M A N I T O B A	**Order No. 56/12**
THE PUBLIC UTILITIES BOARD ACT	**May 3, 2012**

BEFORE: Susan Proven, P.H.Ec, Acting Chair
Monica Girouard, CGA, Member
Raymond Lafond, CA, Member

A HEARING IN REGARDS TO THE CITY OF WINNIPEG'S WATER & SEWER UTILITIES

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1.0 EXECUTIVE SUMMARY

While the water utilities and the sewer utilities in the Province of Manitoba are subject to regulation by The Public Utilities Board (Board or PUB), the City of Winnipeg's (City) water and sewer utilities have a statutory exemption, such that the City's water and sewer rates are currently the only water and sewer rates in Manitoba not subject to approval by the Board. This peculiar situation arises from section 210 of the *City of Winnipeg Charter*, which provides the City with authority to set its own rates.

> *210(5) Despite The Public Utilities Board Act, the city may, as provided in this Act, establish prices, rates, fees, deposits or other charges for any commodity or service that the city supplies and, for that purpose, the city need not obtain any approval from The Public Utilities Board, the intention being that the city may establish such amounts and use the revenues there from for the general purposes of the city and not solely for the purposes of offsetting any costs related to supplying the commodity or service.*

Nonetheless, the Board has a general and supervisory jurisdiction over the City's water and sewer utilities.

On December 19 and 20, 2011, under the Board's general supervisory jurisdiction, the Board held a two-day informational Hearing with respect to the City's water and sewer utilities. The purpose of this Hearing was not to set water and sewer rates but to examine, in an open and transparent forum, how the City finances, manages and operates its water and sewer utilities.

This Order sets out the Board's findings with respect to the City's water and sewer utilities and provides a number of recommendations for consideration based on the Board's review of evidence provided by the City and the Board's significant experience in regulating other water and sewer utilities in the Province.

Overall, the Board found the City's water utility and sewer utility to be in excellent financial health, with combined surpluses of $1.6 billion as of December 31, 2010. The City's water utility generated annual operating surpluses of $41 million in 2008; $25 million in 2009; and $21

million in 2010. The City's sewer utility generated annual operating surpluses of $73 million in 2008; $64 million in 2009; and $65 million in 2010.

However, among dividends, property taxes, low interest rates received on funds due from general revenue, the office rent being charged to the utilities, and the land drainage subsidy, the Board estimates the water and sewer utilities cross-subsidize the City's general revenue fund by approximately $45 million per year.

Collectively, the above noted dividends and cross-subsidies lead the Board to conclude that approximately 20% of water and sewer utility revenue is not used for purposes of the water and sewer utilities, but rather, is directed to the City's general coffers. This represents a hidden property tax increase that should be made explicit and transparent.

The money currently being transferred to the City's general revenue fund by explicit dividends and implicit subsidies, as well as the annual operating surpluses, could be used to significantly accelerate the removal of existing infrastructure deficits, including the separation of combined sewers (to reduce or eliminate raw sewage discharges into rivers) if such monies were kept and used in the two utilities.

As a result of this Hearing, and having examined specifics of the City's water utility and sewer utility, the Board is of the view that it would be in the public interest for the Public Utilities Board to regulate the rates charged by these utilities.

These utilities are being limited in the full performance of their mandate, and responsibilities to the ratepayers, by utility rate revenues being transferred for non-utility purposes.

To rectify that deficiency, the Board recommends the City's statutory exemption from PUB rate regulation (in Section 210 (5) of the *City of Winnipeg Charter* – as set out above) be removed.

Concurrent with the preceding recommendation, the Board also recommends the City develop a plan to migrate towards having the Board approve rates for commodity and service charges levied by the City's water and sewer utilities on their customers. The Board recognizes

alternative revenue sources (or program revisions) may be required to sustain those programs currently subsidized by the water and sewer utility ratepayer.

Under the Board's regulation of water and sewer rates, there would be transparency of the reasons for rate changes and the ability to participate and scrutinize the utility expenditures, (both capital and operating) and scrutinize the allocation of costs to various customer classes.

2.0 INTRODUCTION AND BACKGROUND

2.1 Regulation of Water & Sewer Utilities in Manitoba

The Public Utilities Board (PUB) was established in 1912 as an overseer of the Province's monopoly utilities and the Board will celebrate its centennial in 2012. The rationale behind a regulator, like the PUB, is a simple one: while in the free market, competitive market pressures are expected to keep prices under control and prevent undue profiteering. Monopoly utilities face no competitive pressure, as consumers are effectively bound to use the services of the monopoly. Utility regulators like the PUB have been statutorily created to provide oversight, accountability and rate setting approval. Among the monopolies regulated by the PUB are Centra Gas Manitoba Inc, Manitoba Public Insurance, Manitoba Hydro, Stittco Utilities Man Ltd., Swan Valley Gas Corporation and most municipal and private water and sewer utilities in the Province. Unlike other water and sewer utilities in Manitoba, whose rates must be approved by the PUB, the City has the power to set its own rates by virtue of section 210(5) of *The City of Winnipeg Charter*, S.M. 2002, c. 39, (*Charter*), which states as follows:

> *210(5) Despite The Public Utilities Board Act, the city may, as provided in this Act, establish prices, rates, fees, deposits or other charges for any commodity or service that the city supplies and, for that purpose, the city need not obtain any approval from The Public Utilities Board, the intention being that the city may establish such amounts and use the revenues there from for the general purposes of the city and not solely for the purposes of offsetting any costs related to supplying the commodity or service.*

2.2 The PUB's General Jurisdiction Over Utilities

Section 74 of *The Public Utilities Board Act*, CCSM c. P280 (*The Public Utilities Board Act*) provides the PUB with a broad general supervisory jurisdiction over public utilities:

> *74(1) The board has a general supervision over all public utilities and the owners thereof subject to the legislative authority of the Legislature, and may make such orders regarding equipment, appliances, safety devices, extension of works or systems, reporting, and other matters, as are necessary for the safety or convenience of the public or for the proper carrying out of any contract, charter, or franchise involving the use of public property or rights.*

Normally, the PUB's broad power also extends to rates, but, as set out in section 2.1 above, the City has the exclusive power to set its own rates.

By virtue of the definition of "public utility" in *The Public Utilities Board Act*, any system for the production, transmission, delivery or furnishing of water is deemed to be a public utility and thus subject to PUB oversight. With respect to sewage systems, section 2(6) of *The Public Utilities Board Act* provides as follows:

> *2(6) The board may declare any system of sewage collection or disposal, including all works, plants, sewage lines and equipment pertaining thereto, to be a public utility; and thereupon that system is a public utility under this Act.*

The Board has previously declared the City's sewer works as a public utility.

2.3 The Purpose of This Hearing

The PUB called this hearing as an informational hearing for the Board and the public to learn more about the City's water and sewer utilities, facilitate transparency around water and wastewater operations, and issue recommendations based on the Board's findings on the evidence.

2.4 Procedural History of the Hearing

In most cases, the PUB deals with municipal utilities by way of rate applications to the PUB brought by those municipalities. Since the City's water and sewer rates are not subject to rate approval by the PUB, no hearing has ever been requested by the City and none has taken place with respect to the City's water and sewer services.

In 2009, the City of Winnipeg was contemplating a new service delivery model for its sewer services that, if implemented, would have resulted in a separate municipal sewer utility, the rates for which would likely have become subject to PUB jurisdiction. In an effort to understand the implications of the City's plan at the time, the Board held several meetings with City staff over the course of 2009 and 2010.

The Board eventually determined that to understand the City's water and sewer systems' current structure and operations, and to determine the Board's role with respect to those utilities, an informational hearing would be required. To allow for the gathering and sharing of information through a hearing process, the Board followed its usual processes and procedures, including the issuing of a public Notice in November 2011. That Notice was published in English and French-language newspapers in Manitoba, indicating that the PUB would conduct an informational hearing from December 19 to December 20, 2011.

Because this Hearing was an informational public hearing, no Interveners were anticipated, nor did the PUB receive any requests for Intervener status. The PUB allowed Presenters, but no requests for Presenter status were received either.

Leading up to the Hearing, the City filed documentation on April 6, 2011, November 22, 2011, and December 14, 2011 in response to PUB requests for information. Additional documentation was filed in the course of the Hearing and some of the City's responses (and supporting documentation) to questions were provided in writing after the Hearing. The Hearing took place in the Board's Hearing Room over the course of two days, on December 19 and 20, 2011.

