



## Public Open Houses Summary

<b>Date:</b>	July 11, 2017	July 12, 2017
<b>Time:</b>	4 p.m. – 7 p.m.	4 p.m. – 7 p.m.
<b>Location:</b>	Brunkild Memorial Rec Centre 10 PR 305 Brunkild, MB	Elie Veteran’s Hall 34 Main St. E. Elie, MB

## INTRODUCTION

The City of Winnipeg (the City) is developing a Biosolids Land Application program. Biosolids are a nutrient-rich, solid by-product of wastewater treatment. When applied to agricultural land it brings much needed nutrients to the soil and provides an opportunity to reuse biosolids instead of disposing them in a landfill. The Biosolids Land Application program will be influenced by provincial regulations, public input, and characteristics of application sites, such as soil, slope, type of crop, and distance to water bodies.

In April 2017, the project team facilitated a capital region workshop to solicit input from organizations with regional interests and knowledge of the biosolids sector, policy and regulatory requirements and constraints, and local community issues and concerns. In May and June 2017, the project team met with three municipal councils and four special interest groups. The intent of these meetings was to present high-level program considerations and solicit information about opportunities and current environmental constraints to apply biosolids in the area west and southwest of Winnipeg. The feedback provided by regional and municipal stakeholders helped provide direction for the next phase of engagement, the public open houses.

## PUBLIC OPEN HOUSES

Two public open houses were hosted to gather public input on the program development and site selection. The public open houses for the Biosolids Land Application program were held on Tuesday, July 11, 2017, from 4 p.m. to 7 p.m. at the Brunkild Memorial Recreation Centre, located at 10 PR 305, Brunkild and on Wednesday, July 12, 2017, from 4 p.m. to 7 p.m. at the Elie Veteran’s Hall, located at 34 Main Street East, Elie. The intent of the open houses was to provide an opportunity for community members and interested farm producers to learn about the program, potential application sites, speak with project team members, and provide comments on the program. Presentation boards displayed text and graphics on the project background, timeline, program study area, program regulations and principles, program details and mitigation measures for human health, environmental, and nuisance concerns. Approximately 12 people attended.

The public open houses were advertised in several formats:

FORMAT	DATE	DETAIL
Newspaper Advertisements	June 28 <sup>th</sup> and 29 <sup>th</sup> , 2017	Manitoba Co-Operator
	June 28 <sup>th</sup> , 2017	The Headliner
	July, 2017	Cartier Times (July Edition)
Social Media	June 28 <sup>th</sup> , July 11 <sup>th</sup> and 12 <sup>th</sup> , 2017	Twitter (3 total posts)
	July 4 <sup>th</sup> and 11 <sup>th</sup> , 2017	Facebook (2 total posts)

FORMAT	DATE	DETAIL
Print	June 27 <sup>th</sup> to July 12 <sup>th</sup> , 2017	Posters in Rosser, Marquette, Grosse Isle, St. Francois Xavier, Oak Bluff, Sanford, Brunkild, Sperling, Starbuck, Springstein, and Elie.
Radio	July 7 <sup>th</sup> , 8 <sup>th</sup> and 10 <sup>th</sup> , 2017	93.1 CFRY, Portage la Prairie based radio station, airing three times per day.

## SURVEY

A survey was provided at the public open houses to collect feedback. The survey and open house boards were also available online between June 28 and July 28, 2017. This provided those who were unable to attend the public open house events an opportunity to review the materials and provide their input. A total of 40 responses were received (6 paper submissions and 34 online submissions) from individuals in Manitoba (36 respondents) and from across Canada (4 respondents).

For the purposes of the Biosolids Land Application program, survey responses that did not originate in Manitoba were analyzed and included separately from the other responses. The responses that did not originate in Manitoba will not be included in the Environment Act Proposal public engagement summary, as these survey results are not applicable to the regulatory jurisdiction, but have been included in this report.

