Office of the Auditor General / Bureau du vérificateur général

AUDIT OF THE CITY OF OTTAWA WATER RATE
2008

VÉRIFICATION DE LA REDEVANCE D’EAU
DE LA VILLE D’OTTAWA
2008
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EXECUTIVE SUMMARY

Introduction
The City of Ottawa has finalized an agreement with the Township of Russell to provide potable water from Ottawa’s water distribution system, via a pumping station and a water metering chamber, to the Township of Russell. City Council requested that the Auditor General review the cost of providing water to the Township. Below is the motion passed by Council on October 10, 2007.

“That the License of Occupation and Water Supply Agreement be required to include the following clause: Notwithstanding anything to the contrary, the Township agrees to pay to the City the Water rate within the City for the consumption of Water. The Township further acknowledges that the Auditor General of the City of Ottawa is reviewing the cost of providing Water to the Township. In the event that the Auditor General determines that the Water Rate does not adequately cover the cost of providing Water to the Township, the Township agrees to pay such additional charges to ensure there is full cost recovery to the City of Ottawa as a direct result of providing Water to the Township.” (City of Ottawa Council Minutes No. 22, October 10, 2007, Motion No. 22/5, pages 13 and 14.)

Audit Objectives and Scope
The audit reviewed the current agreement between the City of Ottawa and the Township of Russell regarding the Water Transfer, commenting on the “full cost recovery” component. The audit also reviewed the City’s current method of supporting the Water Fund and provides comments and recommendations on the City’s position with regard to current regulations and practices. The audit also reviewed the status of the implementation of recommendations from the 2005 Audit of Drinking Water Services concerning items related to financial planning, revenue, billing and collection.

Key Findings
1. The overall revenues from the water rate, the fire protection service charges and other miscellaneous water related revenues cover all currently known water system related expenditures. Some water related expenditures are currently unknown, such as source water protection and long-term asset requirements.

2. The water rate that will be charged to the Township of Russell will be the same as the rate being charged to all City of Ottawa consumers. This rate will cover all currently known City costs related to the supply of water to the Township of Russell.

3. The City does not, at present, have a detailed asset management plan developed and in place for use in long-term planning.
4. The 2008 City Budget projected water reserve fund balances over a ten-year period (2008 to 2017). The balance varies from a low of $1.8 million in 2008 climbing to a projected high of $50 million in 2017. The balances projected are very low for a system the size of Ottawa. A water cost of service analysis (including an asset management plan study) would be required to verify if the balances are sufficient for long-term system sustainability.

5. The new financial regulations will take effect in 2010 and the City is planning on completing appropriate studies and introducing new financial accounting principles to meet the new regulations. Once all the studies are completed, the water rate should be revised to ensure full cost recovery.

6. The revenue from the City’s fire supply charge is below average for a municipality the size of Ottawa. The City’s fire supply charge should be calculated so that all infrastructure and water resources that are dedicated to fire protection services are included in the calculation. The current fire protection charge is based on water meter size. Best practices suggest that the fire protection charge should be based on the value of the asset being protected.

**Recommendations and Management Responses**

**Recommendation 1**
That the City consider establishing water rates based on a fixed meter charge plus a consumption charge as this will provide the Water and Wastewater Services Branch a more predictable and stable cash flow. In this fashion, a customer that may not consume any water for a prolonged period (e.g., vacant building) would have a minimal meter charge that should cover the cost of the basic infrastructure that is required to provide water to the property.

**Management Response**
Management agrees with this recommendation.

The City has initiated a comprehensive cost, revenue and rate study. The development of appropriate water and sewer rates are an important element of this study. Among the concepts to be considered will be the development of fixed and variable rate components consistent with the overall service delivery goals of the City. It is anticipated that this comprehensive study will be completed by April 2010.

**Recommendation 2**
That the calculation method for establishing fire protection costs should be reviewed to make certain that all infrastructure and water resources that are dedicated to fire protection services are included in the calculation.
Management Response
Management agrees with this recommendation.

The cost, revenue and rate study will also include a review of all service delivery costs, including those associated with installation, operation, maintenance and rehabilitation/replacement of the fire protection infrastructure to ensure they are included in the overall cost recovery strategy. It is anticipated that this comprehensive study will be completed by April 2010.

Recommendation 3
That the City undertake a cost of service study which would include a detailed asset management study of the system. Preparation of the asset management plan would include a complete infrastructure inventory and valuation; detailed condition assessments; and repair, replacement, and refurbishment plans. Once all the studies are completed, the water rate should be revised to ensure full cost recovery.

Management Response
Management agrees with this recommendation.

One of the key elements in the cost, revenue and rate study will be the inclusion of an asset management plan. A City of Ottawa Corporate Asset Management Working Group is in the process of developing an integrated asset management plan, expected in Q4 2009.

It is anticipated that this report will provide the necessary information for the cost, revenue and rate study. Further refinement and development of these plans will occur beyond Q4 2009, which will include the continuing development of condition-based assessment and individual asset replacement schedules.

Recommendation 4
That the City prepare an integrated asset management plan in conjunction with the streets and sewers that address the following six questions.
1. What assets does the City own?
2. What is the condition of those assets?
3. What level of service are the assets providing?
4. When will the assets need to be replaced?
5. What is the cost of replacement? and,
6. Are the reserve fund balances sufficient?

Management Response
Management agrees with this recommendation.
One of the key elements in the cost, revenue and rate study will be the inclusion of an asset management plan. A City of Ottawa Corporate Asset Management Working Group is in the process of developing an integrated asset management plan, expected in Q4 2009. Although many of the elements listed by the Auditor are either well underway or have been completed, the remaining items will be addressed as part the further refinement of this plan beyond Q4 2009.

Recommendation 5
That the City meet the new financial report standards as per the Public Sector Accounting Board PS 3150, i.e., amortization of tangible capital assets.

Management Response
Management agrees with this recommendation.

The City will meet the new financial report standards as per the Public Sector Accounting Board PS 3150. This will be completed in Q1 of 2010.

Recommendation 6
That the City include in their Financial Plans all requirements of O. Reg. 453/07’s Guideline document and Best Management Practices, i.e., a separate cost item associated with source water protection.