2.5 The PUB's Objectives for Water and Sewer Utilities

The PUB's objectives in regulating water and sewer utilities are to ensure: rates are just and reasonable; the utilities are self sustaining and not receiving or providing cross subsidization to other municipal government expenditures; utilities have the financial strength to supply services in compliance with government regulations; utilities are operating efficiently and: information is open and transparent for the public.

The PUB has identified eleven objectives for municipal water and sewer utilities when assessing their application for rate revisions, against which it has also evaluated the City's water and sewer utilities:

1. Water and sewer services should meet provincial and federal standards and objectives (health, safety, environment & conservation);
2. No subsidy of the municipal government's General Operating Funds (property taxes) should come from water and sewer utilities' rate revenues;
3. An understanding as to the utilities' required capital expenditures, and corresponding funding for those capital expenditures, for the next five years;
4. Public Sector Accounting Board (PSAB) - compliant financial statements;
5. Adequate annual revenue to avoid utility deficits (exception for PUB provision for amortizing grants against amortization expenses related to capital assets);
6. Fair and reasonable rate schedules for all customer categories, including rates that promote conservation;
7. Ratepayers' awareness of rates and plans of the utility, and the opportunity and ability for ratepayers to express any related concerns to the PUB;
8. Avoidance of rate shocks wherever possible;
9. Efficient operations;
10. Avoidance of excessive regulatory costs; and

11. Full and transparent disclosure of results, plans and circumstance of the utility to the PUB and ratepayers – except in circumstances where the Board is satisfied its Rules of Confidentiality need to be invoked.

In general, the PUB tries to ensure the ratepayer receives fair value for rates paid in the provision of utility services. It is with these objectives in mind that the PUB proceeded with this informational hearing related to the City's water and sewer utilities.

Although the Board does not have jurisdiction to approve the water and sewer rates charged by the City, the PUB felt it was important to have an understanding of the City water and sewer operations. The Board also felt it was beneficial to test information in a public forum on the overall efficiency and operations of the utilities as the City moves forward on a significant capital investment plan to replace and upgrade infrastructure.

The Board's findings are set out at the end of each of the topics discussed below.

3.0 OVERVIEW OF THE CITY OF WINNIPEG'S WATER AND WASTE DEPARTMENT

3.1 Organization of the Water & Waste Department

The City's Water & Waste Department is divided into three subsections, namely Solid Waste, Water & Sewer, and Land Drainage. The Director of the Water & Waste Department reports to the City's Chief Administrative Officer through the Chief Operating Officer. Within the Department, each subsection has its own management and supporting engineering and other staff. The City's witnesses, who testified before the Board, were impressive in their knowledge and presentation.

3.2 Existing Water and Sewer Infrastructure

3.2.1 The Shoal Lake Aqueduct

The City receives all of its water from Shoal Lake, which straddles the Manitoba/Ontario border. From Shoal Lake, the water flows to Winnipeg through the Shoal Lake Aqueduct. The aqueduct was initially built in 1919 and has been subject to maintenance work several times since. Water flow in the aqueduct is by gravity, and the aqueduct's current capacity is 386 million litres/day (Ml/d). From the intake of the aqueduct, water flows approximately 157 km westward towards Deacon Reservoir.

Although Shoal Lake itself stretches across both Manitoba and Ontario, the entry to the Shoal Lake Aqueduct lies within Manitoba. As such, the City does not require any Ontario permits to draw water. The City does, however, have an agreement (Agreement #7846) with Shoal Lake Indian Band No. 40 situated close to the entry point, dating back to 1989, that saw the City pay a one-time sum of $3 million, with an equal amount paid by the Province, into a trust account for the benefit of that First Nation, from which interest is disbursed to the First Nation on an annual basis. The $6 million principal amount of the trust created under the Agreement is to be disbursed to the Band on the expiry of the full 60 year term.

3.2.2 Deacon Reservoir

Deacon Reservoir is a large water reservoir consisting of four basins with a total storage capacity of 8.8 billion litres. It is sufficiently sized to provide the City with a 30-day supply of water if something were to happen to the Shoal Lake Aqueduct.

3.2.3 The Water Treatment Plant

Winnipeg's new water treatment plant, located east of the City at the Deacon Reservoir, is a relatively new facility that came into operation in 2009. It has a water treatment capacity of 400 Ml/d, which is slightly more than the daily flow capacity of the Shoal Lake Aqueduct. The PUB confirmed, at the Hearing, that the treatment plant is a state-of-the-art facility which complies with all federal and provincial drinking water guidelines.

3.2.4 Water Distribution

From the City's water treatment plant location at the Deacon Reservoir, two branch aqueducts totalling 44 km bring water into the City. The City itself has approximately 2,500 km of water mains, 150 km of feeder mains, and 1,850 km of water services lines. Within Winnipeg, there are three reservoirs and pumping stations at the McPhillips Reservoir, the Wilkes Reservoir, and the Maclean Reservoir. The City has approximately 200,000 metered water customers.

3.2.5 Sewer System

The City has approximately 2,500 km of below-grade sewer mains, 1,800 km of storm sewers, 119 km of interceptor sewers and 115 pumping stations. For land drainage purposes, the City also has 71 retention ponds that temporarily hold storm water. Approximately 30 percent of the City is serviced by older combined sewers that carry both wastewater and storm water runoff.

3.2.6 Wastewater Treatment Plants

The City has three wastewater treatment plants, known as the North End Water Pollution Control Centre ("NEWPCC"), South End Water Pollution Control Centre ("SEWPCC") and West End Water Pollution Control Centre ("WEWPCC"). The NEWPCC treats approximately half of the sewage generated in the City, as well as hauled wastewater from septic tanks and leachate from Brady Road Landfill. The SEWPCC and WEWPCC are smaller facilities serving the remainder of the City. Effluent from the WEWPCC is discharged into the Assiniboine River; effluent from the NEWPCC and SEWPCC is discharged into the Red River. Biosolids left over from sludge treatment are disposed of at Brady Road Landfill.

3.3 Departmental Staffing Levels

The water utility's staffing level is as follows:

Water Services	278
Finance	58
Engineering	42
Environmental Standards	9
Customer Services	19
Information Technology	9
Human Resources	12
Total	427

The sewer utility's staffing level is as follows:

Wastewater Services	237
Finance	48
Engineering	48
Environmental Standards	26
Customer Services	18
Information Technology	8
Human Resources	10
Total	394

3.4 Board Findings

The City's water and sewer utilities are, by far, the largest in the Province of Manitoba, serving almost 2/3 of the Province's population. The two utilities are not subject to the Board's oversight with respect to rate-setting and the City refused to answer most questions relating to rate-setting practices. As such, the Board was not presented with the City's Cost of Service Study and could not review some of the City's cost allocation factors for determination of rate design issues. While the Board recognizes that utilities the size of those of the City may face certain administrative challenges not faced by smaller water and sewer works, the Board hopes that, despite the City's rates not being subject to oversight by an independent body, the City

reviews and eliminates inefficiencies on a regular basis. The Board is interested in the specific processes used by the City to identify and capitalize on possible efficiency improvement opportunities, such that the ratepayers are continuously being delivered value. The Board therefore recommends that the two utilities review their staffing levels and provide 'benchmarking' studies, against comparable utilities. The Board would also recommend the City investigate opportunities to integrate various functions such as finance with other city functions to maximize efficiency where appropriate. The City should also consider independent reviews of organizational structure and service delivery mechanisms for efficiency.

4.0 CONSUMPTION AND CONSERVATION

4.1 Decreases in Consumption Levels

When the City commissioned a water consumption study in the early 1990s, the study concluded that based on then current and projected water consumption levels by its customers, a new aqueduct would be needed within the next 20 years, and a new water source might also be needed to meet projected demands. This prompted the City to undertake several water conservation initiatives in the 1990s, including an education campaign known as "Slow the Flow", and, ultimately, the offering of rebates for the installation of water-efficient toilets. These initiatives were highly successful and the City is to be commended. From 1990 to 2011, per-capita consumption of water in Winnipeg dropped from more than 450 litres per day to just 300 litres per day, while total consumption dropped from 250 Ml/d to just over 200 Ml/d despite a growth in overall population of 80,000 people.

4.2 Impacts

The impact of the decrease in consumption has been significant. The City no longer requires an aqueduct expansion, as current consumption projections remain well below 386 Ml/d. In fact, the City's new water treatment plant, envisioned in the 1990s as needing a capacity of 750 Ml/d,

ended up only requiring a capacity of 400 Ml/d. Similarly, the expansion of in-city reservoirs to handle peak loads has been put on hold indefinitely.