## PUBLIC SURVEY RESULTS SUMMARY – MANITOBA

Total Respondents, n = 36 (note: answers to the public survey were not mandatory and therefor, some questions include less than total responses)

### CONNECTION TO STUDY AREA

Respondents were first asked to indicate their interest in the program and were encouraged to check all those that apply to them. The majority of respondents indicated they were a member of an agricultural group, environmental group or other interest group (17), followed by those identifying as ‘other’ (14), those identifying as an agricultural producer (8), and a small group identifying as being residents of the four target municipalities (7 total). Those that identified as ‘other’, indicated they were predominantly residents of the City of Winnipeg (8 out of 14 responses). The following table shows the question responses, ranked from highest to lowest:

Answer	Responses
A member of an agricultural group, environmental group or other interest group	17
Other (please specify)	14
An agricultural producer	8
A resident of the R.M. of Grey	2
A resident of the R.M. of Cartier	2
A resident of the R.M. of Rosser	2
A resident of the R.M. of Macdonald	1
<b>Total Responses:</b>	<b>46</b>

(Total respondents, n = 34, note: answers to the public survey were not mandatory and therefor, some questions include less than total responses)

Respondents were then asked if they own agricultural land and to check all the locations that apply. The majority of respondents indicated the question did not apply to them (25),

followed by those who responded 'other' (4), and a group of respondents indicated they own agricultural land in either the R.M. of Grey, the R.M. of Rosser, or the R.M. of Cartier (5). None of the respondents indicated they own land in the R.M. of Macdonald. Those respondents who answered 'other' indicated they own agricultural land outside of the study area.

Answer	Responses
N/A	25
Other (please specify)	4
Own agricultural land in the R.M. of Grey	2
Own agricultural land in the R.M. of Cartier	2
Own agricultural land in the R.M. of Rosser	1
Own agricultural land in the R.M. of Macdonald	0
<b>Total Responses:</b>	
	<b>34</b>

(Total respondents, n = 32, note: answers to the public survey were not mandatory and therefore, some questions include less than total responses)

Respondents were then asked if they rent agricultural land and to check all the locations that apply. The majority of respondents indicated the question did not apply to them (26) followed by a small group that responded 'other' (2). A smaller group of respondents indicated they rented agricultural land in the R.M. of Grey, the R.M. of Rosser and the R.M. of Cartier (5). No respondents indicated they rented agricultural land in the R.M. of Macdonald. For those who responded 'other', responses indicated they rent land outside of the four pilot project municipalities.

Answer	Responses
N/A	26
Other (please specify)	2
Rent agricultural land (tenant) in the R.M. of Grey	2
Rent agricultural land (tenant) in the R.M. of Cartier	2
Rent agricultural land (tenant) in the R.M. of Rosser	1
Rent agricultural land (tenant) in the R.M. of Macdonald	0
<b>Total Responses:</b>	
	<b>33</b>

(Total respondents, n = 32, note: answers to the public survey were not mandatory and therefore, some questions include less than total responses)

## INTERESTS IN BIOSOLIDS LAND APPLICATION

The survey asked respondents to best describe their interest in the Biosolids Land Application program. Respondents were encouraged to check all those that apply to them. Results were varied with the majority of respondents indicating protection of the environment (29) as the highest interest, followed by the protection of human health (20), then agricultural benefits (17), nuisance issues such as odour and traffic (14), economic impacts (10), and lastly 'other' (7). Those that selected 'other' included various interests, including job opportunities, climate change, and impacts on municipal transportation systems.