Management Response
Management agrees with this recommendation.

To comply with the requirements of the Clean Water Act, the Rideau Valley/ Mississippi Valley Source Protection Authority and the South Nation/ Raison River Source Protection Authority are in the process of developing detailed source water protection plans by the provincially mandated timeline of 2012. Implementation will follow municipal and provincial approval of these plans.

The City is required to submit its first financial plan in July 2010. Therefore, it will not be possible to incorporate source protection plan costs into the first plan submission. The first financial plan, being submitted in July 2010, and valid until 2016, will only include those costs that have been determined as of 2010. The financial plan will be developed to allow for inclusion of additional source protection costs, as they become known to the City.

In accordance with Section 5 of Ontario Financial Plans Regulation 453/07, there is no restriction on the amendment of financial plans following their submission. Should further costs be identified after the submission of the financial plan in 2010 and as part of the source water protection plan approved in 2012, it may be necessary for the City to revise and re-submit its financial plan.
Recommendation 7
That the City consider recovering the Fire Supply Charge from users based on the value of the assets being protected, (i.e., assessed value of the property).

Management Response
Management agrees with the recommendation.

The City will consider a number of revenue options as a part of the cost, revenue and rate study. Fire supply charges were moved to the water and sewer bill based on Council direction on January 25, 2006 in report ACS2006-CRS-FIN-0001.

While management will review the recovery of these charges, through its cost, revenue and rate study, it should be noted that fire supply costs and recovery charges must be developed in the context of an overall cost recovery program, and adjusted to the particulars of the municipality for which the revenues are being recovered. A number of factors may affect the strategy in recovering fire supply charges, including the large number of properties owned by other levels of government for which taxes are not collected. It is anticipated that development of an overall cost recovery program that would include fire supply charges would be completed by April 2010.

Recommendation 8
That the City, in the development of the next Development Charge Bylaw (July 2009), carry out a review of the process followed to ensure that full cost recovery of project costs is in fact taking place.

Management Response
Management agrees with this recommendation.

The full cost recovery policy will continue to be one of the guiding principles, as outlined in the City's Fiscal Framework, of the Development Charge (DC) Bylaw update, to recover the costs of growth to the full extent permitted by legislation (thereby minimizing the financial burden of the costs of growth on existing residents) with the target of applying them to the full extent permitted by legislation. This review will be completed by August 2009.

Conclusion
The overall revenues from the water rate, the fire protection service charges and other miscellaneous water related revenues cover all currently known water system related expenditures. Some water related expenditures are currently unknown, such as source water protection and long-term asset requirements.

The 2008 City Budget projected water reserve fund balances over a ten-year period (2008 to 2017). The balance varies from a low of $1.8 million in 2008 climbing to a
projected high of $50 million in 2017. The balances projected are very low for a system the size of Ottawa. A water cost of service analysis (including an asset management plan study) would be required to verify if the balances are sufficient for long-term system sustainability.

The City does not, at present, have a detailed asset management plan developed and in place for use in long-term planning and full costing.

**Acknowledgement**

We wish to express our appreciation for the cooperation and assistance afforded the audit team by management.
RÉSUMÉ

Introduction
La Ville d'Ottawa a conclu avec le Canton de Russell une entente pour l’alimentation en eau potable du réseau de distribution d'eau d'Ottawa, par l'intermédiaire d'une station de pompage et d'une chambre de compteur, au Canton de Russell. Le Conseil municipal a demandé que le vérificateur général étudie le coût de l’alimentation en eau du Canton. Le lecteur trouvera ci-dessous la motion adoptée par le Conseil le 10 octobre 2007.

« Que l'entente relative à l’occupation et l’alimentation en eau inclue la clause suivante : Nonobstant toute disposition à l'effet contraire, le Canton accepte de payer à la Ville la redevance d’eau en vigueur dans la municipalité pour la consommation d’eau. Le Canton reconnaît en outre que le vérificateur général de la Ville d'Ottawa passe actuellement en revue le coût de l’alimentation en eau du Canton. Si le vérificateur général détermine que la redevance d’eau ne couvre pas adéquatement le coût de l’alimentation en eau au Canton, le Canton s'engage à payer de tels frais additionnels afin d’assurer que la Ville d’Ottawa recouvre les coûts liés directement à l’alimentation en eau du Canton dans leur totalité. » (Procès-verbal no 22 de la réunion du 10 octobre 2007 du Conseil municipal d'Ottawa, Motion 22/5, pages 13 et 14)

Objectifs et portée de la vérification
La vérification a passé en revue l'entente actuelle entre la Ville d'Ottawa et le Canton de Russell concernant le transfert d’eau, en présentant ses observations sur l’élément « recouvrement total du coût ». La vérification a aussi passé en revue la méthode actuelle de soutien au Fonds d’eau et formulé des commentaires et des recommandations sur la position de la Ville en ce qui concerne les règlements et pratiques en vigueur. La vérification a enfin passé en revue le statut de la mise en œuvre des recommandations formulées lors de la vérification des services d'eau potable en 2005 et portant sur des éléments liés à la planification financière, au revenu, à la facturation et au recouvrement.

Principales constatations
1. Les recettes globales tirées de la redevance d’eau, des frais de la lutte contre les incendies et d’origines diverses liées à l’eau couvrent toutes les dépenses actuelles connues liées au réseau de distribution d’eau. Certaines dépenses liées à l’eau sont actuellement inconnues, comme la protection de l’eau de source et les besoins au niveau de l’actif à long terme.
2. La redevance d’eau qui sera facturée au Canton de Russell sera identique à celle facturée aux consommateurs de l’ensemble de la ville d’Ottawa. Elle couvrira tous les coûts municipaux connus actuels liés à l'alimentation en eau du Canton de Russell.
3. À l’heure actuelle, la Ville n'a ni rédigé ni adopté de plan détaillé de gestion des actifs à des fins de planification à long terme.