Nonetheless, the financial downside for water utilities when it comes to conservation is that less water sold equates to less rate revenue, which in turn leads to higher unit rates. However, as this Board is always mindful to point out, customers do not pay rates – they pay bills. Higher unit rates can well be offset by conservation and ultimately lead to lower customer bills.

4.3 Unaccounted-For Water

All City water customers are metered. The City does not offer any unmetered flat-rate services. Nonetheless, currently approximately 15 percent of water is used for non-revenue purposes such as firefighting, fire training, watermain breaks, leakage and street sweeping. The Board refers to those non-metered amounts as "unaccounted-for water". The City advised that it is currently engaged in a study to determine the breakdown of non-revenue water consumption to gain a better understanding of the source of the unaccounted-for portion of Winnipeg's water utility.

4.4 Board Findings

The Board concludes that the City should be justifiably proud of its water conservation achievements. The City's success in reducing water consumption has allowed it to build a smaller and less expensive water treatment plant than originally envisioned and hold off construction of a new aqueduct for 50 years longer than initially planned, despite robust population growth. These opportunity cost savings are expected to be significant.

With respect to the City's unaccounted-for water, the Board is heartened by the City's indication that it is studying the breakdown of these water losses. The Board advises other regulated water utilities that it hopes they will achieve less than 10 percent unaccounted-for water. While the City may be using some of the water in this category for important purposes such as firefighting and street cleaning, a break-down will be helpful to the City in determining any potential inefficiencies.

The City's demonstrated commitment to water conservation also underscores the Board's comments, in section 5.4 of this Order that the City move to a single-tier water rate, as the City's present rate structure allows increased consumption at decreased unit costs, which runs contrary to the City's commitment to conservation.

5.0 RATES AND RATE STRUCTURE

5.1 Water Rates

The City's basic water rate is a 'declining block structure', prices for which were as follows in 2011:

- Block 1 - 0-272 m^3 per quarter: $1.34/$m^3$
- Block 2 - 272.1-2,720 m^3 per quarter:$1.17/$m^3$
- Block 3 - 2,720.1+ m^3 per quarter: $1.00/$m^3$

According to the City, virtually all residential customers fall within Block 1, while most commercial operations fall into Block 2. Block 3 is primarily made up of large industrial customers.

The City also charges a daily meter rental rate for water meters, depending on the diameter of the service line, which varies from $0.15 per day for a 5/8 inch meter to $4.04 per day for a 10 inch meter. The meter rental fee is allocated 80 percent to the water utility and 20 percent to the sewer utility, a ratio which is reflected on the City's invoices for water and sewer services.

Over the past decade, water rates have increased by approximately 38% for Block 1 customers, 46% for Block 2 customers, and 59% for Block 3 customers. The City projects further increases over the next decade that are in a similar range.

5.2 Sewer Rates

Unlike the City's water rates, the City's sewer rates for 2011 were billed at a single-block rate of $\$1.97/m^3$.

Pursuant to the City of Winnipeg Sewer By-Law, the City also charges a flat rate of $\$7.15/m^3$ for hauled wastewater deposited at one of the City's wastewater treatment plants and charges 'over strength' surcharge rates to certain industrial customers generating wastewater with a higher total suspended solids (TSS) content or higher biochemical oxygen demand (BOD) than stipulated in the By-Law.

Despite the fact that the City's water and sewer utilities are part of the Water & Waste Department, which also deals with solid waste, the City advised that no revenues from water and sewer rates are used to pay for solid waste services. When the City disposes of biosolids, from the NEWPCC, at the Brady Road Landfill, the landfill charges tipping fees to the sewer utility. Conversely, when leachate from the Brady Road Landfill is treated at the NEWPCC, the sewer utility charges the solid waste section for the treatment.

5.3 Revenues and Surpluses

In 2010, and according to the audited financial statements, the City realized approximately $83,462,000 in revenues from water rates. Including interest income and income from government transfers, permits, and other sources, total 2010 water revenues were approximately $87.6 million. Total expenditures from operations were approximately $66.1 million, yielding a $21.5 million surplus in 2010. (the 2009 surplus was $25.4 million) $12 million of that 2010 surplus was transferred into the City's water main renewal reserve. The remainder was added to the City's accumulated surplus for the water utility, which, at the end of 2010, stood at $755 million.

The City's sewer system is accounted for separately from the water system. In 2010, the City realized approximately $121,270,000 in revenues from sewer charges. Including interest income and income from government transfers, permits, and other sources, total 2010 sewer utility

revenues were approximately $129.7 million. Total expenditures from operations were approximately $64.5 million, yielding a $65.2 million surplus. (the 2009 surplus was $64.7 million). Of the 2010 surplus, $12 million was transferred to the City's sewer system rehabilitation reserve, $11.9 million was transferred into the environmental projects reserve and $13.4 million was transferred into the City's general revenue fund. The City advised that this $13.4 million transfer was earmarked entirely for the City's land drainage program. The remaining $27.8 million was added to the City's accumulated sewer utility surplus, which, at the end of 2010, stood at $863.4 million.

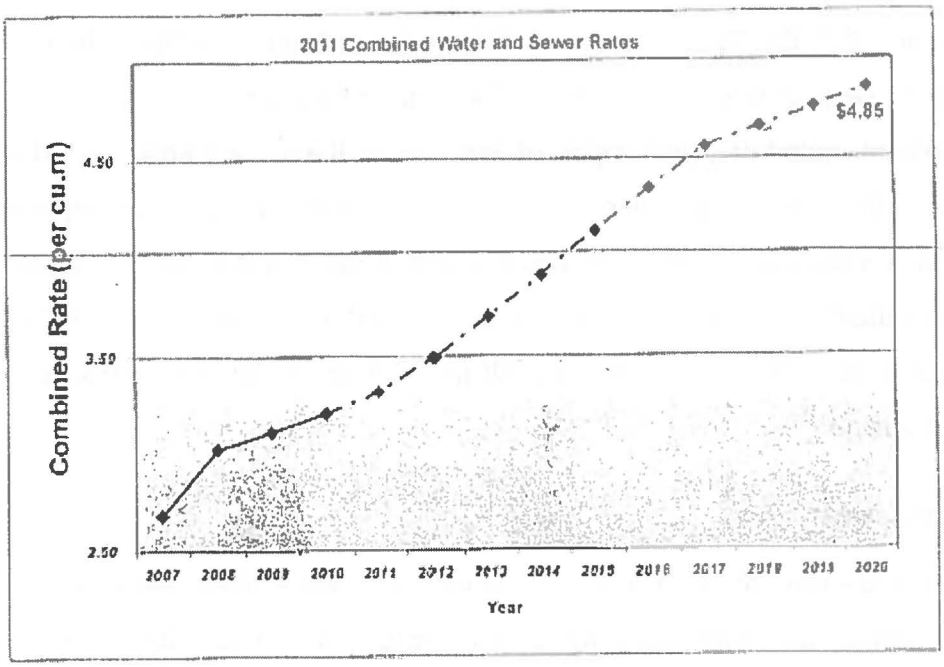
5.4 Board Findings

The PUB has consistently discouraged declining block rates for utility services due to the disincentive for conservation set by such a rate structure. Despite the City's commendable conservation efforts to date (see section 4.0), the PUB accordingly recommends the City consider moving to a single-block rate for all water consumption, as is already done for sewer rates. However, the Board also notes that increases to Block 2 and Block 3 over the past decade have been higher than increases to Block 1, such that there appears to be a very gradual trend of Block 2 and 3 rates approaching the rates charged to Block 1 customers.

By way of example, the Board notes that the City has recently published rate increases for 2012, for both the water and the sewer utilities:

Water Rate (per cubic metre)	**2011 Rate**	**2012 Rate**
0-272	$1.34	$1.35
272.1-2,720	$1.17	$1.20
Over 2,720	$1.00	$1.12
Sewer Rate (per cubic metre)	$1.97	$2.10

Future rate increases have not been confirmed, although the City did provide the following graph outlining projected future rate increases.



A typical residential customer's annual water and sewer bill will increase by $26.40 to $849.40 in 2011.

This graph indicates the City water and sewer utilities are projecting an approximate 40% increase in overall rates by 2020.

Overall, the Board concludes that the City's water and sewer utilities are in excellent financial health with an approximate 11:89 capital structure (debt to equity ratio), which includes $1.65 billion of combined utility surpluses. The City water and sewer utilities are certainly in better financial health than many other municipal water and sewer utilities in Manitoba.