Answer	Responses
Protection of the environment	29
Protection of human health	20
Agricultural benefits	17
Nuisance issues such as odour or traffic	14
Economic impacts	10
Other (please describe)	7
<b>Total Responses:</b>	
	<b>97</b>

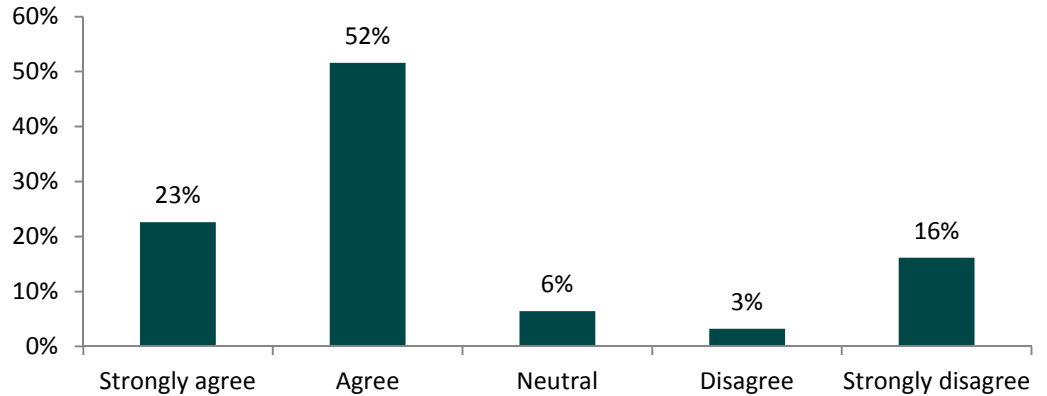
(Total respondents, n = 36, note: answers to the public survey were not mandatory and therefore, some questions include less than total responses)

The survey asked respondents to share their comments on any specific interests they may have in the Biosolids Land Application program. A total of 16 comments were provided. The following is a summary of frequently shared comments:

- Concern over the potential for harmful effects to the environment and public health. Several comments indicate a strong opposition to the program in any form and suggest that:
  - Biosolids are toxic in nature and are not fit to be applied to farmlands;
  - Additional unbiased research is needed before considering biosolids application; and
  - The program should be terminated.
- Broad interest and support for the program and a general excitement for the economic prospects, the potential to divert biosolids from the landfill, and the benefit to local farmers.
- Biosolids are an environmentally friendly alternative to synthetic fertilizers and may help to reduce greenhouse gas emissions.
- Questions regarding nutrient values as well as bacterial content of biosolids.
- Interest in seeing specialized routing and specific maintenance programs to ensure truck routes are in good repair.

## INFORMATION ON THE BIOSOLIDS LAND APPLICATION PROGRAM

The survey asked respondents if they felt the information about the Biosolids Land Application program provided either at the open houses or on the program website was helpful. The majority of respondents either agreed or strongly agreed that the provided information regarding the Biosolids Land Application program was helpful (23% strongly agree, 52% agreed). A smaller number of respondents indicated the information was not helpful (3% disagreed, 16% strongly disagreed). Lastly, 6% of respondents were neutral when asked if the information was helpful.



(Total respondents, n = 31)

For those respondents who did not find the information helpful, the survey asked what information they were missing. A total of 11 comments were provided. The following is a summary of the questions provided by respondents:

- Questions about how biosolids differ from regular agricultural manure including their rate of run-off, treatment process, and what is to prevent a double dosing of both on the same field.
- What research the City conducted in regard to the project.
- Interest in more information about the specific substances the City will be regularly testing for as part of the program.
- Information regarding the prevalence, toxicity and bio-accumulative dangers of identified, and unidentified emerging substances of concern in processed biosolids.
- How emerging substances of concern are being tested for, including sample size, frequency, and when these tests will be made public.
- More research to indicate if treatment processes are adequate to remove the associated risk of emerging substances of concern, as well as prions.
- Information on potential negative consequences of using biosolids were not well represented in the information provided by the program.

