

17 comments on “CSO Master Plan”



Pam Tonsaker says:

March 2, 2015 at 11:50 am

Sorry, but this problem that is extremely important is over my head and i really wouldn't have anything to contribute except in the way of taxes, as I'm sure that this will take millions of \$'s to implement. It's too bad that during the information presented on line, that a \$ figure was not given, nor was how the provincial government will be involved.

It also would have been nice to know if I could find out if my area has combined sewer hookup or not.

PT.



admin says:

March 3, 2015 at 10:35 am

Thank you for your comment Pam.

To learn more about much it will cost to reduce CSOs you can visit today's [topic](#).

To find out where the combined sewer area is you can view [this map](#). If you still want to know for your specific property you can [contact 311](#).



Jan Lankester says:

September 2, 2015 at 6:01 pm

The information is enlightening and as the previous commentor stated, somewhat over my head in terms of suggestions. My biggest concerns are:

1) presently, what state (pollution wise) are both the Assiniboine and the Red rivers in? How is pollution (OR pollutants) measured and what so far has been recommended as an acceptable level?

HOW BAD is it?

most citizens will definitely want to know this at the meeting or before please.

2) what businesses along the riverways impact on leakage of chemicals & other toxins or spills, into the rivers? are they held responsible for accidental releases into the CSO system? If so, what happens: fines?, Large ones? Are they public record?...vital for 'peppers to know about this please.

3) ban of chemical use on all lawns should be immediately introduced IMHO. Our lakes and rivers are far too important and we seem to be taking notice way too late.

4) what can the general public do to help cut down with waste entering our waterways? In plain language, what should be used in washing, cleaning, watering etc.....

5) overall costs \$\$\$\$-wise please, a breakdown of time line for this huge project, who will be responsible for very tough/stringent oversight? what consulting companies have been on board thus far, with what requirements will be needed, input from cities elsewhere and what they have initiated? Pros & cons presented please. Honestly.

The "Budget" is my huge concern. Wpg is not known for controlling costs on some VERY significant projects to date. In fact, it's been a nightmare. Must take this seriously. Citizens attending will want facts, figures and clear concise answers.



waterandwasteadmin says:

September 3, 2015 at 11:59 am

Hi Jan,

We've put together some information for you based on your comment:

The pollutants of concern for CSOs are Total Nitrogen, Total Phosphorous and bacteria. We have water quality data for our rivers [posted on the web](#). There are also [provincial water quality standards](#) available for review, too. Finally, we are also publishing CSO monitoring results [here](#).

The sewer bylaw governs what can and can't be discharged into our sewer systems and the fine schedule. It can be found [here](#).

Individual property violations are not published.

A synthetic lawn pesticide ban has been introduced by the Manitoba Government. For more information on this ban, please visit [Conservation and Water Stewardship website](#). Citizens of Winnipeg can definitely help protect our waterways. A great resource is [Lake Friendly](#). Cost can vary from \$0.6 to \$4.1 Billion depending on the level of CSO control selected by the Province. CH2M Consulting has been hired as the prime consultant. The City has been engaging other municipalities to seek input on what they have done. These will be included in the Preliminary Proposal to the Province. Additional pros and cons will be presented at the public open house on September 14-15 and will be posted on our website shortly. If you can't make it in person, you can also voice your opinion [online](#).



Jan Lankester says:

September 2, 2015 at 6:20 pm

Sorry-One other comment as I noticed the timeline states:

“DEC 2017... Submit final CSO Master Plan to Province”
with CSO Masterplan IMPLEMENTATION Phase III after 2018 and beyond.....

How does the City of Wpg pay for all of this?



waterandwasteadmin says:

September 3, 2015 at 12:02 pm

Thank you for your comment, Jan.

The project will be funded through increases in water and sewer utility bills. The City will also try to secure funding from other levels of government.



Kyle says:

October 1, 2015 at 3:59 pm

So if its going to be paid for by increases in water and sewer bills, basically it will become impossible to afford living here. Great! What next?



waterandwasteadmin says:

October 5, 2015 at 8:54 am

The City will seek funding opportunities from the other levels of government. We are doing our part to protect the long term health of our rivers and lakes.



Kyle says:

October 5, 2015 at 11:47 am

And i think protecting rivers and lakes is a great idea. The thing is though, when the city is forced to do something that will cost billions and probably be billions more over budget, just to prevent 5% of nitrogen and 6% phosphorus and a little poop from entering the rivers? There will still be huge amounts of algae in lake Winnipeg and all the main contributors to that, dont have to do a thing. That is what frustrates me. And also the fact that manitoba will force winnipeg to go full out on this project, so cost will be minimum 4.1 billion, and like everything else be 20% or more over budget, while the other governments only put up 250 million each, and our water bills go from 200 to 600.