4. Le budget municipal 2008 a projeté des soldes de fonds de réserve d'eau sur une période de 10 ans (2008-2017). Le solde varie d’une limite inférieure de 1,8 million de dollars en 2008 à un plafond prévu de 50 millions de dollars en 2017. Les soldes projetés sont très bas pour un réseau de distribution de la taille de celui d'Ottawa. Une analyse du coût du service d’eau (y compris une étude du plan de gestion de l’actif) serait nécessaire pour vérifier si les soldes suffiront à assurer la durabilité à long terme du réseau.

5. Les nouvelles règles financières entreront en vigueur en 2010 et la Ville prévoit achever des études adéquates et présenter de nouveaux principes comptables satisfaisant les nouvelles règles. Une fois toutes les études achevées, la redevance d’eau devrait être mise à jour de manière à assurer le recouvrement total du coût.

6. Le revenu tiré des redevances d’eau-incendies est inférieur à la moyenne pour une municipalité de la taille d'Ottawa. Le calcul des redevances d’eau-incendies de la Ville devrait inclure toutes les ressources d'infrastructure et d'eau consacrées à la lutte contre les incendies. Les frais actuels de lutte contre les incendies sont calculés en fonction de la taille du compteur d'eau. D’après les pratiques optimales, on devrait établir les frais des services de lutte contre les incendies selon la valeur des actifs protégés.

**Recommandations et réponses de la direction**

**Recommandation 1**

Que la Ville envisage d’établir des redevances d'eau basées sur une facturation fixe au compteur et une facturation à la consommation, ce qui fournirait au service d'eau et d’épuration des eaux usées un flux de trésorerie plus prévisible et plus stable. Ainsi, un client qui ne consomme pas d’eau pendant une période prolongée (p. ex. un bâtiment vacant) aurait une facturation minimale au compteur qui devrait couvrir le coût de l'infrastructure de base nécessaire à l’alimentation en eau de la propriété.

**Réponse de la direction**

La direction est d’accord avec cette recommandation.

La Ville a lancé une étude intégrée des coûts, des revenus et des redevances. La mise en place d’une redevance juste pour le service d’eau et d’égouts est un élément important de cette étude. Parmi les concepts à envisager, citons la mise en place d’éléments de tarification fixes et variables conformes aux objectifs généraux de prestation de la Ville. On prévoit que cette étude approfondie sera achevée pour le mois d’avril 2010.
Recommandation 2
Que la méthode de calcul servant à établir les frais des services de lutte contre les incendies soit passée en revue pour s'assurer que toutes les ressources d'infrastructure et d'eau consacrées aux services de lutte contre les incendies sont incluses dans le calcul.

Réponse de la direction
La direction est d'accord avec cette recommandation.

L’étude des coûts, des revenus et des redevances inclura également un examen de tous les coûts de la prestation de services, y compris les coûts liés à l'installation, au fonctionnement, à l’entretien et à la réhabilitation ou au remplacement de l'infrastructure de lutte contre les incendies pour assurer leur intégration à la stratégie globale de recouvrement des coûts. On prévoit que cette étude approfondie sera achevée pour le mois d’avril 2010.

Recommandation 3
Que la Ville entreprenne une étude des coûts des services qui inclut une étude détaillée de la gestion des actifs du réseau de distribution. La préparation du plan de gestion des actifs comprendrait un inventaire et une évaluation complets de l'infrastructure; des évaluations détaillées de l’état des installations; et des plans de réparation, de remplacement et de rénovation. Une fois toutes les études achevées, la redevance d’eau devrait être mise à jour pour assurer le recouvrement total des coûts.

Réponse de la direction
La direction est d'accord avec cette recommandation.

Un des éléments clés de l’étude des coûts, des revenus et des redevances sera l'inclusion d'un plan de gestion des actifs. Un groupe de travail municipal sur la gestion des actifs de la Ville d’Ottawa est en train d’élaborer un plan intégré de gestion des actifs, prévu pour le quatrième trimestre de 2009.

On prévoit que ce rapport fournira les données nécessaires à l’étude des coûts, des revenus et des redevances. Le peaufinage et l’élaboration ultérieure de ces plans auront lieu après le 4e trimestre 2009, et comprendront la poursuite de l'évaluation basée sur les conditions ainsi que des calendriers de remplacement continu des actifs.

Recommandation 4
Que la Ville prépare un plan intégré de gestion des actifs parallèlement au plan de gestion des rues et des égouts, qui aborde les six questions suivantes.
1. Quels actifs la Ville possède-t-elle?
2. Quel est l'état de ces actifs?
3. Quel niveau de service les actifs fournissent-ils?
4. Quand les actifs devront-ils être remplacés?
5. Quel est le coût du remplacement?

6. Les soldes des fonds de réserve sont-ils suffisants?

**Réponse de la direction**

La direction est d'accord avec cette recommandation.

Un des éléments clés de l’étude des coûts, des revenus et des redevances sera l'inclusion d'un plan de gestion des actifs. Un groupe de travail municipal sur la gestion des actifs de la Ville d'Ottawa est en train d’élaborer un plan intégré de gestion des actifs, prévu pour le quatrième trimestre de 2009. Bien que plusieurs des éléments énumérés par le vérificateur soient en bonne voie de réalisation ou achevés, on abordera les éléments restants dans le cadre de la version ultérieure de ce plan, après le 4e trimestre de 2009.

**Recommandation 5**

Que la Ville satisfaise les nouvelles normes en matière de présentation de rapports financiers du Conseil sur la comptabilité dans le secteur public (PS 3150), soit l’amortissement des actifs réels.

**Réponse de la direction**

La direction est d'accord avec cette recommandation.

La Ville satisfera aux nouvelles normes en matière de présentation de rapports financiers selon la norme PS 3150 du Conseil sur la comptabilité dans le secteur public. Cet objectif sera réalisé pour le premier trimestre de 2010.

**Recommandation 6**

Que la Ville inclue dans ses plans financiers toutes les conditions du document de la ligne directrice du règlement 453/07 de l’Ontario et les pratiques optimales de gestion, c.-à-d., un élément de coût distinct lié à la protection de l'eau de source.

**Réponse de la direction**

La direction est d'accord avec cette recommandation.

