I think that scientists who are saying it's this way or that can't really say for sure, 100 per cent, what is going to happen to the lake, but I do know that the lake is facing huge problems now, and I

think that the City of Winnipeg does need to spend the money on the proper technology to take care of the nitrogen into the future, but let's take care of, for sure, what we know needs to be taken care of, as mentioned.

And, yes, Winnipeg might not be a big portion of what's going into the lake because everything's draining in there and it's coming off, but we are part of it. We are part of it when we put cosmetic—what do they call it—cosmetic lawn care and stuff. At my house we mulch the grass. We have the best looking grass on the block, and, you know what? We don't use fertilizers or anything. We just mulch. We take care of it. It works really fine. We need to, as a City, also look at that, and that has not really too much to do with this bill, but the committee I'm on, we're looking at trying to make changes that way.

So, I heard about these advertisements with the CJOB. You know, I can't speak on behalf of EPC, but what I do know at City Council, if I want a question answered, and we asked this question, if we want questions answered about what is the City's position on nitrogen, nitrates and so on, we asked the mayor. Because the mayor has a powerful position at the City—at City Hall. And so, when you hear those advertisements on the radio, that's the mayor of this city telling you what his position is. It's not my position as a city councillor on City Council. On City Council, I represent the Mynarski people, and the Mynarski people agreed with me, we need to take care of other people's water so that our water will be taken care of. Because, you know, frankly, I don't want to be drinking poisonous water in the future. I hate the idea that the Americans will send water our way when we're already getting enough water. We are barely able to stop that, and it's going on, actually. Those are problems but, you know, how can they respect what we are asking for if we don't respect what others are asking for? So, please remember that.

Now, one other thing I would really make a point of, which our EPC is not talking about, and our mayor is not talking about, and that is the fact that we are looking at providing sewage services to the capital region. We are looking at bringing in, for example, West St. Paul, and negotiating a sewage deal and water deal with them to help them with their problem, because they're growing. Other cities, or other municipalities, are growing all around Winnipeg, and is the position of our current mayor and our current EPC to sell services to other municipalities.

So what we are doing is—we are also, if we don't build the proper sewage plant now, and incorporate those costs, and then bring it through when we're selling services to the other municipalities, we're going to be in big trouble. And I'm sorry to say, as a city councillor on the city council of Winnipeg, I am quite concerned in the position that we're taking. And, yes, we need more money for infrastructure at the City. Our inner city streets are crumbling. There's not enough money for renewal highways. There's a lot of money for new infrastructure, but there's not a lot of money for renewal. So we need to make sure that everything's sustainable. And you know, frankly, to make a city sustainable, and a sewage system sustainable, we need to build the more expensive model. I don't like it but, you know what, we have to do it because, again, I want to protect the water.

So I'd like to thank you all for listening to what I have to say and, you know, let's be able to enjoy the water and experience it the way we did when I was a kid. I was dismayed to hear that at Lester Beach, where I spent some wonderful childhood years, that you can't even go in the water and swim because of all that algae, half the time now. I'm—it just, you know, it really scares me. So, my kids won't be able to enjoy that, and everybody talks about that, but that is the future.

Short-term political decisions shouldn't be on—long-term political decisions are needed. So, if we build the City of Winnipeg plant, at least if we have to take nitrogen out, maybe in two years when we get most of the scientists to agree that too much is too much, and we should take some of it out at least. Maybe there is a good point to be made that you still need some for growth in the lake but, you know what, you don't need too much.

**Mr. Chairperson:** Thank you, Councillor Eadie, for your presentation this evening.

**Mr. Struthers:** Thanks, Councillor, for presenting here for us this evening. You are, in fact, the second city councillor to present at our committee this evening. Scott Fielding was here on behalf of the City of Winnipeg. We had some questions for Councillor Fielding that I think were fair enough, but I think he kind of left some confusion on the table as he left.

We've tried very hard to give Councillor Fielding the opportunity to be very clear that EPC had, in fact, approved the ads that I heard this morning. Very clearly, some misleading ads, very

clearly, talking about this bill. And I don't know to this point if EPC has approved them. I think, if I remember correctly, Councillor Fielding had talked about a discussion at the council level. I don't know if that was about the ads or about the nitrogen removal question or just what it was. Can you help us clarify that?

\* (23:30)

**Floor Comment:** I think I can answer one question for you. City Council—

**Mr. Chairperson:** Councillor Eadie.

**Mr. Eadie:** I'm sorry, Mr. Chairperson. I would just point out that City Council did not vote in the recent future nor since I've been elected did they ever vote on running advertisements that would mislead the population about any bill or act. I would also draw your attention to the fact that, yes, there were some votes on City Council in the past to move ahead with a certain agenda when it came to nitrogen and those kind of removals on there. EPC has changed since those days that that vote has happened.

I cannot speak on behalf of EPC because they don't allow me to participate in their inner circle discussions, but, again, I would—if you want to hold somebody accountable with the—to look to who to hold accountable for those misleading advertisements, the mayor of Winnipeg has a lot of power with what happens on City Council and as the six people who sit in opposition to the EPC—as a number there says, although we do support some of their decisions—the six of us would say that—can probably say that the mayor does not represent their perspective on this particular issue as well.

**Mr. Maguire:** Yes, thank you, Mr. Eadie, for taking the time to come down this evening and make a presentation to us and provide your views to our committee, and I just wanted to say thank you for being here and attending this evening.

**Mr. Blaikie:** Yes, thank you, Mr. Eadie. I think the point you made right near the end of your presentation is a key one and that is the fact that the City of Winnipeg is considering expanding its catchment area, if you like, when it comes to sewage treatment and looking to contract with some of the other municipalities, which means that precisely the point that I was making in response to an earlier presentation that we're not only looking at a growing city, we're looking at a city that's trying to grow its customer base, so to speak, with respect to sewage

treatment. All the more reason that we should have a state-of-the-art sewage treatment plant.

So thank you for injecting that fact of—about the City's plans into the discussion we had—that really hadn't been on the table before.

**Mr. Eadie:** Yes, you were—I—yes, that is a very important message to remember, and I actually question the ability of the old technology that is being used. One of the members of your committee, Mr. Chairperson, referred to the chemical technology or the old technological way that we're dealing with things, and I would point out, though, that that old way of dealing with our sewage may not be sustainable on a bigger picture, for a bigger area, for a much—a city that is predicted to be over 700,000 without Capital Region, predicted to be over 700,000 in a short period of time.

And with that kind of growth, we need to make sure that things are sustainable, and, you know, sometimes old scientific methods need to be put aside for new ones, and so I think that state-of-art technology is the way to go and we're going to do it. And I thank you for pointing out this very important part because that's the part that really worries me is that we need to make sure that when we are building cities and things are growing, that we make sure it's sustainable. Thanks.

**Mr. Chairperson:** Thank you, Councillor Eadie. Any further questions or comments?

Thank you very much, Councillor Eadie. Thank you for your patience and for your presentation here tonight.

That—I'm going to canvass the remaining audience here this evening to see if there's any additional presenters because that concludes the list of names I have to call for first rounds. And are there any members of the public in the audience here tonight that have not made a presentation who wish to do so?

I know we had an individual earlier this evening, for the information of committee members, that had expressed an interest in presenting tomorrow evening, and for the information of committee members, we still have 71 people on the list registered to speak that have—that would require calling for a second time.

There is an understanding that this committee may meet again tomorrow evening, so I'm asking what is the will of the committee?

**Mr. Maguire:** Well, Mr. Chairperson, Mr. Howorth, from Ostara, you had indicated earlier that he may speak, but he wasn't here either. I guess he's just like the rest of the—even though he—we do have his presentation here. I don't know whether it was clear that he was wanting to speak as well, even though we have his presentation as one of the speakers who gave his presentation early.