6.0 CROSS-SUBSIDIZATION

6.1 Introduction

As set out in section 2.5, the Board's policy is that water and sewer utilities should be self-sustaining, but at the same time should not be used to fund shortfalls in a municipality's general revenue. The apparent underlying philosophy of the *City of Winnipeg Charter* is different, as section 210 permits the City to use water and sewer rate revenues for general purposes of the City. In the Board's assessment of the evidence adduced at the Hearing, the City makes use of this power both explicitly and implicitly by way of five different subsidies (i) dividends, (ii) payment of municipal taxes by the utilities, (iii) subsidized interest rates, (iv) office rent and (v) transfers to land drainage.

6.2 Dividends

The City historically has paid dividends out of the water and sewer utilities, to be used as part of the City's general budget, and continues to do so on an annual basis. The budgeted dividends for 2011 were $7 million from the water system and $10 million from the sewer system, for a total of $17 million. These dividends represent an explicit cross-subsidization of the City's general revenue fund through water and sewer rates.

Compared to the City's overall annual revenues of more than $1.2 billion, the dividends totalling less than $20 million are still significant. In 2010, the City's actual rate revenue from water sales was approximately $83.5 million. A $7 million dividend from that amount means that more than 8 percent of the City's water rate revenue is currently not used for purposes of operating and maintaining the City's drinking water system but instead subsidizing the City's general expenditures.

The situation is similar for the City's sewer utility. In 2010, the City's actual sewer rate revenues were approximately $121.2 million, which means that a dividend of $10 million represents 8 percent of the City's total sewer rate revenue.

6.3 Property and Other Taxes

The City's water and sewer utilities also paid property and other taxes back to the City in the amount of $2.2 million and $7.9 million respectively in 2010. Since the City's new water treatment plant is located in the Rural Municipality of Springfield, the City also pays a grant in lieu of taxes to that municipality. The City advised that the rationale behind requiring utilities to pay property taxes is to treat the utilities as fully-costed. However, as a regulator of other municipal water and sewer utilities in the Province of Manitoba, the Board can advise that it is not aware of any other such utility being required to pay property taxes to the respective municipality that owns and operates its own utility. In the Board's view, these property taxes do not constitute a genuine expense to the City's water and sewer utilities, but rather serve to recover amounts through water and sewer rate revenue that would otherwise have to be recovered through property taxes on private property.

6.4 Interest Rates

The City's water and sewer utilities do not have their own bank account. The City operates a centralized treasury with a single operating bank account in the general revenue fund. The water and sewer utilities' funds are thus booked as "Due from General Revenue Fund". The utilities receive interest on these funds at the Bank of Canada rate, which is currently 0.9%. This means that the City, in essence, has use of the funds as a low-interest loan at 0.9% interest until they are required by the utilities.

The 0.9% interest rate in no way reflects the external borrowing costs of the City or the borrowing costs of the City's water and sewer utilities. The City holds a range of long-term and short-term debt. As indicated in the City's financial statements, the most recent long-term (2010-2041) debenture has an interest rate of 5.15 percent, the City's serial and instalment debt has a

weighted average interest rate of 4.82 percent, and the City's provincial and bank loans have a weighted average interest rate of 3.69 percent. As such, the interest rate on what the City pays to the utilities for use of their funds and what the City pays on external debt is significantly different.

For example, the amounts "Due from General Revenue Fund", to the water utility were $56.8 million in 2010 and $70.0 million in 2009. Similarly, the amounts "Due from General Revenue Fund" to the sewer utility were $70.9 million in 2010 and $59.7 million in 2009. The City 'borrowed' these amounts from its water and sewer utilities and paid an interest rate of 0.9%, rather than the prevailing market rate of interest. This is another example of a cross subsidy from the water and sewer utilities to the City.

6.5 Office Rental

The City's water and sewer utilities are also required to pay office rent to the City. In 2010, the water and sewer utilities each spent $1.1 million in office rent. In the Board's view, this too is unusual, as the Board is not aware of any other municipal water and sewer utilities being charged rent by their owner. The City advised that these amounts reflect a rent of $20.50 per square foot per year. While the Board did not receive evidence in this hearing as to the average office rental rates in Winnipeg, the Board is concerned that the rental rates are high and that the requirement for both utilities to pay rent constitutes another subsidy of the City's general revenues.

6.6 Transfers to Land Drainage

Although land drainage is generally funded by property tax revenues rather than from water and sewer rates, the City does subsidize its land drainage operations from sewer rates. In 2010, the City transferred $13.4 million from the sewer utility to the general revenue fund to be used for land drainage purposes.

While combined sewers (see section 10.0) can have both a sewage and a land drainage function, the Board understands that the City's combined sewers are in fact financed wholly through the

sewer utility and are not included in the $13.4 million amount transferred to the City's general revenues.

In the Board's view, land drainage is not causally related to water consumption or the use of sewer services. It is, rather, a function of property standards, lot grading, and the built environment. As such, the Board considers it inappropriate to use sewer rates to finance land drainage. Land drainage should be financed through the City's general property tax rates, frontage fees, or other tax-based mechanisms, not through utility charges.

6.7 Board Findings

Among dividends, property taxes, the low interest rate received on funds due from general revenue, the office rent being charged to the utilities, and the land drainage subsidy, the Board estimates the water and sewer utilities cross-subsidize the City's general revenue fund by almost $45 million per year.

Since in 2010 the City collected a total of $550 million in property taxes, the cross-subsidy represents approximately eight percent of the City's overall tax revenue. This is a very significant percentage, and the Board is left to conclude that because of such a cross-subsidy, property tax rates have been held constant over the past dozen years.

While the Board recognizes the City's legal authority to fund general revenues from its utility rates, the City's approach conflicts with the principles the Board applies to other utilities. The Board's concerns are primarily of fairness and transparency.

From 2001 to 2010, the City's combined water and sewer rate has increased from $1.94/$m^3$ to 3.20/m^3, or 65 percent, while the rate of inflation over that timeframe was only 20 percent. The City is projecting a further 40% increase by 2020.

Collectively, the above-noted dividends and cross-subsidies lead the Board to conclude that approximately 20 percent of water and sewer rate revenue is not used for purposes of operating

the water and sewer utilities, but rather, is redirected to the City's general coffers, and this represents a hidden property tax increase that should be made explicit and transparent.

The Board also notes the City's testimony at the Hearing that there currently is a significant infrastructure deficit. The City advised that the total water main renewal backlog is $200 million, while the sewer main renewal backlog is $300 million. Furthermore, the City's Combined Sewer Overflow strategy (see section 10.0/10.5) is progressing, but only slowly.

The money currently being transferred to the City's general revenue fund by explicit dividends and implicit subsidies, together with annual operating surpluses, could be used to significantly accelerate the removal of existing infrastructure deficits, including the separation of combined sewers, (to reduce or eliminate raw sewage discharges into rivers) if such monies were kept and used in the City's water and sewer utilities.

Based on the foregoing, the Board renews its call, as contained in its Annual Reports to Government, for all water and all sewer utilities in Manitoba to be subject to rate regulation by this Board. The Board sees it as illogical, inconsistent and unfair to ratepayers to have different regulatory regimes based on the geographic location of the water and sewer utility within the Province.

As a result of this Hearing, and having examined specifics of the City's water utility and the City's sewer utility, the Board is of the view that it would be in the public interest for the Board to regulate the rates charged by these utilities.

These utilities are being limited in the full performance of their mandate, and responsibilities to the ratepayers, by utility rate revenues being transferred for non-utility purposes.

To rectify that deficiency, the Board recommends the City's statutory exemption from PUB rate regulation (in Section 210 (5) of the *City of Winnipeg Charter*) be removed.

Concurrent with this preceding recommendation, the Board also recommends the City, develop a plan to migrate towards having the Board approve rates for commodity and service charges

levied by the City's water and sewer utilities on their customers. The Board recognizes alternative revenue sources (or program revisions) may be required to sustain those programs currently subsidized by the water and sewer utility ratepayer.

Under the Board's regulation of water and sewer rates, there would be transparency of the reasons for rate changes and the ability of ratepayers to participate and scrutinize the utility expenditures, (both capital and operating) and scrutinize the allocation of costs to various customer classes, all in pursuit of 'just and reasonable' rates that are in the public interest.

7.0 DISCONNECTIONS

7.1 The City of Winnipeg's Disconnection Procedures

The City uses disconnection of the water supply as a last resort if a water/sewer bill remains unpaid.