Pour être conforme aux exigences de la Loi sur l'eau saine, l'Autorité de protection de la source de la vallée Rideau/vallée du Mississippi et l'Autorité de protection de la source South Nation/rivière Raison sont en train d’élaborer des plans détaillés de protection de l'eau de source selon l’écchéancier de 2012 établi par la province. La mise en œuvre suivra l'approbation municipale et provinciale de ces plans.

La Ville doit soumettre son premier plan financier en juillet 2010. Par conséquent, il ne sera pas possible d'intégrer les coûts du plan de protection des sources à la première soumission du plan. Le premier plan financier, soumis en juillet 2010 et valide jusqu'en 2016, comprendra uniquement les coûts qui auront été déterminés en
2010. L’élaboration du plan financier permettra d’y inclure les coûts additionnels de protection des sources, au fur et à mesure que la Ville en est informée.

Selon l’article 5 du Règlement 453/07 de l’Ontario sur les plans financiers, il n'y a aucune restriction à l'amendement des plans financiers suivant leur soumission. Si des coûts additionnels étaient décelés après la soumission du plan financier en 2010 et dans le cadre du plan de protection de l'eau de source approuvé en 2012, la Ville pourrait devoir mettre à jour et soumettre à nouveau son plan financier.

Recommandation 7
Que la Ville envisage de recouvrer les redevances d’eau-incendies auprès des usagers, selon la valeur des actifs protégés, (c.-à-d. la valeur de l’évaluation de la propriété).

Réponse de la direction
La direction est d'accord avec la recommandation.


Tandis que la direction passera en revue le recouvrement de ces redevances, par son étude des coûts, des revenus et des redevances, il convient de noter que les frais des services de lutte contre les incendies et de recouvrement doivent être établis dans le contexte d'un programme global de recouvrement des coûts, et adaptés aux conditions particulières de la municipalité pour laquelle on recouvre ces frais. Un certain nombre de facteurs peuvent influer sur la stratégie de recouvrement des redevances d’eau-incendies, y compris le grand nombre de propriétés détenues par d'autres paliers de gouvernement pour lesquels on ne perçoit pas de redevance. On prévoit que l’élaboration d'un programme global de recouvrement des coûts qui inclurait les redevances d’eau-incendies sera complétée pour le mois d’avril 2010.

Recommandation 8
Que la Ville, dans le cadre de l’élaboration du prochain Règlement municipal sur les redevances d’aménagement (juillet 2009), effectue un examen du processus suivi pour s'assurer que le recouvrement total des coûts du projet a réellement lieu.

Réponse de la direction
La direction est d'accord avec cette recommandation.

La politique de recouvrement total des coûts demeurera l'un des principes directeurs, conformément au cadre fiscal de la Ville, de la mise à jour du Règlement municipal sur les redevances d’aménagement (RA), pour le recouvrement des coûts de la croissance jusqu’aux limites permises par la loi (réduisant ainsi au minimum le
Vérification de la redevance d’eau de la Ville d’Ottawa

...fardeau financier des coûts de la croissance pour les résidents actuels) dans le but de les appliquer jusqu’aux limites permises par la loi. Cet examen sera complété pour le mois d’août 2009.

Conclusion

Les recettes globales de la redevance d’eau, des frais des services de lutte contre les incendies et d’origines diverses liées à l’eau couvrent toutes les dépenses actuelles et connues liées au réseau de distribution d’eau. Certaines dépenses relatives à l’eau sont actuellement inconnues, comme la protection de l’eau de source et les besoins au niveau de l’actif à long terme.

Le budget municipal 2008 a projeté des soldes de fonds de réserve d’eau sur une période de 10 ans (2008-2017). Le solde varie d’une limite inférieure de 1,8 million de dollars en 2008 à un plafond prévu de 50 millions de dollars en 2017. Les soldes projetés sont très bas pour un réseau de la taille de celui d’Ottawa. Une analyse du coût du service d’eau (y compris une étude du plan de gestion des actifs) serait nécessaire pour vérifier si les soldes suffiront à assurer la durabilité à long terme du réseau.

À l’heure actuelle, la Ville n’a ni rédigé ni adopté de plan détaillé de gestion des actifs à des fins de planification à long terme et d’établissement de coûts complets.

Remerciements

Nous tenons à remercier la direction pour l’aide et de la collaboration qu’elle a apportées à l’équipe de vérification.
1 BACKGROUND

The City of Ottawa has finalized an agreement with the Township of Russell to provide potable water from Ottawa’s water distribution system, via a pumping station and a water metering chamber, to the Township of Russell. The Township of Russell is in the process of having a 27 km long water main constructed to transfer this water from the water metering chamber, to their water distribution system.

City Council approved the following motion: “That the License of Occupation and Water Supply Agreement be required to include the following clause: Notwithstanding anything to the contrary, the Township agrees to pay to the City the Water rate within the City for the consumption of Water. The Township further acknowledges that the Auditor General of the City of Ottawa is reviewing the cost of providing Water to the Township. In the event that the Auditor General determines that the Water Rate does not adequately cover the cost of providing Water to the Township, the Township agrees to pay such additional charges to ensure there is full cost recovery to the City of Ottawa as a direct result of providing Water to the Township.” (City of Ottawa Council Minutes No. 22, October 10, 2007, Motion No. 22/5, pages 13 and 14.)

1.1 Sustainable Water and Sewage Systems Act, 2002 (Bill 175)

The Province of Ontario’s Bill 175, the Sustainable Water and Sewage Systems Act, was introduced on September 23, 2002. It has not been enacted and therefore there are no associated regulations produced and filed under it. Without enactment and production of associated regulations it is still not clear what will be required by a municipality to be compliant. The government of Ontario has not provided any insight as to when or if this Bill will be enacted.

However, the intent of the Act was the production of financial plans. The Act requires both a report on full cost of water services and a cost recovery plan for water services. It states that “every regulated entity that provides water services to the public shall prepare and approve a written report about those services”. The contents of “the report must contain the following information:

1. An inventory of and management plan for the infrastructure needed to provide the water services, prepared and certified by a professional engineer.

2. An assessment of the full cost of providing the water services and the revenue obtained to provide them.

3. Any other matter specified by the regulations.”

The identified components of the full cost of providing the water services includes the source protection costs, operating costs, financing costs, renewal and replacement costs and improvement costs associated with extracting, treating or distributing water to the public and such other costs as may be specified by regulation.
Bill 175 states that “every regulated entity that provides water services to the public shall prepare and approve a plan describing how the entity intends to pay the full cost of providing those services”.