**Mr. Chairperson:** It's my understanding that his presentation was agreed to by this committee to be accepted as a written presentation, but we have a lady who was here a short time ago who had expressed an interest, and that individual had expressed an interest in presenting tomorrow evening.

So I'm asking what the will of the committee is with respect to the names, and considering that this committee has, by House leader agreement, I believe, expressed an interest in sitting tomorrow evening as well.

**Mr. Struthers:** I think that—I think the usual practice that we've adopted at this committee is to not to call names tonight and force people off the list. I think it makes good sense to reconvene here again tomorrow evening and give all these people a chance to come and speak with us about these—about this bill that we've got forward.

So I would propose that we invite them back tomorrow evening to present to us. *[interjection]* Right, to see if they show up, and if they don't show up tomorrow night, instead of dropping their names to the bottom of the list, then they'd be eliminated from the list at that point. But I think we need to be open and accessible and hear those folks.

**Mr. Maguire:** Yes, thanks, Mr. Chairperson. I'm just looking for a bit of information in regards to a speaker that we had earlier this evening. If you bear with me for a moment, I'll find his name. Mr. Beddome just went out of the room from the Green Party, saying—I heard him say that he thought he knew where that person was and whether she wanted to speak or not. I don't know if we'd give him a minute to come back or not—*[interjection]* But if she wants to come back tomorrow, I have no problem with that.

And how do you wish to deal—I mean, normal practice is—my colleague is correct, we would normally go forward and have speakers who didn't have a chance to speak tonight to do that. But in regards to usual practice, if they're not here, their

name is put to the bottom of the list and they're read again. Do we go through that this evening, then? And these folks that are not here tonight—because the second reading means that they're knocked right off the list, doesn't it?

**Mr. Chairperson:** My understanding of the process is that the names that were called once and dropped to the bottom of list would remain such and would be called again tomorrow evening to give them the opportunity to present. And I do know that the lady who had been here earlier—and we had called her name, number 58 on your list, I believe—had expressed an interest in presenting tomorrow evening and had expressed that to the committee versus presenting this evening.

So even though her name was called and she would be dropped to the bottom of the list, she has expressed an interest in presenting tomorrow. And there are 71 other people that are still on the list to be called for a second time.

**Mr. Maguire:** Just for clarity, then, I have no problem with that. I'm assuming that this list will be the list that we'll be dealing with because people were supposed to sign up for the committee by six o'clock tonight or—so I'm just saying, are we taking more presenters or would they be done at six tonight?

**Mr. Chairperson:** My understanding of the process is the list would remain open. The names that have been called once would still be remaining on the list to be called a second time before being struck from the list. But any other additional Manitobans or interested parties wishing to make a presentation may add their names to the list prior to the commencement or during the committee meetings tomorrow evening.

**Mr. Maguire:** Just for clarity, then. I know that the minister wants to move this bill and I guess, you know, if we've got 70 that show up for tomorrow night to actually present, we could be here until small hours of the morning, which I have no problem with. But I just wonder if there's a point—give the minister an opportunity to speak to that as well.

**Mr. Blaikie:** Yes, Mr. Chair, you know, I feel bound by the custom of this Legislature, and my understanding is that if people haven't—we don't know why the people who—the 71 who didn't come tonight, why they didn't come. If somebody knows, they can tell us. But they put their name on the list, they didn't come and, you know, so we can read their

names. [*interjection*] If you guys want to—you know, we don't have loges here, yes.

\* (23:40)

If, you know, so—I say, I don't know why the 71 witnesses who—I mean, I'm—I got a hunch that they're probably not going to be here tomorrow night either. They might have made a decision not to present, but I don't want to presume on that.

So I would just say we can come back here tomorrow night at 6 o'clock. Their names can be read out and the one person who wanted to present tomorrow night, although I see she's here now to present—and then we can go into—now, there might be some other people that add their names to the list, I don't know, but my hunch is that we'd be able to finish very expeditiously tomorrow evening, that we won't be sitting here at 20 to 12 tomorrow night unless the person—unless whoever is in charge of the 71 people have told them not to come tonight, tells them to come tomorrow night.

**Mr. Ron Schuler (Springfield):** The custom always is that the Clerk's office calls all the individuals on the list and says prepared to come to committee. We then go through the list once. Those who are in the room are called and they present. Those who aren't in the room are dropped to the bottom of the list. Then when everybody's presented, everybody is called a second time. If they're not present, then they're off the list. And when everybody is heard, we then move on and pass the legislation. It then goes on for further reading.

And what the House leaders actually agree to is that, if necessary, we could sit another day. I think what they said was, only if necessary I think was the agreement. But we've sat. I think we've given ample opportunity. Everybody on the list was called and we should call them again. That's what we've done for 12 years, and, all of a sudden, there's a mass amnesia here on the way rules used to or have always been. So, anyway, just for clarification.

**Mr. Chairperson:** Just in fairness to the presenter, because I see the lady has joined us in the room here, and I'm just wondering if Eugennie Mercredi would be interested in making a presentation this evening.

Could you express your intent to the committee, please? Welcome back, by the way. Thank you for coming back.

**Ms. Eugennie Mercredi (Private Citizen):** Good evening. I was told that I can speak tomorrow. So I

would rather speak tomorrow, kindly, because I did not make copies of my statement, and I got in late travelling. So, you know, I've been just listening but I'll be ready to speak tomorrow, if that's okay with you.

**Mr. Chairperson:** I appreciate you expressing your interest, ma'am. Thank you very much. That helps with clarity for the committee.

So then I put the question back to the committee. Since this presenter has indicated and perhaps others that may be interested in making a presentation tomorrow evening, is it the will of this committee, then, to leave the list of names open for the 71 who have been called and for this individual who has just expressed an interest in presenting tomorrow to allow these presentations to occur?

**Mr. Maguire:** Yes, Mr. Chairperson, I agree with my colleague from Springfield here that normal practice is just what he outlined, and in relation to Ms. Mercredi who has spoken here very clearly that she would like to present, we were only going to sit later than midnight if there was enough people here to do that. We haven't even got there yet.

Normal practice would be we would continue to call the folks. They would be done and we wouldn't have to sit tomorrow night. But to get around that, she has indicated she has a written presentation that she would have available tomorrow night, and I wonder if we could accept her written proposal at some point tomorrow and have that as her presentation.

That would be very clear and we would have it the same as we have the other presenters that have provided us with those, and then we could go through the rest of the list tonight, and normal practice, the committee would be finished.

**Mr. Chairperson:** The Chair is very reluctant to continue to call presenters back and forth to the microphone to express their intent or interest. I think it was pretty clear to this Chair that the individual had indicated that she wanted to present tomorrow evening. That was her express intent, and that was clear to this Chairperson.

So, by giving the individual that opportunity, I think that would be fair to the individual, but calling them back again and again to the microphone to continue to express that interest I think is self defeating. I'm not prepared, as the Chairperson, to go any further down that road.

**Mr. Maguire:** Well, it seems you've made the decision that I was talking about. I wasn't asking her to come back to the mike, Mr. Chairperson, I was asking for you to make a decision on that and you appear to have done that.

It's just that, you know, there are resources, and I feel, for one presenter, if that's the case, I mean, as my colleague instructed, people are instructed by the Clerk's office to be here to present and be ready to present, and I am quite willing to take her written presentation tomorrow and go through the rest of this and pass the bill back into the House for third reading and we can move forward, like, right away.

**Mr. Chairperson:** It's the will of this committee that we'll decide the process that's followed here, so I leave it into the hands of the committee to decide, and if it requires a vote to—no, presentations, ma'am, is—are concluded here for the evening.