Water and sewer bills are issued by the City on a quarterly basis. The due date for the bill is 30 days after the date of the bill. Forty days after the bill date, the City issues a reminder notice. If a property is occupied by a tenant, the landlord (i.e., the registered property owner), also receives a copy of the notice. Once an account is an additional 30 days overdue, the City issues a turn-off notice, which is also copied to any landlord. Following the turn-off notice, the City attempts to reach the customer by telephone.

If the City does turn off the water supply to a property, it provides a same-day payment option to have the service reconnected. Once a property has been turned off for a period of 30 days, the City revisits the property to ensure that the supply has actually been turned off. If the City believes that the residents of the property require assistance, the City provides the information to the environmental health office. Reconnection takes place only after payment.

To the extent that services remain unpaid, the City adds the amount to the property taxes for the underlying property, regardless of whether the property is owner-occupied or tenant-occupied.

In 2010, the City disconnected 3,452 properties, representing slightly less than two percent of the City's total water customer base. This amount is slightly higher than usual as the City suspended disconnections in late 2009 due to an ongoing move to a new customer information system. Accordingly, some disconnections that would have taken place in 2009 only took place in 2010. In 2011, the City indeed noted a decrease in the number of disconnections.

7.2 Board Findings

In Order 39/09 issued by the Board on April 17, 2009, the Board adopted Conditions Precedent Allowing for Collection and Disconnection of Water and/or Sewer Services for Non-Payment of Accounts ("Conditions Precedent"). To date, the Conditions Precedent has not been applied to the City. However, on a review of the City's existing practices, the Board is pleased that the City already substantially complies with the Conditions Precedent. There are, however, specific requirements set out in the Conditions Precedent that may deviate from the City's existing practices. These are as follows:

- Section 5.1 of the Conditions Precedent requires municipalities to send out a total of two reminder invoices. The first reminder should be sent after 31 days, while the second reminder should be sent after a further 45 days. From the time of the second reminder, customers should have another 14 days to make payment before their water is disconnected.

- The City currently sends a first reminder after 40 days and a second reminder after another 30 days. However, it only disconnects the water supply 40 days from the second reminder. As such, the City is more generous with respect to the total timeframe between billing and disconnection than required by the PUB, but the timing of reminder invoices does not correspond to that in the Conditions Precedent.

- Section 4.6 of the Conditions Precedent requires any municipal water utility to apply to the PUB prior to disconnecting service to a community or to multiple residences or properties. This requirement is triggered, for example, where a bulk-metered multiple

residential dwelling is threatened with disconnection. The PUB understands that the City currently does not follow this practice.

- Customers have a right to appeal their disconnection to the PUB, and section 5.1 of the Conditions Precedent requires the final notice to contain a statement to that extent. The pro-forma final notice provided to the Board in this hearing did not contain notice of any right to appeal a disconnection.

While section 210 of the *Charter* indicates the Board does not have jurisdiction over the City's rates for services, the City is subject to the same Board regulation of municipal water and sewer utilities as other municipalities in the Province. The Board believes it would be beneficial to gain further understanding as to the City's disconnection procedures, including the steps and procedures and options available for a customer to appeal a notice of disconnection.

8.0 CAPITAL EXPENDITURES AND CAPITAL BUDGET

8.1 Capital Expenditures

The City's water and sewer utilities are capital-intensive operations. From 2011 to 2016, the City expects to make the following capital expenditures, as set out in the City's 2011 adopted Capital Budget:

- Waterworks Upgrades: $79 million
- Watermain Renewals: $92 million
- Sewage Disposal System: $815 million
- Sewer Renewals: $90 million

8.2 Financing of Capital Projects

The planned waterworks upgrades are to be financed entirely by retained earnings, while the watermain and sewer renewals are to be financed through the watermain and sewer renewal reserves, respectively. The latter funds are not true "reserves" as much as segregated funds. The money in these funds is set aside out of operating revenues in any given year and usually earmarked for spending in the same year.

There are two noteworthy exceptions to the City's mechanism for financing infrastructure renewal through current revenues. Firstly, the City's water treatment plant was financed primarily through debt by way of long-term debentures maturing in 2036. Secondly, the City's proposed upgrades to the North-End Water Pollution Control Centre (NEWPCC) and related alternative biosolids disposal management system will be financed in a similar manner. Specifically:

- The planned nutrient removal upgrades at the NEWPCC, currently projected to cost approximately $365 million, are to be financed entirely through long-term debt; and
- The planned alternative biosolids disposal delivery and management system, currently projected to cost approximately $150 million, is to be financed as follows:
    - $25.6 million from the environmental reserve fund; and
    - $124.4 million through external debt.

The City advised that the reason for relying primarily on debt financing for the NEWPCC and biosolids treatment upgrades is intergenerational equity, as the City does not want a single generation to have to pay for the entire upgrade. The City further advised that there may be a need for additional capital expenditures on those projects, as the planning is currently in the preliminary stages.

8.3 **Board Findings**

The City's plan to finance infrastructure renewals through current revenues but avail itself of debt financing for the construction of major capital projects is prudent. In the Board's view, there are two criteria that must be considered when financing large projects that take up a significant portion of the capital budget for a number of years. The first is the principle that utilities should avoid "rate shock", i.e., sudden and significant rate increases that customers may not be able to absorb. The second is the need for ratepayer equity.

Ratepayer equity has two separate components. The first is a need for intergenerational equity. Water and sewage works last many decades. The City amortizes water treatment plants on a straight-line basis over a period of 75 to 100 years. Wastewater treatment plants are amortized over a period of 50 to 75 years.

The Shoal Lake Aqueduct, constructed in 1919, is still in operation today, albeit after significant funds spent over the years on maintenance and rehabilitation. The NEWPCC was first constructed in 1937, and subsequently expanded a number of times. In short, more than one generation is benefitting from the construction of major water and sewer infrastructure, which justifies spreading the cost of such projects out over a reasonably long timeframe through the use of long term debt.

The second component of ratepayer equity is that cities are not stagnant. People come and people go. Some may stay for a year, others for a lifetime. The more major capital projects are financed through current year rates, the more temporary residents of the city have to pay for infrastructure that will benefit others long after they leave. This, too, justifies spreading out the cost over an extended timeframe.

This is not to say that the Board condones municipal utilities running deficits. In fact, any deficits among the water and sewer utilities regulated by Board must be reported to the Board pursuant to Board Order 151/08, and the Board requires deficits to be remedied as part of any

new rate application. However, where appropriate, debt financing should be used for capital projects.

9.0 GOVERNMENT REGULATION AND REGULATORY COMPLIANCE

9.1 Federal Regulation

The federal government regulates the City's water and sewer utilities through the *Canadian Environmental Protection Act*, which among other things requires the City to report on its releases of greenhouse gases and other pollutants on an annual basis. Each of the three sewage treatment plants, for example, separately reports its annual discharges of nitrogen and phosphorus into the river systems. Because these facilities discharge into rivers, the City is also subject to the *Fisheries Act*, which regulates discharges into waters frequented by fish.

The federal government is currently proposing a *Waste Water Systems Effluent Regulation* under the *Fisheries Act* that may set specific discharge limits once in force.

The City is also subject to Health Canada's *Guidelines for Canadian Drinking Water Quality*. These are a set of non-binding standards for chemicals and microorganisms in drinking water that serve as best practices across the country.

9.2 Provincial Regulation

The Province of Manitoba extensively regulates the City's water and sewer systems.

The operators of the City's water and wastewater treatment plants are subject to the *Water and Wastewater Facility Operators Regulation* and must be certified. The City is audited with respect to compliance with this Regulation on a regular basis.

Under *The Drinking Water Safety Act,* the *Drinking Water Safety Regulation* and the *Drinking Water Quality Standards Regulation*, the City's water treatment plant is licensed, must achieve

specific compliance parameters, and must report on those parameters on a regular basis. Manitoba Health also sets certain water fluoridation parameters to which the City adheres.

Winnipeg's three wastewater treatment plants are subject to licences under *The Environment Act* and the *Wastewater Facility Operators Regulation*. Like the water treatment plant, the wastewater treatment plants must achieve certain compliance parameters and report on those parameters on a regular basis. The City has a separate licence under *The Environment Act* for its biosolids program, meaning the disposal of solid matter extracted from sewage.

In addition to extensive regulation under *The Environment Act*, the three wastewater treatment plants are also subject to regulation under *The Water Protection Act*, the *Nutrient Management Regulation*, as well as *The Save Lake Winnipeg Act* and, since November, 2011, the *Manitoba Water Quality Standards, Objectives and Guidelines Regulation*. All of these govern releases of nutrients by the three water treatment plants and are discussed in further detail in Section 9.5 below.