Andrei says:

October 5, 2015 at 12:47 pm

I agree! There must be a clear value statement, like 'reducing nitrogen by 50% at the lake entry'. And what would happen to some very specific individuals if the goals aren't met including budget overruns.

I for example know well what would happen if I don't pay property tax. Similarly, I'd like to see something significant happening to people who mismanage my paid taxes.



Anne Bubbs says:

September 15, 2015 at 4:17 am

The meeting September 14 was very informative. It was well presented and easy to understand. The health of the rivers and Lake Winnipeg is very important, but health of people comes first, and having three major sewage events in less than six weeks is not healthy for the residents of my building. We need immediate help!



Andrei says:

October 2, 2015 at 11:26 am

Given the size of this project, this is a great opportunity for the city to become more transparent.

I can see the timeline, which is good. It would be nice to add what will be the outcome of each phase and \$\$ budgeted/spent. With as much details as possible – given that every taxpayer would foot the bill.

As for the options, it would be nice to see the cause and effect. Like by spending so much per household, we would achieve ..% reduction in this and that.

Te project should be very open to the public bidding, so that wide range of alternatives could be considered. For example, if rain water is the problem – should we try to capture that (clean) water instead of mixing it with sewage and then spending \$\$ on more sewage treatment facilities?



waterandwasteadmin says:

October 6, 2015 at 2:59 pm

Thank you for your comment.

As currently shown in the timeline, December 2015 is when we will provide the Province with our preliminary proposal and recommendation on the control limits. The Province will select a control limit and we will have until December 2017 to provide an implementation plan on how we will achieve this goal. At this point we will come back and engage with the public in developing the implementation plan. The Plan may include but not limited to the following: green technologies; deep tunnels; in-line/off-line storage; and separation.

For this project CH2M was awarded the consultant contract for \$4.1 million for the CSO Master Plan. This consists of all work until December 2017.

The project will be funded through increases in water and sewer utility bills. The City will also try to secure funding from other levels of government.

The [storyboards](#) provided during the public engagement process outline the options and their associated costs.



Ruby Kenning says:

October 2, 2015 at 11:43 am

Re: admin says: March 3, 2015 at 10:35 am

To find out where the combined sewer area is you can view this map.

ACCESS IS DENIED must be member, etc. (blog)

This came to me as I have signed up for City of Winnipeg subscribed e-mail from COW website ...E-mail title ...'Public Engagement News -COW'. My response should be the ability to response in e-mail form and not be forced to accept COW's choice.



waterandwasteadmin says:

October 2, 2015 at 1:21 pm

Thank you Ruby for letting us know about this error, and we have corrected it so that you can see the image.

If you would like to submit your comments on the project you can always [email us](#).



Dan McInnis says:

October 5, 2015 at 9:54 am

Thank you for this opportunity to participate.

Whatever the final design, it will be costly. Consider establishing a land drainage utility to fund the costs. This is in keeping with the concept of polluter-pays and is equitable and fair to all. As well, land owners will take measures to reduce run-off in order to avoid paying. It doesn't have to be a complicated system either – KISS.

Obey the law. The current Environment Act CSO License (section 8) states that the CoW shall not increase the frequency or volume of CSOs due to new and upgraded land development activities and shall use green technology and innovative practises in the design and operation of all new and upgraded storm and wastewater infrastructure. This is clearly not happening – case in point, new Walmart on Taylor (and many many others).

Incorporate green practises into the building requirements/code in order to reduce peak flows. Green roofs are a good example of this and provide other benefits as well. There are many examples of how this works (Dockside Green in Victoria) and a good guide is “Artful Rainwater Design; Creative Ways to Manage Stormwater” by Echols and Pennypacker.

Reinstitute regular inspections of commercial and residential locations that may be diverting rain water into the sewer system (i.e. the south area of the City in particular).

Good luck!



waterandwasteadmin says:

October 6, 2015 at 3:02 pm

Thank you for your comment.

Instituting a land drainage surcharge or changes in the building requirements to incorporate green technology would be a policy issue that would need to be decided at a higher level. Any development in the City is required to meet pre-development run-off flows. An example would be when a gravel site is later developed, the run-off from the new development would have to be designed to discharge the same as if it was the gravel site. In this example the developer may meet the requirement by installing a number of options to hold the water: roof storage, parking lot storage, underground tanks, retention ponds, etc.