This committee has to make that decision. The Chair cannot make that decision.

**Mr. Struthers:** It's interesting that the only time we hear from our members opposite all night tonight was to move forward and cut off people from presenting. This is undemocratic. It fits into what—exactly what you said this morning, and all morning—all morning—you've been trying to cut off farmers and you've done it again. The only time that we've heard from the member for Springfield (Mr. Schuler) tonight, not a single question to a single presenter, and all he could come up with was a way in which we could cut somebody off. Manitoba Pork, for whatever reason, wasn't here tonight and they did not make a presentation, and now you want to read their names into the list so they have no say in this legislation that you claim is impacting their members.

Mr. Chairperson, it would be abysmal for this committee to read off those names tonight and close down and shut debate, to close this debate tonight. We need to follow the practices that have been established in this committee, which is very clear, and that is to read the names tomorrow night of people who wish to present so that we do not stifle the kind of debate and the kind of advice that we need at this committee.

So, Mr. Chair, I think you're correct. I think that the accepted practice on this committee is to move on to tomorrow night and call at that time the 71 people plus whoever else wants to register with the Clerk tomorrow night and let them have their say.



**Mr. Maguire:** Just to the same point, Mr. Chairperson, that my honourable colleague, the Minister of Agriculture (Mr. Struthers), is on some kind of a rant and nobody knows why he's doing this.

Nobody here is trying to stop the pork industry from making their presentation. Their presentation was presented to us by the Chairperson as written into the agreements. They were—we accepted their package tonight, if the minister would listen. We accepted their presentation into the written reports tonight. If he wants them to come and present it tomorrow night, I'd be glad to read it into the record right now if he does. But just for the record, for clarity, the Manitoba Pork Council's presentation was accepted by the committee, of which he was one, before the presentations started tonight to have been accepted as one of the written proposals that we received.

So I just wanted to clarify that. We'd be more than happy to come back and hear the—any presenters that are there tomorrow night if that's the will of the committee.

**Mr. Chairperson:** It sounds like there's some consent here now, at least in the Chair's mind.

It seems like both sides are agreeing that this committee will reconvene tomorrow evening to allow for the individuals expressed an interest in making a presentation tomorrow and any other Manitobans who may wish to also make a presentation, including the 71 names that are still remaining on the list. So it seems like there's agreement.

Is that the will of the committee? *[Agreed]*  
Agreed that this committee shall sit tomorrow night and that the list will remain open and the individual will have the opportunity tomorrow night to make that.

So, the hour being 11:50 p.m., committee rise.

**COMMITTEE ROSE AT: 11:50 p.m.**

**WRITTEN SUBMISSIONS PRESENTED  
BUT NOT READ**

Province of Manitoba  
Standing Committee of the House  
Bill C46 Hearing June 13, 2011

The Lake Winnipeg Foundation (LWF) is pleased with the Manitoba Government's proposed Bill C46, The Save Lake Winnipeg Act, to reduce substantially the amounts of phosphorous entering Lake Winnipeg

by conserving wetlands on crown lands, expanding the hog moratorium to all of Manitoba, prohibiting winter manure spreading, and requiring the preparation of drinking water and wastewater management plans in certain jurisdictions.

Since Red Zone 1, the Public Open Forum on Wastewater Treatment Strategies organized by the LWF in 2008, and the letter to the CEC signed by 63 international scientists calling for phosphorus but not nitrogen removal from Winnipeg's North End WWTP, the LWF has encouraged and funded projects focussed on reducing phosphorus loads from Manitoba sources. In 2010, the LWF, recognizing that world supplies of phosphorus for the manufacture of fertilizers were finite and that future shortages could be anticipated as mines were depleted, adopted a position that called for the recycling and re-use of the phosphorus in any P--containing materials and discouraged the discharge and loss of phosphorus as a waste product.

The City of Winnipeg is clearly committed to phosphorus reduction for the restoration and protection of Lake Winnipeg. Even though Winnipeg's phosphorous loading is small in comparison to watershed sources (Yates et al 2011), the City appears prepared to implement BNR for phosphorus treatment and recovery. To the LWF, the requirement in Bill C46 for the City of Winnipeg to remove nitrogen from its North End WWTP is a waste of millions of tax dollars. Technical adjustments to the North End treatment process that were originally recommended by qualified Environment Canada experts, among others, have enabled the City to meet effluent ammonia standards.

The Lake Winnipeg Foundation encourages the Government of Manitoba, in light of the economic burden that flooding and severe weather have imposed on its citizens, to choose the most fiscally prudent option for the North End WWTP and the safest, scientifically-based ecosystem strategy for Lake Winnipeg. The Lake Winnipeg Foundation recommends that Manitoba withdraw the Bill C46 requirement for the City of Winnipeg to remove nitrogen from its North End wastewater treatment facility.

In summary, the LWF supports in principle the Government of Manitoba's proposed Bill 46 as a significant step toward reducing provincial phosphorous source loads, the underlying cause of toxic, nitrogen- fixing blue-green algae proliferation in Lake Winnipeg. The LWF will continue to collate

and promote objective scientific information in order to inform decision makers of the best solutions for Lake Winnipeg and its watershed. The LWF also recognizes that other significant factors such as flooding, drainage, climate warming, exotic species, and shoreline development, are influencing Lake Winnipeg ecosystem sustainability, and we will continue to encourage the government to address these other important issues.

Thank You

Donald Cobb  
Chair, Science Committee  
Lake Winnipeg Foundation

\* \* \*

Bill 46 Committee

Ostara Nutrient Recovery Technology's Written Statement

Ostara Nutrient Recovery Technologies would like to express its support for the intent of Bill 46: The Save Lake Winnipeg Act. We believe the Bill is in the best interests of Manitoba's community, economy and environment, and serves as a sound and comprehensive model for sustainable stewardship of precious and finite resources.

In particular, Part 5 of the Bill, The Water Protection Act, which concerns the removal and recovery of nutrients, including phosphorus, will play a uniquely critical role in ensuring the overall success of the Bill for generations to come.

It is in this area where we would like to direct our comments today.

### **Phosphorus – An Essential Nutrient**

Phosphorus is an essential element in all life. It is one of the three primary nutrients (together with nitrogen and potassium) present in fertilizer and a key input into global food production.

For hundreds of millions of years, natural geological processes and plant and animal life cycles have kept the earth's phosphorus cycle in balance. However, over the past century, as world population swelled from under 2 billion to nearly 7 billion, consumption of this non-renewable resource has exploded to keep pace with global food needs. As we head towards the 9 billion mark later this century, how we manage this essential nutrient will have a direct impact on global water resources and our ability to feed the planet.

Phosphorus fertilizers are produced from mined phosphate rock deposits. Viable deposits are limited to a very small number of locations, with almost 90% of reserves located in four countries. The US recently started importing phosphate from Morocco, as its own domestic production rates have fallen. Further, the environmental impacts of phosphate fertilizer production are significant and include habitat destruction and greenhouse gas impacts from fertilizer manufacturing and large transportation distances.

### **Phosphorus and Manitoba**

Phosphorus is vital to Manitoba's economy and indeed to the thousands of farming communities in the wider Lake Winnipeg Basin. These farms are estimated to spend approximately \$1.5 billion annually on fertilizer and lime inputs, producing gross annual revenues of over \$18 billion. Nitrogen is produced from nitrogen gas in Brandon and a large deposit of potash is believed to exist in the Russell-Binscarth area. No viable source of phosphate is known in Manitoba however, and only negligible deposits are believed to exist anywhere in Canada.