During the Hearing, the City also advised that it expects to be issued a Combined Sewer Overflow licence, but such a licence has not materialized to date, nor did the Board receive evidence as to what would likely be contained in such a licence.

9.3 Municipal Regulation

The City has its own municipal by-laws dealing with the water and sewer system, known as *The Water Works By-Law* and *The Sewer By-Law*, respectively. These by-laws deal with connections and disconnections to water and sewer mains, technical standards, and what can and cannot be discharged into the sewer system.

9.4 The City of Winnipeg's Compliance Record

At the hearing, the Board was advised that a 2010 audit by the provincial Office of Drinking Water found the City to be in 100% compliance with its regulatory requirements. With respect to its sewer utility, the City did note, however, that it had difficulty meeting some daily discharge

limits. In October 2011, the City's South End Water Pollution Control Centre also suffered a well-publicized "upset" in the biological treatment process that resulted in the discharge of a large volume of partially treated sewage into the river system over a period of three to four weeks. As of the date of this Hearing, the release had not attracted any regulatory repercussions for the City.

9.5 Nutrient Management Requirements

A significant source of confusion, contention, or both, arose with respect to the City's obligations to upgrade its North End Water Pollution Control Centre (NEWPCC) to treat sewage for ammonia, total Kjehldahl nitrogen (TKN) and phosphorus. The Board understands that for approximately a decade the City has taken the position that while it does not object to treating for ammonia and phosphorus, it should not be subjected to any TKN limits. The Province, on the other hand, has moved towards requiring TKN removal. The City's argument has been that there is scientific evidence that demonstrates that phosphorus is the "key nutrient" responsible for blooms of blue-green algae (also known as cyanobacteria) in Lake Winnipeg, and that so long as phosphorus is removed, the presence of high levels of TKN without a corresponding presence of phosphorus is not sufficient to trigger algal blooms. Since the removal of TKN (a process also known as denitrification) carries substantial capital and operating costs, the City has argued that the benefit of removing TKN does not justify the cost.

This Board was not presented with any evidence as to the technical merits of removing or not removing TKN. As such, the Board is currently not prepared to voice an opinion as to the merits of TKN removal. However, due to the significant capital expenditure implications of the proposed NEWPCC upgrades, a review of the regulatory history surrounding the issue is in order. The Board understands that history to be as follows:

- In 2002, the City experienced a large sewage spill from the NEWPCC, which prompted a public hearing by the Clean Environment Commission (CEC) into the City's wastewater collection system.

- In 2003, the CEC held several days of hearings and issued a report which, among other things, recommended that interim *Environment Act* licences should be issued to the City for each of the three wastewater treatment plants and that the City should be directed to plan for both phosphorus and TKN removal. The CEC concluded that phosphorus should not exceed 1.0 mg/l based on a 30-day rolling average and that TKN should not exceed 15 mg/l based on a 30-day rolling average.

- In 2005, Manitoba Conservation issued an *Environment Act* licence to the City for the NEWPCC that required the CEC's recommended limits to be implemented by the end of 2014.

- As set out above, the City has taken the position that only phosphorus and ammonia removal should be required and that there is no incremental benefit to the health of Lake Winnipeg in removing TKN from the City's wastewater effluent. In September 2008, following discussions and negotiations between the City and the Province of Manitoba, the Minister of Conservation asked the CEC to specifically consider this issue and determine whether it was appropriate to require the City to meet TKN effluent limits.

- In 2009, the CEC held its second round of hearings and issued a report concluding that it stood by the recommendations it had made in 2003, and that it would continue to recommend TKN removal.

- In 2010, the Manitoba legislature passed *The Save Lake Winnipeg Act*, section 16 of which amends *The Water Protection Act* to explicitly require the NEWPCC to meet, by December 31, 2014 or such other date as stipulated by regulation or in the NEWPCC's licence, phosphorus limits and total ammonia limits. Notably, *The Save Lake Winnipeg Act* is silent with respect to any TKN limit. It states that: "*If the North End Water Pollution Control Centre is not able to fully remove nitrogen*

by the date required by subsection (1), it must be capable of being modified to do so with minimal additional cost." The Board notes it does not, however, actually require nitrogen removal.

The Save Lake Winnipeg Act received royal assent on June 16, 2011 and requires the City to provide a report on how to achieve the set limits within one year of the act coming into force. The Minister must then refer the plan to the CEC for advice and recommendations. Following a further report from the CEC, and any potentially required revisions to the plan, the City must provide a report that details the estimated capital costs of the project, the estimated resulting annual operating expenses, and the anticipated effects of those costs on rates. The Minister may then refer the report to the PUB for evaluation, but is not required to do so.

- On November 28, 2011, the Province of Manitoba registered the *Manitoba Water Quality Standards, Objectives and Guidelines Regulation* under *The Water Protection Act*. This regulation adopts the Manitoba Quality Standards, Objectives and Guidelines and among other things stipulates that no new *Environment Act* licences can be issued for a project that "affects or may affect water" unless the licence will comply with the Standards. The Standards stipulate a 15 mg/l TKN limit as a "*site-specific requirement ... for new and expanding wastewater treatment facilities discharging more than 33,000 kg of total nitrogen per year.*" Since the NEWPCC already holds an *Environment Act* licence, and the requirement under the Standards is site-specific, it is not clear to the Board whether the Manitoba Water Quality Standards actually change the existing regulatory situation.

The City is currently faced with an existing *Environment Act* licence that requires phosphorus, ammonia and TKN removal by the end of 2014. Unless the existing NEWPCC licence is amended, the City will have to upgrade the NEWPCC for full nutrient removal by December 31,

2014. Since that date is less than two years away and the PUB was advised by the City that plans are still in the very preliminary stages, the Board has no reasonable assurance, or expectation, that this compliance deadline will be met. The City advised the PUB that it is still "*on speaking terms*" with the Province regarding the situation and that the situation is currently being addressed at the political level. As such, the Board can only surmise that the City still holds some expectation that the terms of its existing NEWPCC licence will be repealed.

9.6 **Board Findings**

The Board recognizes that the health and environmental parameters of the City's water and sewer utilities are comprehensively regulated by the federal and provincial governments. Unlike many smaller municipalities, the City has a full-time Manager of Environmental Standards and is well-attuned to its regulatory obligations.

Nonetheless, the Board is frustrated by what can best be described as a labyrinthine regulatory maze regarding the issue of whether or not the NEWPCC will be required to meet a TKN effluent limit. The CEC recommended TKN limits in 2003. After a decade of apparent legal and political wrangling, and after the matter has gone before the CEC twice and been subject to a specific statutory provision dealing with the NEWPCC, the issue is still in flux and, in the words of the City's witnesses at the Hearing, "the plan right now is to continue discussions with the Province." A major upgrade to the NEWPCC would be required to meet the TKN limit, and it is fairly apparent to the Board that the statutory deadline of December 31, 2014 will not be met. This is especially so since presumably the City will not be in a position to finalize an engineering design until it knows whether it needs to treat for ammonia and phosphorus only, or whether it needs to treat for TKN as well.

The ongoing debate is not fair to the taxpayers of the City. The NEWPCC project represents almost half of the total capital budget for wastewater in the next six years, and the Board fails to see how the City sewer utility can prepare any meaningful capital budget and project future sewer rates if half of its capital budget is in flux. In the Board's view, it also undermines the public's respect for the regulatory process when the stakeholders operate on the understanding

that the terms of a licence will not be met without either amending that licence or making it clear that compliance will be expected.

10.0 COMBINED SEWER OVERFLOWS

10.1 History of the Combined Sewer System

Like many other North American cities, the City's older neighbourhoods have so-called 'combined sewers' which carry both sanitary sewage and storm water. The history of combined sewers is simple. When the sewers in older parts of the city were first constructed, there was no wastewater treatment. All sewers discharged untreated sewage directly into the river system. In 1937, the City built its first wastewater treatment plant. At the same time, the City built an "interceptor" sewer to carry sewage from the existing sewer system to the new plant. This interceptor connected to the existing sewer system, and weirs were installed inside the existing sewers so that during low-flow conditions, all sewage was diverted into the interceptor. However, during rainstorms or snowmelt season, when total runoff exceeded the capacity of the interceptor, water would overflow the internal weirs and discharge into the river. This is what is called a Combined Sewer Overflow (CSO).

10.2 The City of Winnipeg's Combined Sewers

Currently, approximately 30 percent of the City's geographic area is served by combined sewers. The City is divided into 43 combined sewer districts with a total of 72 combined sewer outfalls to the river system. In total, the City has approximately 1,280 km of combined sewers.