Bill 175 also states that “every regulated entity shall establish and maintain a dedicated reserve account that segregate from its general revenues the revenue allocated in its approved cost recovery plan to pay the full cost (including source protection costs and operating and capital costs) of providing water services or waste water services, and shall do so in accordance with the regulations”.

1.2 Ontario Regulation 453/07 (Financial Plans)

Subsequent to the introduction of Bill 175, a new Financial Plans regulation was developed under the Safe Drinking Water Act, 2002, referred to as Ontario Regulation 453/07 (Financial Plans), which came into effect in August 2007. It prescribes the requirements for Financial Plans to be prepared as part of the Municipal Drinking-Water Licence Program set out in Part V of the Safe Drinking Water Act.

Ontario Regulation 453/07 (O. Reg. 453/07) appears to meet the intent of all of the potable water system requirements noted under Bill 175. The only components still missing which are not covered under O. Reg. 453/07 are related to the Sewage System items. The Ontario government may be deciding to regulate the full cost recovery requirements of Bill 175 under other current Acts (such as the Safe Drinking Water Act), and once implemented, dissolve Bill 175, as it will no longer be required. This is speculation at this time, as the Ontario government has not commented on this. Regardless, O. Reg. 453/07 is now in place and appears to meet the full intent of Bill 175 with regards to Drinking Water Services. As such, this audit focused on the requirements of O. Reg. 453/07, rather than the minimal information available on Bill 175.

Financial Plans are one of the five elements which must be put in place for a licence to be issued under the Water Licencing Program. For an existing drinking water system, such as Ottawa’s, the Financial Plan will not be required at the time of application for the first licence. However, the Financial Plan will be needed through a condition of the licence that requires that the owner of the drinking-water system prepare and approve financial plans for the system. In Ottawa’s case this date is July 2010.

Under the Safe Drinking Water Act (section 30), the Financial Plans element of the Licence Program must either be prepared in accordance with the Sustainable Water and Sewage Systems Act, 2002 or in accordance with requirements set out by the Provincial Minister of the Environment. At this time, the government’s approach is to require Financial Plans development under O. Reg. 453/07 of the Act.

A Guideline “Toward Financially Sustainable Drinking-Water Systems and Wastewater Systems” (August 2007) was designed to assist municipalities in preparing the required Financial Plans under the Financial Plans Regulation (O. Reg. 453/07). The Guideline sets out broad principles and practical advice to assist municipalities in moving towards
long-term financial sustainability of water services. Although the Guideline is not required practice, it is designed to provide assistance to municipalities and to help build capacity in financial planning.

Taken together, O. Reg. 453/07 and the associated Guideline are a key step in the Ontario Government’s long-term strategy to ensure the financial sustainability of municipal drinking-water systems. The Government has stated that financial sustainability is needed to ensure that Ontarians continue to enjoy clean and safe drinking water, that water services are reliable in the long term, and that environmental protection is maintained.

1.3 Other Provincial and Accounting Requirements

In June 2007, the government of Ontario proposed a Lead Action Plan in response to elevated levels of lead in drinking water in a number of Ontario municipalities. One of the requirements is a regulatory program that makes it mandatory for municipal residential system owners to regularly sample for lead at a specified number of taps, notify homeowners of the results, and take corrective action in systems with elevated lead levels. In addition to this, the Financial Plans Regulation also contains requirements for municipalities to include in their Financial Plans the costs associated with replacing lead service pipes that are part of the water system. The Guideline strongly recommends that utilities locate and replace lead service lines with approved materials.

Source Water Protection is also a major priority for the provincial government. In the associated Guidelines of O. Reg. 453/07, it is stated that Financial Plans should include source protection costs related to the provision of water services. Utilities are encouraged to have, at minimum, estimates of any current source protection costs as a separate cost item by the time their Financial Plans are required in order to effectively align with the anticipated approval timelines for Source protection Plans (2010 to 2012).

In June 2006, the Public Sector Accounting Board of the Canadian Institute of Chartered Accountants approved new municipal financial accounting and reporting standards requiring that tangible capital assets, including water systems, be included in municipal financial statements. Full accrual accounting provides a new view of cost for financial reporting purposes and has significant implications for public works departments of municipalities.

The new accounting standard PS 3150 comes into effect on January 1, 2009. The first financial statements reflecting this change are anticipated no later than May 31, 2010. The comparison year is presently set as 2008, which means that the necessary data will need to be available for 2008, although it does not have to be reported until the 2009 financial statements are published in 2010.

The transition to full accrual accounting has important implications for water utility financial sustainability. PS 3150 will make municipalities and the public more aware of the investment in physical infrastructure, and the cost of using an asset to provide
services over its useful life. It will also encourage long-term planning for capital renewal and replacement, and begin to provide a more informed basis for setting water rates.

The transition to full accrual accounting is expected to provide a useful foundation for long-term financial planning for capital renewal and replacement. However, by itself it is not the complete answer. Other tools will be required such as long-term asset management. The Guideline recommends that municipalities view accounting standard PS 3150 as an opportunity to move toward comprehensive asset management.

1.4 Background Summary

This Water Rate Audit reviewed the full cost recovery component of the water being transferred from the City of Ottawa to the Township of Russell. As well, a general review of the overall water fund in relation to O. Reg. 453/07 (Financial Plans) and Bill 175 the Sustainable Water and Sewage Systems Act (not yet enacted), was completed. As part of the review, best management practice manuals were also referenced, which included:

- The Canadian Water and Wastewater Association and Rawson Academy of Aquatic Science’s ‘Municipal Water and Wastewater Rate Manual’ (Second Edition October 1994);
- The InfraGuide best practice document: ‘Dedicated Funding’;
- The InfraGuide best practice document: ‘Speed and Quality of Linear System Repairs’;
- The InfraGuide best practice document: ‘An Integrated Approach to Assessment and Evaluation of Municipal Road, Sewer, and Water Networks’;
- The InfraGuide best practice document: ‘Developing a Water Distribution System Renewal Plan’; and,
- The new accounting standard PS 3150 of the Public Sector Accounting Board of the Canadian Institute of Chartered Accountants.
2 AUDIT OBJECTIVE AND SCOPE

The audit reviewed the current agreement between the City of Ottawa and the Township of Russell regarding the Water Transfer, commenting on the “full cost recovery” component. The audit also reviewed the City’s current method of supporting the Water Fund and provides comments and recommendations on the City’s position in regards to current regulations such as O. Reg. 453/07 (Financial Plans), Bill 175, PSAB accounting standard PS 3150, and current best practices. The audit also reviewed the status of the implementation of recommendations of the 2005 Audit of Drinking Water Services concerning items related to financial planning, revenue, billing, and collection.