The province of Manitoba has a track record of progressive leadership in both sustainability and phosphorus management, having been the first province to regulate the use of phosphorus in fertilizers and to pass a Sustainable Development Act. This leadership is informed by respected scientific and policy development organizations in the province, such as the University of Manitoba and the International Institute for Sustainable Development, both of which have recently researched and identified viable opportunities for improved phosphorus management. The removal and recovery of phosphorus proposed in Bill 46 is one such opportunity, which will enable the province to continue its progressive economic and environmental stewardship, while also complying with federal and provincial regulatory priorities.

### **The Benefits of Biological Nutrient Recovery**

The removal of phosphorus from wastewater using enhanced biological phosphorus removal is widely regarded to be more economical and environmentally sustainable compared to chemical phosphorus removal for wastewater treatment plants that serve larger communities.

The large size of the North End Water Pollution Control Centre makes a compelling case for biological phosphorus removal when whole life costs

are considered. Conversely the ongoing costs and impacts of chemical phosphorus removal will quickly negate any initial cost savings, compounded by future cost increases and potential chemical shortages. For these reasons, biological phosphorus removal has been employed by large communities across Western Canada – including Saskatoon, Calgary, Red Deer, Lethbridge and Edmonton – where it has proven to be reliable over many years.

Biological phosphorus removal works by taking phosphorus out of wastewater and concentrating it into sludge, which is the solid material extracted from sewage. Once in the sludge the phosphorus can be recovered in the form of struvite, the most economical and sustainable technique for managing nutrients. Removing phosphorus from the sludge not only results in significant savings to treatment plants, it can also transform the phosphorus into a highly pure form of struvite that is reusable as an environmentally friendly fertilizer product. The technology that makes this possible is only suitable for treatment plants that employ biological phosphorus removal – it is not suitable for plants that practice chemical phosphorus removal as the chemicals lock up the phosphorus and prevent it from being recovered as a useful resource.

#### **About Ostara**

Ostara Nutrient Recovery Technologies is the market leader in North America for phosphorus recovery. The Vancouver-based company was founded in 2005 to commercialize technology developed by the University of British Columbia. Ostara provides a holistic nutrient management approach that combines leading treatment technology with management of the recovered nutrients, turning treatment challenges into an environmentally beneficial fertilizer product. The company currently has facilities operating at full scale in four North American cities and has projects in development for four additional plants, including in Saskatoon where construction is expected to commence this summer.

We believe that improving phosphorus management by reducing losses to the environment as waste is in the best interests of Manitoba's economy, community and natural environment.

To this end, we applaud the vision and leadership of the Manitoba government by reiterating our support for the removal and recovery of nutrients as drafted in Part 5 of Bill 46 – and we pledge our resources and expertise to helping make the Bill an enduring success.

Thank You,

F. Phillip Abrary  
President and CEO  
Ostara Nutrient Recovery Technologies

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This written presentation is being submitted in support of Bill 46 – The Save Lake Winnipeg Act. I am particularly pleased that the Bill proposes to continue with the moratorium on building hog barns not only within the watershed area but within the entire province.

Although the hog industry is not the only contributor to the problems of Lake Winnipeg, the hog industry must be a willing participant in contributing to the solution. We all have rights and freedoms and that includes the enjoyment of Lake Winnipeg.

Lake Winnipeg is a crown jewel of the area. When I first moved to the Interlake in 1984 I freely enjoyed the use of the Lake and never heard of warnings of high densities of E. Coli and green Algae problems. As the years went on water warnings have become progressively more common and it seems that this has grown with the hog industry.

We only need to look at our neighbors to the south to see how the hog industry has devastated their waters. North Carolina with 10 million pigs produces 13 million pounds of manure and urine each day. With the waste being flushed into lagoons and later sprayed on fields as fertilizer it has polluted the waterways during floods. This state has had so much manure in its fields that it can't absorb it all thus poisoning the groundwater and contaminating drinking wells. In addition, they have had lagoons that have leaked and overflowed spilling millions of gallons of manure in fields, streams, and rivers. This has resulted in closing areas for swimming and killing fish.

According to the Natural Resources Defense Council:

- An eight-acre hog waste lagoon burst spilling 25 million gallons of manure into the New River resulting in the kill of about 10 million fish and closing 350,000 acres of coastal wetlands to shell fishing.
- Run-off included from hog waste from factory farms in Maryland and North Carolina is believed to have contributed to outbreaks of

*Pfiesteria piscicida*, killing millions of fish and causing skin irritation, short-term memory loss and other cognitive problems in local people.

- Nutrients in animal waste cause algal blooms, which use up oxygen in the water, contributing to a dead zone in the Gulf of Mexico where there is not enough oxygen to support aquatic life. The dead zone fluctuates in size each year, extending a record 8,500 square miles during the summer of 2002 and stretching over 7,700 square miles during the summer of 2010.
- Amonia, a toxic form of nitrogen released in gas form during waste disposal, can be carried more than 300 miles through the air before being dumped back onto the ground or into the water, where it causes algal blooms and fish kills.

Larry Cahoon, a Scientist at the University of North Carolina says that “30 percent of wells tested near hog farms are already contaminated.” The EPA and US Geological Survey identified antibiotic contamination of waters near two North Carolina hog farms as well as in the samples of nearby streams and the Neuse River; a finding that suggests groundwater is laced with drugs and that this bacteria in streams had acquired resistance to common antibiotics.<sup>1</sup>

Hog manure contains drugs, antibiotics, growth hormones, pathogens and excess phosphorus in relation to its nitrogen content. If manure is spread in the fall it will be more likely to be picked up by the spring runoff; phosphorus that can cause toxic algae blooms if it gets washed off into surface waters.

Even in years of severe drought we can have problems as animal waste being sprayed or spread will build up on the ground surface waiting for heavy rainfall and without healthy crops to absorb them they are capable of running freely into rivers and streams.

A study conducted by Chee-Sanford, Aminov, Krapc, Garrigues-Jeanjean and Mackie from the University of Illinois shows that antibiotic resistant bacteria from hog barn waste lagoons are being introduced into the groundwater and from there into drinking water sources. These findings make it clear that pathogens of concern for human health are surviving in liquid manure, that they are showing a disturbing pattern of antibiotic resistance, and that these pathogens were also found in surface and groundwater near intensive confinement farming operations.

Finding antibiotics in our waters should raise a red flag. The real problem is that these drugs can breed super bugs which will be resistant to antibiotics commonly used to treat human illness. The United States Geological Survey’s Iowa City office reported that a check of 30 Iowa streams turned up antibiotics and other unnamed substances.<sup>2</sup> Iowa is the biggest hog producing state in the US.

Pigs produce 3-4 times the excretia of humans. In Manitoba there are more pigs than people. Manitoba has over 7 million pigs and they are the single biggest producer of excretia in Manitoba which makes our province one big toilet.

The province of Manitoba should make it law that confinement systems in the hog industry be eliminated and replaced with the use of a deep straw system which would not only be a humane method of raising hogs but would also reduce the environmental risks of liquid waste and the use of pit lagoons. These systems rely on a solid manure system where the collection of waste and straw is piled up and composted, thus, reducing it to half its former size and can be used as rich organic manure for farm fields. On a farm in Northern Iowa using such a system, an environmental audit was completed by the University of Iowa which found the operation was producing between only 20 and 30 pounds of excess nitrogen per acre annually, a sign that it’s extremely efficient at keeping wayward nutrients from becoming pollutants. In comparison, nitrogen loss on liquid manure-based factory operations is measured in the hundreds of pounds per acre.<sup>3</sup>

We all have been asked to do our part in saving Lake Winnipeg and this includes Manitoba’s hog industry. We no longer need the pollution of the Lake to restrict our freedom and divide communities. We need to work together to save the Lake.

There is a myth to the belief that industrial factory farming brings us the cheapest food in the world. We pay for it through other ways – the contribution to the damage of Lake Winnipeg being one example.