Green technologies will be incorporated where possible. Some green technologies require building owners to install, operate and maintain, such as the green roofs mentioned.

We have been conducting regular Lot Grading By-law inspections since 1995, to ensure that sump pump water is being properly discharged onto private property. An additional sump pump inspection program was undertaken in 2007. It was determined that 20,807 homes out of 22,773 had a sump pump hose connected at the discharge outlet at the foundation – 91%. The most common violation is placing the hose so that the water drains onto the street or lane. We conduct regular inspections and issue by-law infraction notices as required.

5 comments on “Public Meeting – Participate online”



David M. Sanders says:

September 13, 2015 at 7:34 pm

I am sorry, but your survey questions and possible answers are quite unintelligible. I hope the public meeting is more edifying.



Pam Rayner moore says:

September 14, 2015 at 1:08 pm

I attended the public meeting organized by the City this morning . It was well organized and informative. I chose the forth option because it allowed for the biggest storage capacity in-line, with water to be moved to treatment plants when it was feasible to do so. This larger capacity can also mean in very dry years water can be stored for city watering use. With climate change droughts can be as likely as extreme precipitation events. Rather than the complete separation of drainage and sewer, this water can be treated and used if needed, or returned treated to the river. Also, one would hope that the city engineers, in planning renewal for the old infrastructure in a third of our city, will note the excellent opportunity to apply transformative transitions using proven green strategies for slowing, spreading and seepage of overland waters.



Alison says:

September 28, 2015 at 12:53 pm

Thinking outside of the box for a minute – there are some excellent composting toilets out there. One that I have personally seen is the Nature’s Head composting toilet, which has excellent reviews and apparently less odour than conventional toilets. People are putting them in their apartments, in their basements. How about promoting a solution like that?



waterandwasteadmin says:

October 5, 2015 at 9:40 am

For out of the box thinking, [green infrastructure](#) will be included as part of our strategy to help delay and divert the amount of runoff entering the combined sewer system during wet weather events. Regarding composting toilets, under [sewer by-law no. 92/2010](#), section 28(1) requires wastewater to be discharged to an adjacent sewer main. One rationale for this clause is to ensure that all wastewater is treated and disposed of properly at the wastewater treatment plants to safeguard against public health issues.

If pathogens in the composting toilet are not fully composted, there may be concerns with its disposal and the possible spread of disease to the public.



Alison says:

October 5, 2015 at 11:32 am

Interesting, thank-you. I will read through the by-law carefully, however my first thought is that if it is composted it does not contain water, so is it “wastewater”? There are many diapers changers and dog walkers that are dealing with waste but not “wastewater”.

5 comments on “2015 CSO Master Plan Symposium Livestreaming”



Phil Chilton says:

March 2, 2015 at 9:13 pm

The big error in waste water design is using too small of inside diameter PVC pipes. Eight inches or 200 mm is too small. The minimum has to be raised to sixteen inches or 400 mm.

Chancellor in Fort Garry is a very good example why 8” pipe is too small. A large additional load was added to the existing infrastructure during the 1980’s with disasterous effects. All because there was no upgrade to handle the increased load.

The downtown area is mostly all 16” pipe because its a combined system and the oldest part of the city. The engineers believe when one 16” pipe is replaced by two pipes, the pipe size can be cut in half. Silly old rabbits. Sewage is not at like potable water. Only 90% of sewage moves down the pipe. There’s 10% that does not move. In fact, 10% keeps on pilling upon the previous 10% that settles until the pipe is blocked. People get raw sewage backing up into their basements and then call 311 for some service.

The moral is use 16” or 400mm just as engineers of 1900 did. Sickness and disease has to be minimized, not pipes.



admin says:

March 3, 2015 at 11:03 am

Thank you for your comment Phil.

Since the 1970s the current minimum diameter for a City sewer main is 250 mm, or 10". Common sewer diameters are 10", 12", 15", 18" (250mm, 300mm, 375mm, 450mm), while 16" pipe is more of a water main size.

The City's standards also require pipes to be at a slope sufficient to have the velocity required to scour and remove the sediment from the pipe. In fact, sometimes using too large a pipe can result in an increase in sediment buildup due to the flow slowing down. Pipe sizes are always chosen based on the expected flows and installed at a grade to minimize sedimentation. Additional information on City design standard can be found [on our website](#).

Also, the City has an extensive [sewer main clearing and inspection program](#) that removes any buildup and helps to identify trouble spots.