10.3 Combined Sewer Overflows (CSOs)

Every year, the City experiences an average of 22 combined sewer overflows, either during the snowmelt season or during significant rainstorm events. Over the past two years, the City lost approximately one percent of its total annual sewage flow to CSOs, or between 1,150,000 and 1,500,000 m^3 annually. To that extent, the City operates a "sewer overflow information system"

that, on the City's website, provides the public with information as to when and where CSOs are occurring.

10.4 The City's CSO Strategy

In 1992, the Clean Environment Commission (CEC) conducted a hearing with respect to the City's combined sewer system. Out of that hearing came a recommendation for the City to undertake site-specific studies and formulate a remedial plan to deal with adverse water impacts. The City subsequently retained Wardrop Engineering, TetrES Consultants and CH2M Hill to conduct a Combined Sewer Overflow Management Study that considered several technical alternatives to reduce the number of CSOs to an average of four per year, primarily through increases of "latent storage", i.e., the ability of pipes to store larger amounts of runoff until that runoff can be processed by the treatment plants. At the time, the City was considering a 50-year implementation timeframe.

In 2003, after a major spill of untreated sewage into the Red River from the North End Water Pollution Control Centre (NEWPCC), the Clean Environment Commission (CEC) once more conducted a hearing into the City's wastewater collection and treatment systems, and issued a 73-page written report in August 2003. Among other things, the CEC recommended that the City be directed to shorten the timeframe to complete its CSO plan from a proposed 50 years to 20-25 years.

The City currently has a target to invest at least $450 million over the next 25 years to achieve its goal of reducing the number of CSOs to four per year during the open-water recreation season. Among other things, all combined sewer districts have low-impact development standards in place that require new developments to have an adequate storm water management plan. The City also advised that it initiated a so-called "CSO Master Plan" that involves reviewing the 2002 CSO study and retaining a consultant that will provide a technical proposal within three to five years.

The City has a target to separate six of the 43 combined sewer districts over a period of ten years, meaning that separate storm sewers and sanitary sewers will be installed. Currently, no plan exists to separate the remaining combined sewer districts.

The CSO separation project has been identified as a capital issue at the City for several decades. To date, approximately 30 years later, no alternatives to separation have been provided and only six districts will be fully or partially separated over the next 10 years.

10.5 **Board Findings**

Like the CEC, the Board is concerned about the environmental impacts of CSOs on the river systems. While one percent of the City's sewage being lost to CSOs may not sound like much, it must be borne in mind that this amount represents over a million cubic metres every single year. As such, the City's CSO management plan should be accelerated as much as feasibly possible.

While the City appears to be making some progress with respect to CSOs, the Board is disappointed to hear that of the 43 combined sewer districts, only six will be fully or partially separated over a period of ten years. At this rate, full separation, if ever achieved, will take at least 70 years. While the CEC considered the cost to the environment of CSOs, the Board notes that there is an additional cost to the City of operating combined sewers, namely the cost of treating storm water runoff that flows through combined sewers to the wastewater treatment plants. While the Board did not hear evidence as to the cost of such treatment or the volumes of storm water involved, the Board hopes that the City will take such costs into consideration and consider an acceleration of the sewer separation process in the City. There appears to have been little, if any cost benefit analysis of CSO mitigation strategies or alternatives. The proposed $450 million in capital expenditures is likely to increase substantially given construction cost escalation. Given the capital cost of CSO mitigation there needs to be a clear value proposition presented to the ratepayer.

Further to the Board's comments on cross-subsidization in section 6.7 of this Order and the Board's findings on the utilities' financial health in section 5.4 of this Order, the City would be

in a position to significantly increase its infrastructure investment, including the separation of combined sewers, if it decreased or abolished the subsidization of the City's General Revenue Fund from water and sewer rates and availed itself of debt financing at favourable interest rates.

The continuing existence of combined sewers in 30 percent of the City must be considered part of the City's "infrastructure deficit" that should ultimately be addressed.

There was no evidence presented of viable alternatives to separating combined sewers. For the sake of the environment into which untreated raw sewage flows due to combined sewer overflows, all combined sewers in the City need to be separated. The Board is satisfied there are sufficient funds, through elimination of the cross subsidies and the annual rate revenue surpluses, to finance the rectification of the City's infrastructure deficit – including the separation of the combined sewers. The Board agrees with the CEC, that the combined sewer remediation needs to be addressed in a more expeditious timeframe than the City currently plans. The Board will request the City to report back on the options, timelines and costs of the separation of the combined sewers.

11.0 PROVISION OF SERVICES TO OTHER MUNICIPALITIES

11.1 Existing Arrangements

The City is an amalgamation of formerly independent smaller municipalities and is still surrounded by various independent rural municipalities. The City currently has an agreement with the Rural Municipality of East St. Paul to provide water and sewer services to the residents of one border street on which one side of the street lies in East St. Paul and the other side of the street lies in Winnipeg. The affected East St. Paul residents are billed by the City in the same manner, and for the same rates, as Winnipeg residents. To date, this is the only service sharing agreement in place with respect to water and sewer utilities.

11.2 **Planned Future Sharing Agreements**

In December 2011, Winnipeg City Council approved a service sharing policy that would allow the City to enter into broader agreements with surrounding rural municipalities to provide water and sewer services. Authority to negotiate such agreements rests with the City's Chief Administrative Officer.

Salient points of the City's service sharing policy are as follows:

- Municipalities would pay the initial cost of water and sewer line extensions based on their share of the benefit, which could be up to 100%, or less if the extension also serves Winnipeggers;
- All water will be charged for at the Block 1 rate, the intent being to charge the same rate charged to a typical Winnipeg homeowner;
- Utility buy-in charges would be levied for each municipal property connecting to the system based on meter size, ranging from a total cost for water and sewer hook-up of $3,600 for a residential 5/8 inch meter to $54,000 for a 3 inch meter;
- In addition to rates, an additional revenue sharing amount would be levied in the following amounts, to be used for the City's regional roads capital budget:
    - an up-front payment of $3,000 per residence, or more for commercial and industrial properties; and
    - an ongoing annual participation fee of $200 per residence or more for commercial and industrial properties;
- Agreements would be for a 20-year period with automatic 5-year renewals, and could be cancelled on 3 years' notice; and

- All agreements would contain joint planning provisions that allow the City to participate in planning decisions in the municipalities that are sharing the City's services.

11.3 Board Findings

The sharing of services by the Province's largest and most sophisticated water and sewer utility can be a useful financial tool to the City if used appropriately, while at the same time providing neighbouring municipalities with water and sewer services at lower costs than if those municipalities operated their own utilities. However, it could also be a financial pitfall and enabler of urban sprawl in "low-tax" municipalities outside City limits if managed inappropriately.

The City's capacity to provide water appears to be constrained by two factors – firstly, the maximum flow of the Shoal Lake Aqueduct of 386 Ml/d, and secondly, the treatment capacity of the new water treatment plant of 400 Ml/d. Currently, the City has ample excess capacity, primarily as a result of its highly successful conservation efforts to date. This capacity can either be reserved for future expansion within the City, or it can be used to supply water to surrounding municipalities. Any economic consideration of the cost and benefit of sharing services with other municipalities accordingly should consider the impact of sharing services on future capital upgrade requirements in the City. Those economic and financial considerations should also include consideration of the benefit rural municipality customers would receive due to the City's existing infrastructure, the accumulated surpluses and investments made to date.

With an ability to cancel, on three years notice, an agreement to extend services to adjacent municipalities, there may be no need for the City to consider amending its policy to allow a certain maximum percentage of the City's water that can be exported to surrounding municipalities to avoid losing sight of the City's mandate to provide services to its own residents and focus overly on export.

The Board is of the view that in determining whether or not to provide services to surrounding municipalities, the City should apply an economic financial feasibility test that determines the actual financial benefit to the City in each case, especially in light of the connection fees and annual fees being more or less fixed in the current policy document. Such financial feasibility tests are used by other utilities in the Province. For example, Centra Gas Manitoba Inc. applies a net present value (NPV) test that requires the NPV of revenues to exceed the NPV of costs over a 30-year period, with a positive revenue to cost ratio before the end of the fifth year. If the City were to apply a feasibility test, not all service expansions would presumably be financially feasible, without an upfront capital contribution by the customers and/or the municipality.

The Board also notes, that according to recent media reports, the City's legal ability to sell water utility services to neighbouring municipalities may be challenged by Iskatewizaagegan Independent First Nation (also known as Shoal Lake No. 39). As noted in Section 3.2.1 above, the City does have an agreement with Shoal Lake Indian Band No. 40 respecting the use of water from Shoal Lake.