Gail Kreutzer (private citizen)  
Arnes, Manitoba

<sup>1</sup>Fackelmann, Kathleen, “Drugs Found in Tap Water,” USA Today Health, 8, November 2000

<sup>2</sup>Beeman, Perry. “New Tests of waterways Planned,” DesMoines Register, 30 March 2001

<sup>3</sup>The Land Stewardship Letter, November 2000, Vol. 18, No. 5

MEMBERS OF THE COMMITTEE / SAVE THE LAKE ACT / BILL 46.

This is my presentation: It represents "THE TRUTH". Governments lose themselves, and their integrity when they compromise the very ideals that we fight "to defend". OUR WATER.

Beginning Monday, 13 June, subsequent to its first and second readings, members of the public are invited to make presentations on BILL 46, "Save the Lake Act".

The first Line of the Act presently reads: "Whereas the government is committed to protecting all waters in Manitoba"

This line should be amended to read:

"Whereas the government is committed to protecting all waters in Manitoba, with the exception of those waters that will be used for the benefit of mining operations in the province, now and in the future".

Yours Truly,  
John Fefchak;  
Virden, Manitoba.

\* \* \*

Bill 46 as currently drafted responds to the scientific evidence that large reductions in nutrient loading will be necessary to save Lake Winnipeg. The amendment to the Water Protection Act is particularly significant – it requires that the City of Winnipeg not only remove but recycle phosphorus. The legislation recognizes that phosphorus is simultaneously a noxious pollutant and a scarce, strategic resource.

Manitoba will be the first jurisdiction in the world to legislate phosphorus recovery. In my professional opinion this provision demonstrates a significant commitment to global food security and fundamental sustainable development principles. Phosphorus, Nitrogen, and Potassium are the fundamental constituents of agricultural fertilizers. Phosphorus fuels the process of photosynthesis that drives plant growth; every DNA molecule of every living plant and animal incorporates elemental phosphorus – all biological life on earth depends on phosphorus.

The mineral origin of almost all phosphorus used in agricultural fertilizers is rock phosphate, which is mined out of the ground from concentrated deposits much like potash is mined to extract potassium. The International Fertilizer Development Corporation – the fertilizer industry's R&D agency - estimates that

we have several hundred years of rock phosphate reserves. Scientific studies published in prestigious journals such as Nature and Scientific American suggest that global phosphorus reserves may be much less – as little as several decades. Whether global rock phosphate reserves are 50 years or 500 years the implications of exhausting supplies of phosphorus for global food security are catastrophic. Phosphorus is much scarcer than potash, which has an estimated 4,000 year reserve life. Canadians will recall that potash was declared a strategic national asset by federal government when it rebuffed the hostile takeover attempt of the Potash Corporation of Saskatchewan by BHP Billiton, a multi-national mining conglomerate based in Australia – the same long-term strategic thinking should be applied to phosphorus.

Bill 46 is a critical first step towards re-defining phosphorus as a strategic asset by legislating its long-term stewardship. In principle a molecule of phosphorus can be infinitely recycled – always returned to agricultural land to grow food. We ignore our reliance on phosphorus when we allow it to flow unmanaged into lakes and rivers fouling our ecosystems and imperilling the food security of future generations. This phosphorus is effectively lost to global nutrient cycles - a one-time geologic endowment of concentrated mineral supply squandered in a few generations.

Wastewater Treatment Plants are important sources of phosphorus supply. Wastewater Treatment Plants in the 21st century must play a much more important role in phosphorus recycling and the emerging bioeconomy than they did in the 20th century. Wastewater treatment plants should be understood as biorefineries, where strategic resources can be extracted using biological processes and recycled, benefitting the downstream aquatic environment, Manitoba's economy by displacing imported fertilizers, and ensuring long-term food security. Extracting phosphorus using chemical methods and disposing of it in landfills is environmentally, economically, and ethically short-sighted and unacceptable.

Bill 46 is an important initial step towards building the Manitoba bioeconomy by requiring leadership from the City of Winnipeg and it sets the stage for a constructive engagement with Manitoba's agricultural sector, which also has an important part to play. Based on analysis conducted by IISD, we believe that as a whole, Manitoba farmers are very efficient users of agricultural nutrients, specifically

phosphorus and nitrogen. We estimate that the fraction of applied phosphorus that leaves agricultural land destined for Lake Winnipeg is very low compared to other jurisdictions in North America. Nonetheless, because of our enormous land base and accumulated surpluses in some localized areas, the total mass of phosphorus that reaches Lake Winnipeg from agricultural sources is significant.

We believe that the key principle introduced by Bill 46 – that phosphorus is a strategic resource that should be recycled – should also be extended to the agricultural sector in a manner that promotes innovation and new economic opportunities for Manitoba's farmers. Manitoba farmers, Manitoba communities and the entrepreneurs that will build the Manitoba bioeconomy should be encouraged to realize these opportunities. An important example of such opportunity is the nutrient-bioenergy project IISD has demonstrated at Netley-Libau marsh, where marsh biomass is used intercept and recycle phosphorus when the biomass is used to produce energy and displace fossil fuels. The nutrient-bioenergy concept could be widely applied across Manitoba's agricultural landscape, creating nutrient management, flood protection and economic co-benefits.

In summary, Bill 46 is an important legislative precedent as it recognizes phosphorus as a strategic resource. Future legislation consistent with the principles introduced in Bill 46 should take an integrated systems view of the agricultural landscape and encourage innovative agricultural nutrient management that builds Manitoba's bioeconomy and fosters global sustainable development.

Henry David Venema,  
Director, Water Innovation Centre,  
International Institute for Sustainable Development  
(IISD)

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#### Manitoba Pork's Zero Percent Solution

Manitoba farmers have a solution to the perceived problem that apparently was the impetus for the Manitoba Government's Bill 17 and Bill 46.

Bill 46 contains a proposed amendment to the provincial Environment Act and if passed would ban all new hog barns or barn expansions in all of Manitoba -apparently based on the misunderstanding that a lot of hog manure is getting into waterways. But the irony is that this draconian measure would not even begin to solve the problem that the

government claims is being caused by hog farmers (despite the fact that there is NO scientific evidence that any significant amounts of hog manure are even getting into the water system in the first place). But Bill 46 will kill the billion dollar hog industry.

Manure is organic, breaks down in the environment quickly and helps to build soil. Manure has been used by farmers for about 10,000 years to fertilize crops. Manure feeds crops, the crops feed livestock and livestock create more manure to feed crops again – known as the Nutrient Cycle. Why the government would be opposed to this valuable and natural by-product of the livestock industry is hard to understand.

The solution is not in banning structures, but in ensuring reasonable management of 'nutrients' (that is, phosphorous and nitrogen that are contained in manure and artificial fertilizers). The phosphorous that is blamed on causing algal blooms in Lake Winnipeg comes from many sources (the largest single point source being the City of Winnipeg) – current science estimates that at the most, hog operations contribute about 1.5% of the phosphorous to the lake, likely less. Still, hog farmers, as good stewards of the land, are prepared to continue to help improve the environment.

The responsible solution that Manitoba hog farmers are proposing in place of a ban is to:

- only apply manure to crop land (CLI Classes 1-5) for new or expanding operations at a rate of 1x phosphorous removal over a 3-5 year crop cycle – that is, manure would only be applied to the same land every 3-5 years so the ensuing crops could use up all of the phosphorous in the manure, or, manure could be applied more frequently as long as the planted crops could appropriately absorb the phosphorous, and
- by November of 2013, manure would not be applied in the winter (on frozen ground) in order to reduce run-off, and
- by November of 2013, all applied manure would be incorporated into the soil either through direct injection or through plowing-in within 48 hours of application (again to help reduce run-off). This means the amount of phosphorous applied would be used up by the intended crops (over a 3-5 year period) and would leave little if any additional phosphorous residue – the Zero Percent Solution.