Cheron Long-Landes says:

March 5, 2015 at 4:51 pm

I don't know enough about the subject to comment, and that is why it was my intention to attend this evening. I am not feeling well, so will postpone to another meeting. I will follow the discussion through the website. Thanks for giving the public an opportunity to participate and be heard.



Robert Kury says:

March 6, 2015 at 11:25 am

One of the questions at the symposium was, "Do CSO affect the rivers colour?". Supposedly the correct answer is no. I have witnessed a City CSO discharging to the Assiniboine River and it was black and smelled sewage-like not brown and odourless like the river. That black discharge hugged the shoreline and eventually was eddied into the main river. This discharge was occurring during normal weather conditions and not during some winter melt or wet weather event. The outfall's location is along the river walk between the Forks and the Legislature, I think, just east of the Mid-town Bridge. Outfalls of this nature need to be on the City's priority list for correction.



admin says:

March 9, 2015 at 3:39 pm

Thanks for your comment Robert.

Winnipeg's rivers are naturally murky brown in appearance due to the large amounts of suspended soils in the water, which isn't affected by CSOs.

If you see discharge to the river, such as the one you describe, please note the date, time and location and report it to 311.

2 comments on "How are CSO controls measured?"



Carolyn Garlich says:

October 1, 2015 at 9:14 pm

Both measures are important, but the frequency of sewer overflows tells us more about the adequacy of the system. The volume depends more on an act of nature.



waterandwasteadmin says:

October 5, 2015 at 9:30 am

Thank you for your comment.

The combined sewer system is designed to capture 2.75 times the dry weather flow and convey this to the wastewater treatment plants. In this respect, the system is working as it was intended.

3 comments on “What are the potential ways that we can implement CSO control strategies?”



carole keeley says:

September 9, 2015 at 9:31 pm

water resevoirs. there were so many in the city and they slowly being taken away for new neighbourhoods. water retainments for drought seasons..when there is too much rain on one side of the country there is always drought and forest fires else where. heck even water reserves for fire stations ease up on the water supply from shoal lake..so many ways. air it all to the public before the meetings so thee usca constant flow of feedback and ideas. water reserves that can be used for the organic compost strategy program..air like a political campaign people..



Carolyn Garlich says:

October 1, 2015 at 9:26 pm

It is important that we increase permeable surfaces and decrease the impermeable. The city defeats this objective when it requires parking lots to be paved with impermeable materials instead of something like quarter round.

All of the strategies are important. Citizens can do their part, but the heavy work has to be done by the city.

It has been years since the Clean Environment Commission ordered the city to start replacing the combined sewer system. Get on with it!



waterandwasteadmin says:

October 5, 2015 at 9:28 am

Any development in the City is required to meet pre-development run-off flows. An example would be a gravel site is later developed, the run-off from the new development would have to be designed to discharge the same as if it was the gravel site.

Since the Clean Environment Commission hearings, we have been doing our part to mitigate CSOs through sewer separation and operational improvements.

2 comments on “What would happen if we fully separated sewers?”



Carolyn Garlich says:

October 1, 2015 at 9:12 pm

Of course the work would not all be done at once, but it is important to begin the work, and organize it to get the minimum disruption, for example not too much in the same area at the same time. It should be a concentrated effort so that the work would be completed in as short a time as possible.



waterandwasteadmin says:

October 5, 2015 at 9:31 am

Thank you for your comment.

Sewer separation will have the greatest impact on livability of the control options being considered. Typical sewer renewals cause only localized traffic disruptions unless it is on a major traffic route. However, sewer separation could involve sewer construction on potentially every street throughout a neighbourhood. An implementation program will be developed once a control option is selected by the Province.

One comment on “How does development impact CSOs?”



Gord Richardson says:

February 25, 2015 at 9:45 am

It's a good thing run-off control regulations are in place that force developers to act responsibly because the 'bottom line' mentality would guarantee no such provisions would be made. A long, narrow bungalow condo development was recently completed in SW River heights along the former CN Rail Oak Point Subdivision right-of-way all the way from Corydon north to Academy Road. I was pleased to see absolutely gigantic fibreglass tanks buried deep beneath the homes' basements about every second or third set of bungalows. I suspect the temporary storage capacity of these

tanks will ensure less run-off than even a primarily grassy strip of land was able to provide. I live behind a still-undeveloped segment of that right-of-way and during heavy rains and snow-melts, considerable water flowed visibly off the grass onto the lane and into the catch basins.