The audit focused on the Township of Russell water transfer agreement and on an assessment of the Potable Water Component of the Water Fund only. The audit did not carry out a review associated with the City of Ottawa’s Wastewater Fund.

In summary, the audit included an assessment of the following as outlined and defined through the audit objectives:

1. Evaluation of the Township of Russell Agreement regarding Full Cost of Service.
2. Review of the City’s Water Fund compared to Ontario Regulation 453/07 and its associated regulation Guideline document and Bill 175.
3. Review of the City’s Water Fund compared to Best Practices.

3 DETAILED OBSERVATIONS, FINDINGS AND RECOMMENDATIONS

This section outlines the detailed findings related to each of the audit objectives. Under each objective, the criteria employed are listed and the findings are identified. Where appropriate, related recommendations are provided and explained. In some cases, findings related to a number of objectives contribute to a single recommendation. These recommendations and the related explanations are provided in sections 3.1, 3.2, and 3.3.

3.1 Evaluation of the Township of Russell Agreement regarding Full Cost of Service

3.1.1 Background

The following outlines the background information concerning the supply of water to the Township of Russell:

• The Township of Russell will receive drinking water from the City of Ottawa through a privately owned feedermain to convey water to the Township in accordance with the agreement.

• The Township will pay for the construction of the required Pumping Station and Metering Chamber in the Leitrim area as well as all other costs associated with the provision of water.

• The City will assume ownership, operate and maintain the Leitrim Pumping Station and Metering Chamber in accordance with the agreement.

• The feedermain from the Pumping Station to the Township is to be built, owned, operated and maintained by the Township.

• The City agrees to maintain, operate, inspect, repair and rehabilitate the City Water System in accordance with good engineering practice including all newly assumed assets.

• The Township agrees to pay to the City the Water Rate within the City for the consumption of water.

• The Township agrees to provide for its fire protection and maximum hourly demands from its own reserves and releases the City from any obligations for providing fire protection flow to the Township.

• The Agreement is structured to be in place for a minimum of 30 years.

• Water rate changes require notification to the Township.

3.1.2 Focus of Audit
The audit focused on the Water Rate being charged to the Township of Russell by the City of Ottawa in relation to receiving full cost recovery for the services provided by the City.

3.1.3 Audit Findings and Observations
1. The Township has agreed to pay the City Water Rate.

2. The City currently has only one Water Rate for all customers.

3. As of May 1, 2008, the water rate for the City of Ottawa is $1.159 per cubic meter (1000 litres). This water rate increase of 33.5%, combined with the sewer surcharge decrease from 145% to 100% of the water rate, is equivalent to a 9% overall water bill increase over the 2007 period.

4. The Water Rate for the City is structured to recover most costs related to the water system as documented in the City budget.

5. The City has a fire protection service charge (currently estimated at $7,630,000 per year for the entire system) which is collected through an annual Fire Supply Charge shown on the water bill, and which is based on the size of the customer’s meter.
6. The overall revenues from the water rate, the fire protection service charges and other miscellaneous water related revenues cover all currently known water system related expenditures.

7. The City will not be responsible for providing fire protection flow to the Township.

8. A Fire Supply Charge will not be charged to the Township based on the size of the meter at the Leitrim Pumping Station.

9. Russell provides fire protection services to the Township from reservoir(s) and other infrastructure located within the Township.

10. Based on the “Water and Sewer Rates: Full Cost Recovery Manual” (National Guide to Sustainable Municipal Infrastructure) the wholesale rate for water should include all sources of supply, treatment and transmission costs. In the Water Industry, the water being transferred from the City to Russell Township is considered as the “wholesale” of water.

11. The City does not have a separate wholesale water rate which would normally include only those costs directly attributed to supplying the services being provided to a wholesale customer.

12. Best management practice documents recommend that water utilities set separate rates for retail customers and wholesale customers with both accounting for full cost recovery of all services provided to the different customer base.

13. Ontario Regulation 453/07 (Principle #7) states “Ensuring users pay for the services provided leads to equitable outcomes and can improve conservation. In general, metering and use of rates can help ensure users pay for the services received”.

14. Based on a web research scan, wholesalers of water in Ontario and across Canada typically do not charge the full retail water rate to wholesale customers. It is also noted in the web scan that wholesale rates vary widely across the country.

15. Wholesale water rates are usually lower than the standard residential/retail water rates as a reduced level of service is normally provided to wholesale water customers (i.e., minimal meter reading requirements, no water services to maintain, reduced number of water mains to maintain, no fire hydrant maintenance, etc.).

3.2 Review of the City’s Water Fund compared to Ontario Regulation 453/07 and its associated regulation Guideline document and Bill 175

3.2.1 Background
The applicable legislations are the recent (August 2007) “Financial Plans” (Ontario Regulation 453/07) under the Safe Drinking Water Act, 2002 and the Province of Ontario Bill 175, the Sustainable Water and Sewage Systems Act, 2002 (not yet enacted). There is also a Guideline document associated with O. Reg. 453/07 that is called
“Toward Financially Sustainable Drinking-Water Systems and Wastewater Systems” (August 2007). The Guideline document was designed to assist municipalities in preparing the required Financial Plans under the Financial Plans Regulation. The Guideline sets out broad principles and practical advice to assist municipalities in moving towards long-term financial sustainability. The primary focus of the Guideline is on the preparation of long-term Capital Investment and Funding Plans. Taken together, the Regulation and Guideline are meant as a key step in the provinces long-term strategy to ensure the financial sustainability of municipal drinking water and wastewater systems.