Hog farmers should be able to continue to operate and to expand no matter where they are located in

Manitoba, as long as they have enough good crop land to responsibly apply manure at this 'zero percent' rate.

This solution would eliminate the need for a ban because it would essentially eliminate any phosphorous run off (which is minimal to begin with) from all new or expanded hog operations.

Manitoba Pork,

June 2011

A Brief Review the Paper: Sudden ecosystem change in Lake Winnipeg, Canada, caused by eutrophication arising from crop and livestock production during the 20th century, Paper prepared by L

Bunting, PR Leavitt, B Wissel, KR Laird, BF Cumming, A St Amand and DR Engstrom – released, June 2011

Review by Manitoba Pork

This paper is based solely on the analysis of 3 samples of the sediment from the bottom of Lake Winnipeg in 2006. They took 5 years to write up the lab analysis of their findings in the form of a scientific report of only 30 pages. This is not a study of five years of data as implied in the government news-releases and statements by politicians.

This paper conjectures about the causes of the problems of Lake Winnipeg with much scientific jargon and cut and paste items from other papers. While it is difficult to critique the actual analysis of the plankton material found in the samples, one can surely question the attempt to interject comparisons of the findings with the work of others on the causes of eutrophication of lakes by excessive nutrients, and the potential source of such nutrients. One would have hoped that the provincial government would have sent this commissioned report to the Clean Environment Commission, the University of Manitoba and/or the Canadian Freshwater Institute for their comments before using it as the basis of new legislation.

Did the government pay to get findings which fit into their political agenda or is this an attempt to provide meaningful information for public discourse? The rush to get legislation through before the end of this legislative session and the term of this government is unworthy of the issue.

Points for Consideration

- A government should not bring forward major amending legislation to four Acts on a significant

public policy issue in the last weeks of the Session and the term of this government, based on a single scientific research paper which has not been reviewed by any formal scientific body or a peer group of third party interests. The reviewers indicated in the introduction are all connected with the researchers in some way.

- While the paper provides some analysis of the samples taken from the Lake bottom most of the paper deals with trying to correlate the causes of eutrophication of the Lake with the economic and social development of the Province, with a particular interest on agriculture for some reason. It then makes a general recommendation that the levels of nitrogen (N) and phosphorus (P) need to be reduced by 50% and 500%. There is no explanation of why these numbers were suggested. A question arises as to how one could reduce something by 500%.

- The use of a statistical tool to prove that the rapid growth and change in the algal population in the Lake is related to the rapid growth of a certain sectors in agriculture, which seem to have similar growth curves is highly questionable. They could have easily arrived at the same correlations if they had selected the growth in the number of Tim Horton stores, the number of desktop computers, the proliferation of ATMs, the sales of Kia automobiles or any number of other things that have increased across the Province over the years. Having similar linear or exponential graphical curves does not mean that two items are actually related in terms of cause and effect. It would seem that they started with the concept that agriculture is the most likely candidate and worked their analysis back from that point. The paper is littered with inconsistencies about actual levels of N and P over different time periods and they even admit the data is sketchy before the 1980s.

- There is no explanation or analysis of the movement of N and P in the Prairie environment which would have provided a basis from which he could have explained how their findings on plankton species in the Lake are related. From this they might have been able to clarify why agriculture should be singled out as a focus for their correlation theories.

- Assuming agriculture is to blame, one would look for a discussion of the growth of the use of artificial fertilizers and manures on cropland. Using their starting point of 1990, total fertilizer use in Manitoba, sold by nutrient content, has increased by almost 160,000 tonnes (from 360,000 tonnes in 1990 to 537,000 tonnes) in 2009/2010, of which the level

of applied phosphate (P<sub>2</sub>O<sub>5</sub> equivalent) has stayed the same at about 110,000 tonnes per year. This amount of fertilizer was applied on over 80% of the 12 million acres of cropland in Manitoba. For comparative purposes, the total amount of phosphate in hog manure (an item of much public discussion) amounts to about 7,000 tonnes per year (7% of fertilizer P<sub>2</sub>O<sub>5</sub>); this is mostly injected and incorporated into the soil as organic fertilizer. Yields of grain and oilseeds have climbed 2 from 6.5 million tonnes in 1990 to about 8.6 million tonnes. There is no discussion how this could have been achieved without any increase in the use of phosphate fertilizer. Further these increased yields would mean that the level of plant nutrients removed and exported out of the Province actually increased. The phosphate level in our soils should therefore be staying at the same level as producers continue to improve the efficiency of their method of fertility improvement. However, they proceed to recommend a reduction in the level of manures and fertilizer. Perhaps a better approach is to ensure there is a more even distribution of P across the different regions and soils in the Province.

- In a couple of paragraphs they provide an odd calculation on animal densities to prove that increased animal production is a major cause of N and P runoff problems. Using the concept of biomass they compare humans with animals, first dismissing increased human populations as though their impact on the environment is the same as animals. This overlooks the impact of industrial chemicals, household waste, and other major sources of both elements. However, their calculations of animal numbers are grossly overestimated when trying to develop comparative numbers because they mix up annual marketings with inventory numbers. For example, they state there are 3 million pigs weighing 112 kg at any moment in time when in fact according to Statistics Canada, 40% of that number actually only weigh 5-23 kg. In terms of mammalian tissue excreting N and P, this is a significant error. For cattle, they completely ignore the number of cows which greatly exceed the number of marketed calves stated in the report and also weigh 3 times as much.

- Leaving aside the 'interesting' statements about why animal production increased in Manitoba, they fail to provide an explanation in even theoretical terms about how animals situated hundreds of kilometers away from the Lake affect the level of N and P in the water and algal populations. Livestock

in Manitoba might consume about 20% of all the grain and oilseed meal grown in the Province. 80% of our crops are exported. The ratio does not hold every year depending on the relative cost of using locally grown feeds or importing corn and soy meal. Any increase in imports is offset by exports of similar volumes. Most of our livestock production is actually exported as finished products or live animals. Farm animals do not create N and P. These elements are part of their feed which is essentially ground-up crop material which in turn has been grown on Manitoba soils. After going through their digestive tracts these elements are returned to cropland as manure (which is where they came from in the first place). The manure helps the crops to grow which are then fed back to the livestock.

- While farm animal populations have increased, the amount of P in the total system has hardly increased if at all. The use of manures has allowed producers to significantly increase their crop yields without having to increase the level of commercial fertilizer. There is no increase in N and P in the system as a whole; if anything, there is a small decrease from exported meat and egg products, and from substitution for artificial fertilizer.

- Animal feeding in Manitoba is completely different from other regions such as Quebec, New York State and Northern Ireland (to use the examples in the paper), where production is completely dependent on imported grains and oilseed meal to feed animals which are mostly consumed in those areas. They are importing more nutrients than their farmland can use for crop production. P in those areas is a significant problem. Quebec has been trying to deal with excessive P levels in its soils for over 20 years with limited success.

- There is also no discussion about the impact of annual spring run-off of melted snow. In Manitoba this is the defining issue on how we need to address the problem of small amounts of P leaching from the top inch of our soils in early spring, and that melted water moving into our waterways and finally into Lake Winnipeg. Most credible research to date has clearly identified this as a core problem. There is no mention of this concept in the paper.

- Also of significance is the impact of crop residues on run-off. These residues are beneficial in reducing the total amount of P in the run-off (some P is carried in suspended silt particles, and some in soluble P from soil water). But in areas where erosion is not a problem, crop residues left on the surface result in an







Provinces have no Right to pollute our Waters. The US found that out and had to build filtering devices at Garrison.