12.0 AGREEMENT WITH VEOLIA

12.1 Background

Leading up to the City's expansion of the South End Water Pollution Control Centre (SEWPCC) to allow for nutrient removal, the City commissioned a study by Deloitte & Touche that considered alternative utility service delivery methods for the City. The Deloitte & Touche report, entitled *A New Model for the City of Winnipeg's Utility Services – Proof of Concept*, was issued in October 2008. Deloitte & Touche concluded that the most favourable utility model would be a Municipal Corporate Utility, by which the City's water and sewer utility would reorganize to become a corporation wholly owned by the City. One of the side effects of this business model would have been that water and sewer rates would have become subject to PUB oversight.

The City of Winnipeg's Executive Policy Committee (EPC) recommended the Municipal Corporate Utility model to council in July 2009 and requested that council approve the model. It presented the City with a business plan that, among other things, envisioned savings of approximately $6 million over a five-year period compared to the existing municipal utility model.

For reasons not made clear to the Board at this Hearing, the EPC's recommendation was never approved by the City's city council. In 2010, the EPC changed it course and recommended a design-build-operate agreement with Veolia, a large engineering firm, instead. Council approved this alternate proposal, and the City and Veolia apparently entered into an agreement on April 20, 2011.

12.2 The Board's Attempt to Obtain Access to the Veolia Agreement

The Board, in the course of the hearing process, ruled that the City was required to file the April 20, 2011 Veolia Agreement with the Board in confidence pursuant to Rule 13 of the Board's Rules of Practice and Procedure. The City refused. The Board did not exercise its power of subpoena under section 27(2)(c) of *The PUB Act*, and accordingly has not yet been provided with an opportunity to review the Veolia Agreement.

12.3 The Publicly Accessible Summary

Despite the City's refusal to produce the Veolia Agreement to the Board, the Board was provided with a publicly accessible summary of the Veolia Agreement made available on the City's website. From the summary, the Board understands the following:

- The Agreement relates solely to the sewage utility, and the water utility is not included.
- The term of the Agreement is 30 years.
- Under the terms of the Agreement, Veolia will provide "expert advice" to the City to assist with the construction and operation of the City's sewage system assets.

- The City will continue to manage and operate the sewage facilities and retain responsibility and control over its employees.
- Veolia will provide engineering, design and construction management during the planning and development phase, and provide ongoing operations and maintenance expertise thereafter. It will make personnel available as requested by the City.
- Veolia can earn compensation in one of three ways:
    - Margins based on the cost of construction and operations;
    - A share of savings to the extent that construction and operating costs are below "target costs", starting at 50% and decreasing as savings grow; and
    - Financial incentives for meeting "quality excellence targets".
- Target costs are set jointly by the City and Veolia.
- An Earnings at Risk Account will be used to require Veolia to carry some of the financial cost if quality standards are not met.
- If the City terminates the Agreement without cause, Veolia would be entitled to any positive balance in the Earnings At Risk Account as well as liquidated damages in the amount of $5 million.

12.4 **Board Findings**

The City advised the Board that the Veolia Agreement is the first time the City has entered into an agreement of this nature. It is a 30-year agreement that will govern the operation of the City's sewer utility for a generation. That agreement will generate costs to the utility. The Board accordingly is disappointed with the secrecy surrounding the Veolia Agreement and the City's refusal to file it with the Board, in confidence.

The purpose of this hearing was to achieve transparency with respect to the City's utilities. Transparency with respect to a 30-year commercial relationship is vital. The need for transparency is exacerbated by the fact that the City did not follow the recommendations of its external advisor to follow a Municipal Corporate Utility program but chose to opt for the relationship with Veolia instead. As such, there is currently no publicly accessible business plan or supporting rationale for the Veolia Agreement, other than a very high-level summary. This summary leaves out a number of issues, most importantly the actual projected construction and operating costs, the amounts paid to Veolia under the Agreement, and how the projected costs to the City compare to the previously recommended services delivery model.

The City has not established why it should not be required to file a copy of the Veolia Agreement with the Board in confidence. While the City has consistently taken the position over the course of the hearing that it will not answer any questions relating to rate-setting, it is not apparent that the Veolia Agreement relates in any way to rates, other than having an impact on rates in the manner that any of the City's operational decisions may impact rates. The Board notes that under section 27(2)(c) of *The Public Utilities Board Act*, it has the power to require the production of documents. In the context of this hearing, which may best be characterized as informational in purpose, the Board has chosen not to exercise this power. Rather than utilize the Board's power of subpoena, and recognizing the witnesses took the matter under advisement, the Board will rely on the promises by the Mayor of the City to be transparent and provide all the information related to the Veolia Contract. These promises are found in the December 15, 2010 Minutes of City Council as follows:

> **Councillor Gerbasi**; My last; thank you Mr, Mayor, my third question is on a different topic, lf I remember correctly during the recent election campaign the Mayor made a commitment to share information about the Veolia Contract with Members of council and the public for the Waste Water upgrades and l' m asking if that Veolia Contract has been signed and will the Mayor share the details of what the City of Winnipeg has agreed to in a transparent manner?
>
> **Mayor Katz**: Mr. Speaker, I can stand before you today and tell you there is no level of Government more open, honest and transparent than this government right here. That's just

> a fact. Number 2, contrary to what some Councillors may have said, or other citizens of Winnipeg, no contract has been signed, and when the contract is signed, I've already said on the record that I would share whatever information I have. Nothing has changed whatsoever, except we're now getting the facts and the truth out there as opposed to misrepresentation and just things that are not true that are said on a regular basis. Thank you, Mr. Speaker.

Trusting the Mayor's comments have provided clarity on the issue, the City will be requested to provide all of the Veolia Contract information as referenced above. Should the Board not be satisfied with the City's response, the Board will reconsider its use of subpoena to obtain the information that the Board has acknowledged would be received in confidence.

13.0 IT IS THEREFORE RECOMMENDED THAT:

1. the City's statutory exemption from PUB rate regulation of water and sewer rates, as currently set out in Sub-section 210 (5) of the *City of Winnipeg Charter*, be removed;

2. (a) the City accelerate the negotiations with the Province of Manitoba regarding the City's requirement to comply with the terms of its existing North-End Water Pollution Control Centre (NEWPCC) licence requiring the NEWPCC to meet a total nitrogen limit by December 31, 2014; and

   (b) the City confirm the feasibility to meet the December 31, 2014 deadline for upgrading the NEWPCC, and, if the City cannot meet that deadline, to describe the project management plans to meet the new expected compliance date;

3. the City review its disconnection procedures, including the steps and procedures and options available for a customer to appeal a notice of disconnection to determine to what extent these procedures can be harmonized with Board Order 39/09.

4. the City make public, by no later than June 30, 2012, a copy of the Agreement(s) between the City and Veolia. (Note: The Board is prepared to receive the Veolia contract in Confidence.)

5. the City accelerate the completion of the City's Combined Sewer Overflow (CSO) Management study, including any technologies chosen to remedy CSOs and the City's expected timelines and costs for implementing such technology.

6. (a) the City eliminate the payment of a dividend from the water and sewer utility to the City's general operating fund;

   (b) the City eliminate the payment of property and other taxes by the water and sewer utilities to the City;

   (c) the City reduce any rent payable by the water and sewer utilities to the City to actual cost;

   (d) the City increase the interest rate paid to the City's water and sewer utilities for funds held in the City's general revenue fund.

   (e) the City eliminate the transfer from sewer rate revenues to the land drainage program;

   (f) the City apply the savings realized by implementing recommendations 6)(a)-(e), together with using the annual revenue surpluses realized, to reduce the infrastructure deficit faced by the water and sewer utilities, and, in particular, accelerate the City's Combined Sewer Overflow strategy and the separation of combined sewers;

   (g) the City provide 'Benchmarking' studies for the operating, maintenance and administrative expenses of the water and sewer utility;

(h) the City formulate an economic feasibility test to be applied to the sharing of water and sewer services with other municipalities;

Board decisions may be appealed in accordance with the provisions of Section 58 of *The Public Utilities Board Act*, or reviewed in accordance with section 36 of the Board's Rules of Practice and Procedure (Rules). The Board's Rules may be viewed on the Board's website at www.pub.gov.mb.ca.

THE PUBLIC UTILITIES BOARD

"SUSAN PROVEN, P.H.Ec."
Acting Chair

"HOLLIS SINGH"
Secretary

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issued by The Public Utilities Board

Secretary