It should be noted that no regulations have been filed to date under Bill 175, as it has not been enacted. It should also be noted that O. Reg. 453/07, the “Financial Plans”, is now a required condition for issuance of a municipal drinking-water license in the Province of Ontario. With O. Reg. 453/07 now in force, there appears to be little rush by the province to impose any regulations under Bill 175, as O. Reg. 453/07 meets most of the recommendations identified under the Justice O’Connor’s Walkerton Inquiry reports. The government has stated that its present approach is to require Financial Plans development under Ontario Regulation 453/07 of the Safe Drinking Water Act.

The City will also be required to comply with the new accounting standard PS 3150 of the Public Sector Accounting Board of the Canadian Institute of Chartered Accountants. The impact of this requirement is that the City will have to report tangible capital assets and have them included in municipal financial statements.

3.2.2 Focus of Audit
Since Bill 175 is not yet in force and may never be enacted, the focus of this audit concentrated on the items contained in O. Reg. 453/07 (Financial Plans) and the associated Guideline document. It should be noted that the general thrust of Bill 175 (i.e., full cost recovery) is also the intent of O. Reg. 453/07. The Guidelines included with O. Reg. 453/07 recommends that municipalities view accounting standard PS 3150 as an opportunity to move toward comprehensive asset management. There are numerous topics and principles covered in the Guideline document, and the more important items that were considered for this audit are listed in Appendix A.

3.2.3 Audit Findings and Observations
1. The current City of Ottawa water rate model is primarily consumption based with no base charge (other than a specific Fire Supply Charge). This model is called a ‘consumption model’ and any reduction in consumption has a total effect on the revenue generated. As an alternative a ‘base charge and consumption model’ would result in less impact on revenue should consumption drop, as the base charge is always paid regardless of the amount of water consumed. The purpose of the base charge is to account for recurring costs such as depreciation, general administration, metering and billing. The ‘base charge and consumption model’ provides for more stable revenue generation. For a water system the size of Ottawa the typical range of
1. A fixed charge is between 15% and 25% of total revenue requirements. Smaller systems typically utilize an even higher fixed charge percentage.

2. Water is sold based on a single consumption rate (i.e., single water rate per cubic meter for all users). In 2008, the rate is $1.159 per cubic meter (1000 litres) of water.

3. The City’s Fire Supply Charge is recovered based on meter size which has no direct relationship to risk or assessed value of the property being protected by the fire fighting capabilities of the water system.

4. The Fire Supply Charge is meant to recover all costs associated with the fire protection service to the community provided by the water system. This charge typically includes all direct and indirect costs for the water system infrastructure that is related to providing fire protection, such as:
   a) Fire hydrants
   b) Over-sizing of water mains
   c) Over-sizing of pumping stations
   d) Over-sizing of water storage reservoirs
   e) Over-sizing of water treatment plants
   The charge should also include all activities related to the operations and maintenance of this additional infrastructure.

5. The City’s Fire Supply Charge costs are not calculated based on the assets and resources dedicated to fire protection.

6. The City is in the process of complying with the Public Sector Accounting Board’s new accounting standard PS 3150. This was a focus item of the 2008 Water Budget.

7. The City is in the process of complying with the Municipal Drinking Water Licensing requirement for a dedicated Financial Plan (O. Reg. 453/07). This requirement includes the setting up of a separate reserve fund for water and wastewater. This was a focus item of the 2008 Water Budget.

8. The 2008 Water Budget focuses on positioning the Water Fund Reserve to be in compliance with O. Reg. 453/07.

9. The 2008 Water Budget funding strategy focuses on Council’s strategic direction of closing the gap on water main rehabilitation/replacement by 2015 and to ensure that the City infrastructure required for new growth is built or improved as needed to serve growth.

10. The overall revenues from the water rate, the fire protection service charges and other miscellaneous water related revenues cover all currently known water system related expenditures. Some water related expenditures are currently unknown, such as source water protection and long-term asset requirements.
11. The 2008 Water Budget identified an initiative to carry out a water and wastewater rate review study. Work on this project is expected to commence during 2008. This work, when coupled with the Public Sector Accounting Board Tangible Capital Asset reporting requirements under accounting standard PS 3150, is expected to provide a full assessment of longer term financing requirements as required by Regulatory Reporting Requirements.

12. The Water Budget does not contain a separate line item associated with source water protection costs. At present the City has a charge identified for these costs, but only under the Wastewater Budget ($1.3 million). Drinking Water Services does carry out many activities associated with source water protection such as; source water quality monitoring, well system land use restraint, and protection/monitoring of wells. However, the costs associated with these activities are not specifically identified in the Water Budget.

13. Long Range Financial Plans (LRFP) are prepared for the Water System. The latest being LRFP III which is the third since amalgamation and covers operating requirements for 4 years (2007-2010) and Capital requirements for 10 years (2007-2016).

14. The City does not, at present, have a detailed asset management plan developed and in place for use in long-term planning.

15. The City does not have detailed estimates of the remaining water infrastructure asset life for the system components.

16. Replacement cost estimates for the entire system need to be developed in detail utilizing a detailed asset management approach.

17. The City has an inventory of most of their water system assets. However, no detailed replacement cost estimate of the inventory asset items is available.

18. Amortization is not listed as an operating expense in the 2008 budget; however the Water System budget does include Capital for Life Cycle replacement of assets. This deficiency will be resolved once PSAB PS 3150 comes into force for the 2010 Budget cycle.

19. Funding for capital projects incorporates debt financing for long-term growth related projects (e.g., water treatment plant expansions) and other legacy capital works which would benefit future users of the utility system (e.g., reliability of service issues such as the looping of feeder mains).

20. Funding for capital projects also incorporates utilization of funds from annual cash flow for ongoing items such as replacement of system components (e.g., water main replacement program).

21. The 2008 City Budget projected water reserve fund balances over a ten year period (2008 to 2017). The balance varies from a low of $1.8 million in 2008 climbing to a projected high of $50 million in 2017. The balances projected are very low for a
system the size of Ottawa. A water cost of service analysis (including an asset management plan study) would be required to verify if the balances are sufficient for long-term system sustainability.