Ottawa endorsed a program that hog manure was to be disposed of as cheaply as possible! With all tis cheap run off from Hog Factories in Western Canada, the only solution was to run into Our Lake!

# 8

It is my sincere request that all presentations be mailed to Shiela Frazer, Auditor General of review.

# 9

It is unfortunate that we have been complaining to all Levels of Government with no responsible reply and now we have a Commission to hear our concerns once again!

# 10

It is therefore my request that measures as such be conducted by Regional Representation to better qualify the concerns. It should be the opinion of all Residents and Ratepayers to have their say! After all Natural Resources belong to all Manitobans not just a chosen few like Manitoba Hydro who have constipated Lake Winnipeg with Provincial blessings. Another super answer to the pollution.

# 11

In the early 1990's, I would take my Daughter and visit the Beauty of Lake Winnipeg and let her play and enjoy! Today, I would not walk my dog there. A few years later, Beach closures that blamed the Sea Gulls for their deposits! Courtesy of the Filmon Government! Further down the line, we got the Doer Sewer when the Reality of a Polluted Lake was evident! Today we are faced with a real Dilemma. We should be ashamed of such Progress! Consequently, Economics has more Power then Common Sense!

Maybe we need more then Reality to sink in!

Thank you,

Sincerely,

Joe Leschyshyn

\* \* \*

*Presentation to legislative committee regarding Bill 46 The Save Lake Winnipeg Act*

It was my hope when I heard the announcement that Bill 46, *The Save Lake Winnipeg Act* had been introduced that I would be able to stand before this

committee and lend my support to this initiative. But I can't and won't.

Two years ago I was in New Zealand. I spoke with people who were concerned about water quality, the environment and food production. I was informed that with the move to the "new agriculture" which involved the intensification of livestock and crop production, with a shift to producing for export, there was a commensurate increase in nutrient loading of the landscape. Consequently, significant water quality problems have developed there. Indeed, one person told me that the New Zealand government estimates that if all livestock production and nitrogen fertilization of crops ceased today in the Rotorua area, it would take 80 years for the nutrient loading on the land to return to levels which existed in the 1990's and for lakes and rivers to heal. I quote, "We thought that if we could only educate the government about the problem, they would take action and do what was necessary to protect the water and the environment. But we found out that they already knew," said Andrew Leary.

I told him that what was happening to his country's environment was strikingly similar to what is occurring in Manitoba. Indeed, in the 1990s, ag extension staff encouraged us farmers to adopt the New Zealand and Australian models.

This included re-focussing government assistance and policy away from "inefficient farms" to bigger and "more efficient" operations, to allegedly benefit from economies of scale. This policy defines efficiency in capitalistic terms – not ecological terms, the main beneficiaries of which is global capital. For example, the Wal-Marts, Cargill, Maple Leaf Foods, Tyson Foods, the big 3 pharmaceutical companies (one of which is the parent company of Monsanto – I'd ask you to think about that connection in particular).

More "efficient" capital intensive industrial food production systems – I won't call them farms or agriculture – require huge public subsidies to operate. One such subsidy is environmental degradation and destruction.

We are told by Dr. Leavitt among others, that Lake Winnipeg is at a "tipping point." Yet, Bill 46 does little to address the fundamental causes of the problem. Merely banning winter spreading is not going to prevent nutrient transfer into Lake Winnipeg. We have to address the overloading of nutrients onto the land.

Mr. Alan Baron, appearing before the Lake Winnipeg Stewardship Board in 2005 as Co-Chair of CRAP, (Citizens for the Responsible Application of Phosphorus) presented similar estimates to those of New Zealand on the extent of the problem in Manitoba. His comments are on the public record.

Here we are today with a P regulation that Mr. Baron describes as a “license to pollute” and one that was designed to “accommodate what the industry is doing.”

I refer you to exhibit \_\_\_ in your packages. I submitted this information during the Bill 17 committee hearings where I opposed the moratorium on hog production and expansion. It is on public record. The charts I have provided regarding the existing phosphorus regulation show that phosphorus loading due to the rapid expansion of hog production – a type of food production actively promoted by government – has been rapid.

**The chart shows how the phosphorus regulation was designed to meet the needs of the industry rather than protect the environment.**

In 2006, citizens met with members of the Manitoba Phosphorus Expert Committee. Then Mr. Baron deciphered the implications of the proposed regulation. The group’s recommendation, and subsequently the recommendation of CRAP – Citizens for the Responsible Application of Phosphorus – was that 60 ppm – where the phosphorus regulation begins to limit phosphorus application – be the UPPER limit that could be adjusted when credible science proved that it could.

The environmental threshold in many jurisdictions for where phosphorus rapidly and exponentially escapes into surface waters is well below 60ppm. This information is contained in a number of studies I cited during the Bill 17 hearings, and was imparted to the public by Water Stewardship staff – Dwight Williamson at the consultations on the Water Quality Management Zones in Brandon.

Given this scientific fact, why then would government start regulating at 60ppm? The only logical conclusion that one can draw is to accommodate what the industry has been doing and relieve the financial burden to the industry of properly disposing of manure. Just as Mr. Baron has consistently point out to the public and to government.

The hog industry has had until 2015 to comply with the existing regulation, which was amended to 2013

in 2009, and are now performing the same song and dance about the economic hardships that a “new” phosphorus regulation will bring to the industry. They are telling the public that the cost of complying will put them out of business. The fact is, the regulation has been in place since October 19, 2009 and they had lots of time to get their ducks in a row. They simply want to minimize costs with the expectation that the public interest in and costs to the environment are a subsidy that is owed to them. I am not including real hog FARMERS here.

Farmers such as myself reject the notion that the public bears the responsibility for environmental degradation. That is why I FARM and do not participate in industrial food production systems. I am trying to restore a purchased, previously degraded farm to an ecologically sound farm at my OWN EXPENSE. I could easily achieve this if government stopped subsidizing and supporting a dysfunctional marketplace, international trade agreements and a type of food production that prevents farmers from getting cost of production that includes a living wage.

A very important point to realize is that what soil tests measure is only the form of P that is available to be used by a crop at the time the test was taken which is 10% of what P205 is actually in the soil. This means that there is considerably more P in the soil than what the soil tests show.

When one considers the study entitled “*Report on current knowledge of Key Environmental Issues Related to Hog Production in Manitoba*,” Commissioned by the Clean Environment Commission, October 2007 written by Dr. Don Flaten, Karin Wittenberg and Qiang Zhang, all of the University of Manitoba, where 20.47lbs/acre per year of P205 is the average extracted in Manitoba, why would government or any credible scientist recommend or support loading p205 to 823 lbs/acre labile or over 7000 lbs/acre non-labile? By the way, the information to produce the chart was gleaned from this study. Don Flaten was a member of the Manitoba Phosphorus Expert Committee.

Water Stewardship personnel admit that under flood conditions, especially when land is under water for 10 days, this non-labile or “bound” phosphorus can become dissolved in flood waters and move into surface waters such as Lake Winnipeg. It will be frightening to learn what the P loading in Lake Winnipeg will be after this spring’s flooding and flush events.

Common sense tells real farmers that overloading soils with nutrients will pollute surface waters. Government has let industry get away with this pollution and are now launching a new initiative at taxpayer's expense to clean up the Lake. This is clearly another subsidy and after the horse is out of the gate.

The key to preventing – not mitigating for and enabling pollution while subsidizing the industry, and to prevent the further exacerbation of polluting practices is to change the P regulation to only allow for P to be applied at rates that cannot exceed the amount a crop can use that growing season. It also requires capping residuals below 60 ppm which is 276 lbs P205.