## CONCERNS REGARDING THE BIOSOLIDS LAND APPLICATION PROGRAM

The survey asked respondents to provide any outstanding concerns they had in regard to the Biosolids Land Application program. A total of 21 comments were received. The following is a summary of the comments provided by respondents:

- Concern of potential odour entering into densely populated areas in Winnipeg.
- Concern regarding the toxins present in the Winnipeg sewer system that may enter into the biosolids used in the program. There is a desire to know what the City has planned to prevent individuals from pouring toxic chemicals down the drain.
- Concern regarding potential harmful effects of biosolids on the health of the environment and humans.
- Need for heightened enforcement of mitigation measures to ensure local producers are following correct procedure.
- Concern for the lack of buffer around the Assiniboine River. While there is a buffer for the flood control area of the Red River, no buffer exists for the Assiniboine River.
- General concern for the effects of prions, emerging substances of concern, and the toxicity of biosolids.

## ADDITIONAL COMMENTS OR QUESTIONS

The survey provided a final opportunity for respondents to share any additional comments or questions they may have had regarding the Biosolids Land Application program. A total of 14 responses were provided. The following is a summary of the comments or questions provided by the respondents:

- With proper management and proper application techniques, the program can be a success.
- Desire to know the total amount of biosolids the City is currently producing, and how much the program will offset this amount. A specific question was asked regarding the effect on fertilizer producers in Manitoba and if there will be any significant pushback.
- Certain areas proposed for the pilot project are often extremely wet in the springtime and tend to flood during high water events and during spring run-off. There is a desire to know where these lands drain to and what is being done to mitigate the unnecessary runoff of nutrients from biosolids.
- Staff at the open houses were well prepared and knowledgeable on the subject matter, and that the provided survey gave ample opportunity to share opinions in an open and clear way.
- Previous application program run by the City was a success and provided satisfaction to local producers.
- General uncertainty and rejection of the program, and would suggest invoking the precautionary principle. Responses suggested that using biosolids is unsafe for both human health and the environment.

## SURVEY RESULTS – OUTSIDE MANITOBA

(TOTAL RESPONDENTS, N = 4)

### CONNECTION TO STUDY AREA

Respondents were first asked to indicate their interest in the project and encouraged to check all those that apply to them. The majority of respondents selected ‘other’ in their interest to the project (3), followed by members of an agricultural group, environmental group or other interest group (2). For those who identified themselves as ‘other’, respondents indicated their place of residence as British Columbia.

Answer	Responses
Other (please specify)	3
A member of an agricultural group, environmental group or other interest group	2
An agricultural producer	0
A resident of the R.M. of Grey	0
A resident of the R.M. of Cartier	0
A resident of the R.M. of Rosser	0
A resident of the R.M. of Macdonald	0
<b>Total Responses:</b>	<b>5</b>

(Total respondents, n = 4, note: answers to the public survey were not mandatory and therefore, some questions include less than total responses)

Respondents were then asked if they owned agricultural land and to check all those that apply. Three respondents indicated they owned agricultural land outside of Manitoba (3), while one respondent identifying themselves as not owning any agricultural land (1).

Answer	Responses
Other (please specify)	3
N/A	1
Own agricultural land in the R.M. of Grey	0
Own agricultural land in the R.M. of Cartier	0
Own agricultural land in the R.M. of Rosser	0
Own agricultural land in the R.M. of Macdonald	0
<b>Total Responses:</b>	
	4

(Total respondents, n = 4)

Respondents were then asked if they rent agricultural land and to check all those that apply. All respondents indicated this question did not apply to them.

### INTERESTS IN BIOSOLIDS LAND APPLICATION

Respondents from outside Manitoba indicated a strong majority for the protection of the environment (4), protection of human health (4), nuisance issues such as odour and traffic (4), economic impacts (4), and a slightly smaller number of responses for 'other' (3).