Second, the current government policy of promoting and allowing industrial, intensive livestock production **MUST BE REVERSED**. Policies that support and encourage small, ecologically sound hog production, distributed widely over the province **MUST BE ENCOURAGED AND SUPPORTED**. Dr. Flaten maintains that Manitoba soils are deficient in P and could benefit from hog manure application. The problem is, P is being concentrated around these operations for economic reasons. It is too expensive to transport manure beyond 2kms. That's a figure I heard over and over again at conditional use hearings by the likes of Elite Swine. The problem is intrinsic to the concentration of animals produced in an industrial manner. We as a society must abandon the industrial model for ecologically sound ways of producing food.

Third, the province must challenge the federal vision of agriculture as contained in the document "Agriculture 2020" where smaller producers are deemed "inefficient" and not worthy of public support, yet the industrial model is deemed "efficient" and worthy of support.

Fourth, Bill 46 must be amended to include an amendment to the LMMMR. I suggest it includes the following statement, " No person shall apply manure at rates where the amount of phosphorus in the manure exceeds the phosphorus required to grow the intended crop."

Fifth, these regulations must be enforced and the unfettered discretion of the director and minister to waive the regulations and legislative requirements be removed.

By the way, a review of the P regulation was required to be done by March 31, 2011 pursuant to

Section 18 of the LMMMR. I've asked for a copy of the review and who was consulted in conducting the review on several occasions. I have not been provided with one. The conclusion that I have drawn is that the review has not been done. This is a clear violation by the government of its own laws.

#### *Wetlands*

Why, knowing that wetlands are critical to maintaining clean water, does bill 46 not prohibit further wetland loss? It's not just the provincially significant wetlands that need protection. Nor, just "wetlands that are directly linked to a large Manitoba lake."

We have lost 80% of our wetlands in the Little Saskatchewan River watershed which flows into the Assiniboine and then into Lake Winnipeg. Yet, the Save lake Winnipeg Act limits regulation in 7.1.1(3) (b) in a way that leaves us with 'business as usual on private lands.

Finally with regard to the treatment of wetlands in this Bill, under Part 3 – the proposed changes to the Mines and Minerals Act, I have to ask why government is proposing a mere 2 year moratorium on permits or leases for peat moss extraction.

Peat bogs are exquisitely complex ecosystems, once mined are destroyed. Peat moss extraction is not a sustainable activity or "development." Unless, we are talking in terms of hundreds or thousands of years. Do we have that long? Most scientists say that we don't.

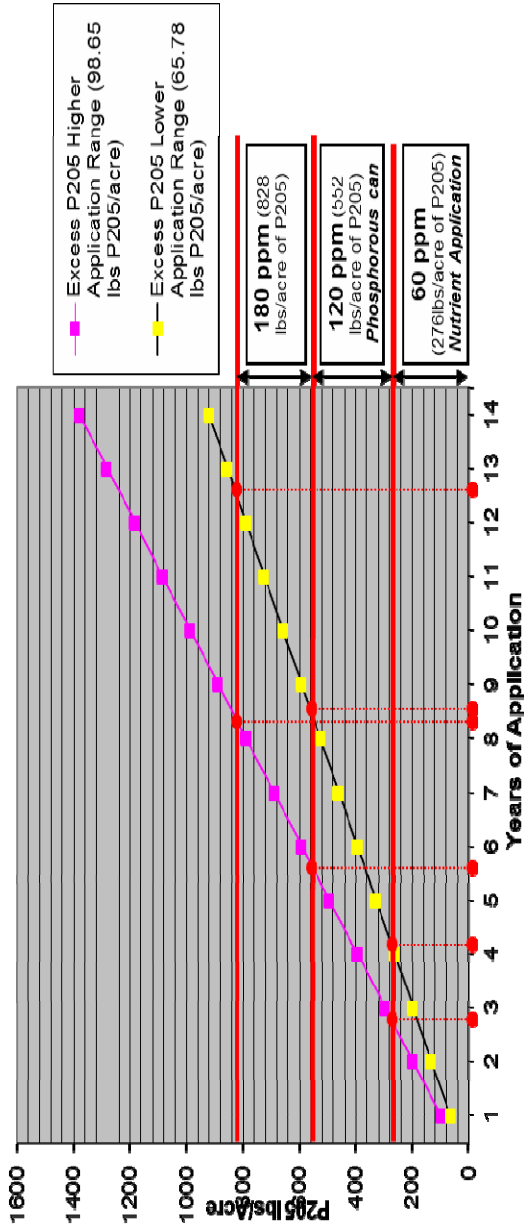
Your government has told us that you are committed to reducing green house gasses as part of your climate change strategy. Yet your government licensed the Deer Lake peat mine operation before the public environmental review process was complete. This mining operation is licensed for some 53,000 hectares on the West side of Lake Winnipeg. What is the point of environmental assessment if a project can't be turned down? This action is in direct contravention of the intent in Part 1 of Bill 46.

#### *City of Winnipeg*

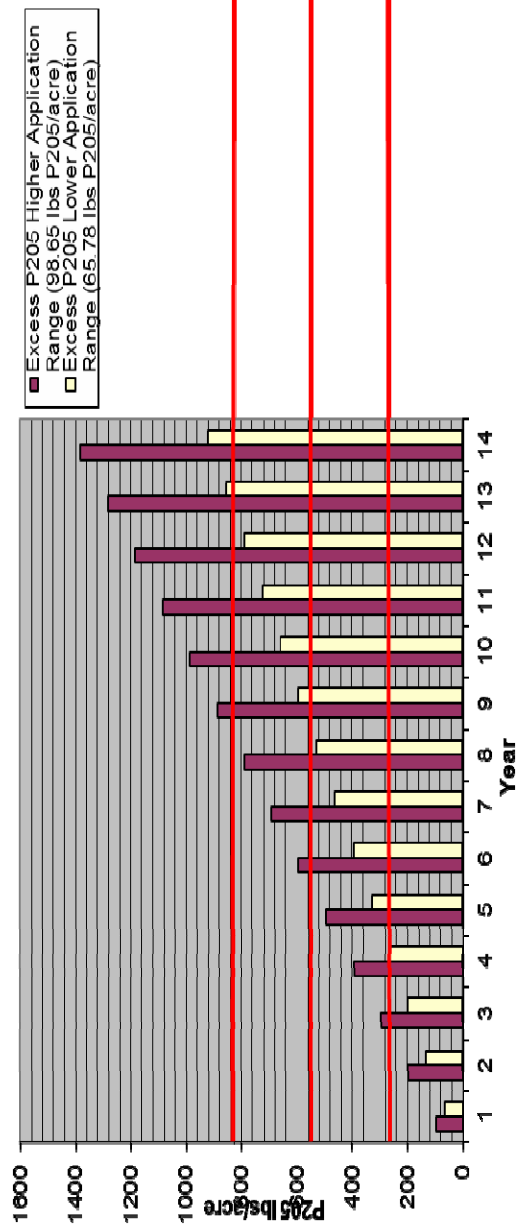
While, in principle it is a positive move to require P removal by the City of Winnipeg, I have to ask why the acceptable P discharge outlined in Bill 46 is 1.0 mg/litre which is 20 times the scientifically accepted level of .05mg/litre, beyond which negative environmental effects occur? The expense to the City of Winnipeg and to taxpayers to remove P is substantial. Why is this not being done to a level



**Figure 1: Actual Average Annual Excess Phosphorus (P205) Application Manitoba Hog Industry**



**Figure 1: Actual Average Annual Excess Phosphorus (P205) Application Manitoba Hog Industry**



By Ruth Pryzner  
Alexander, Manitoba

The Legislative Assembly of Manitoba Debates and Proceedings  
are also available on the Internet at the following address:

**<http://www.gov.mb.ca/legislature/hansard/index.html>**