Answer	Responses
Protection of the environment	4
Protection of human health	4
Nuisance issues such as odour or traffic	4
Economic impacts	4
Other (please describe)	3
Agricultural benefits	0
<b>Total Responses:</b>	
	19

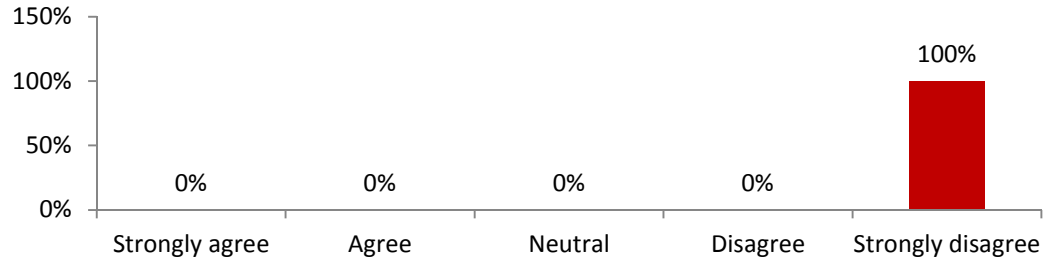
(Total respondents, n = 4, note: answers to the public survey were not mandatory and therefore, some questions include less than total responses)

Respondents were asked to provide comments on any specific interests they have in the Biosolids Land Application program. A total of 4 comments were received. The following provides a summary of the comments:

- Responses suggested a general desire for more research into the potential harm of biosolids application by researching the health of individuals living near biosolids application and those who live further away.
- Responses indicated a general mistrust of the program citing there are special interest groups benefitting from these programs in Canada and the United States.
- Responses indicated a desire for more information regarding the potential negative impacts of biosolids, and further indicate the project information seems biased in its presentation.
- Responses indicated a desire to end the program to protect human life and reduce future medical costs.

### INFORMATION ON THE BIOSOLIDS LAND APPLICATION PROGRAM

The survey asked respondents if they felt the information provided about the Biosolids Land Application program was helpful. All of the respondents from outside Manitoba strongly disagreed (100%).



(Total respondents, n = 4)

For respondents who did not find the information helpful, the survey asked what information they were missing. A total of 4 responses were collected. The following is a summary of the provided responses.

- Additional scientific cases from independent researchers need to be provided that oppose the use of sewage on farmland and forests.
- Desire for equal amounts of information to be provided, both positive and negative in their presentation.

## CONCERNS REGARDING THE BIOSOLIDS LAND APPLICATION PROGRAM

The survey asked respondents to provide any outstanding concerns they had in regard to the Biosolids Land Application program. A total of 4 comments were received from respondents outside of Manitoba. The following is a summary of the comments provided by respondents:

- Broad concerns for biosolids land application citing current petitions to the Canadian Federal Government, a failure to test for emerging substances of concern, lack of information on pharmaceuticals and industrial waste entering the waste stream in Winnipeg, the addition of airborne spores, and the need for increased setbacks that take into account strong winds.
- Ample independent research is being conducted that provides contradictory findings on biosolids land application.

## ADDITIONAL COMMENTS OR QUESTIONS

The survey provided a final opportunity for respondents to share any additional comments or questions they may have had regarding the Biosolids Land Application program. A total of 3 responses were provided. The following is a summary of the comments or questions provided by the respondents:

- Alternatives including pyrolysis (e.g. thermochemical decomposition of organic materials) and gasification are two waste-to-energy solutions that should be considered rather than land application.
- Emerging substances of concern and, specifically prions, pose a significant risk to human health and the health of the environment.

## NEXT STEPS

The feedback from the open houses and survey provides valuable insight on proposed program details from a community perspective and is being considered in the next steps towards developing the Biosolids Land Application program. In addition, the feedback





received also helps reaffirm the guiding principles developed from the regional and municipal stakeholder workshop, which included:

- Protection of the Environment;
- Protection of Public Health;
- Public Awareness and Education; and
- Building Relationships.

Feedback gathered through the public engagement process will be considered in the development of the Biosolids Land Application program, the location(s) of biosolids land application sites and included in the Environment Act Proposal.