22. When comparing Water Reserve Fund balances, the following results are exhibited: average actual five year fund balance for period 1996-2000 was $46.6 million, average actual five year fund balance for period 2001-2005 was $12.8 million, projected average five year fund balance for period 2008-2012 is $7.1 million. This indicates a significant degradation in the fund balance over this 1996 to 2012 time frame. However, the projected average five-year balance for the period 2013-2017 is $35.6 million which is a move in the right direction.

23. The last ‘water cost of service analysis’ was carried out during 1995/96 with a report published in June 1996. The 2008 budget identified the initiation of a water and wastewater rate cost recovery assessment review.

24. Some important financial budget numbers are:

- Drinking water rate increases:

<table>
<thead>
<tr>
<th>Year</th>
<th>Water Rate(^1) $/m(^3)</th>
<th>Water Rate Increase %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>$0.868</td>
<td>12</td>
</tr>
<tr>
<td>2008</td>
<td>$1.159</td>
<td>33.5*</td>
</tr>
<tr>
<td>2009</td>
<td>$1.264</td>
<td>9</td>
</tr>
<tr>
<td>2010</td>
<td>$1.377</td>
<td>9</td>
</tr>
</tbody>
</table>

* This water rate increase of 33.5% is associated with a sewer surcharge decrease (from 145% to 100% of the water rate), which equates to an overall increase to the customer of 9% for the year 2008.

- Total 2008 Water Infrastructure asset value including the communal well systems is estimated at $4.843 billion.
- Total 2008 Water Infrastructure asset value excluding the communal well systems is estimated at $4.835 billion.
- 2008 projected total revenue: $110,036 million.
- 2008 budget high level allocation of costs (net): Direct Operational ($43.9 million); Indirect Operational ($14.4 million); Capital Formation and Payments In Lieu of Taxes ($51.7 million).
- The 2008 budget allocated expenditures of $14.385 million for general administration.
- In 2007 the City Treasurer carried out a detailed analysis of the general administration costs and concluded that the cost allocations were appropriate. Finance will continue to review this allocation on a regular basis to advise Council if an adjustment is required in either direction.
• General administration costs of Ottawa were compared to those of the Halifax Regional Water Commission, and on a per customer basis (per year) were found to be comparable.

• 2007 total revenue: actual $89.021 million, budgeted $90.163 million; 2007 net expenditures: actual $86.083 million, budgeted $90.163 million; 2007 year net surplus/(deficit): $2.938 million or a deviation of 3.3%.

• 2006 total revenue: actual $81.376 million, budgeted $85,287 million; 2006 net expenditures: actual $82.155 million, budgeted $85.287 million; 2006 net surplus/(deficit): ($779 million) or a deviation of 0.9%.

25. Judging from the actual vs. budget figures for 2006 and 2007, the City appears to forecast and manage their budget funds fairly accurately.

26. The 2008 Budget included funding for a Lead Services Replacement Program. The amount approved for 2008 was $1.0 million with another $1.0 million forecasted every year thereafter until completed. A report for an accelerated program is to be brought forward during 2008 that will outline the costs for such.

27. The following graph shows water rates and water reserve fund balances from 1993 to 2017 (2009 to 2017 figures are estimated).

28. The following table provides an approximate breakdown of the 2007 Water Fund Revenues and Expenditures.

<table>
<thead>
<tr>
<th>Revenue ($Million)</th>
<th>Expenditures ($Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales of Water</td>
<td>$78.45 (88.1%)</td>
</tr>
<tr>
<td>Fire Supply Charges</td>
<td>$8.08 (9.1%)</td>
</tr>
<tr>
<td>Other Revenues</td>
<td>$2.49 (2.8%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$89.02 (100%)</strong></td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td>$39.16 (45.5%)</td>
</tr>
<tr>
<td>Admin &amp; Overhead¹</td>
<td>$14.03 (16.3%)</td>
</tr>
<tr>
<td>Capital (pay-as-you-go)</td>
<td>$30.58 (35.5%)</td>
</tr>
<tr>
<td>Other Expenditures²</td>
<td>$2.32 (2.7%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$86.09 (100%)</strong></td>
</tr>
</tbody>
</table>

Notes: ¹ Admin and Overhead includes Meter Reading and Billing
² Other Expenditures includes debt charges
29. The average annual number of water main breaks from 1984 to 2007 is 294. The low was 193 (1988), the high was 398 (1994) with the last full year having 320 (2007). Based on the size of the City’s water distribution system, and comparing this to more recent benchmarking data from other Ontario municipalities under the Ontario Municipal Benchmarking Initiative (OMBI), the City of Ottawa is close to the reported median for breaks per 100 km of installed water distribution pipe.

30. The current method of recovering the Fire Supply Charge (based on meter size) from water ratepayers does not necessarily fairly distribute the cost between individual ratepayers and the assets that is being protected by the water infrastructure.

**Recommendation 1**
That the City consider establishing water rates based on a fixed meter charge plus a consumption charge as this will provide the Water and Wastewater Services Branch a more predictable and stable cash flow. In this fashion, a customer that may not consume any water for a prolonged period (e.g., vacant building) would have a minimal meter charge that should cover the cost of the basic infrastructure that is required to provide water to the property.

**Management Response**
Management agrees with this recommendation.

The City has initiated a comprehensive cost, revenue and rate study. The development of appropriate water and sewer rates are an important element of this study. Among the concepts to be considered will be the development of fixed and variable rate components consistent with the overall service delivery goals of the City. It is anticipated that this comprehensive study will be completed by April 2010.

**Recommendation 2**
That the calculation method for establishing fire protection costs should be reviewed to make certain that all infrastructure and water resources that are dedicated to fire protection services are included in the calculation.

**Management Response**
Management agrees with this recommendation.

The cost, revenue and rate study will also include a review of all service delivery costs, including those associated with installation, operation, maintenance and rehabilitation/replacement of the fire protection infrastructure to ensure they are included in the overall cost recovery strategy. It is anticipated that this comprehensive study will be completed by April 2010.

**Recommendation 3**
That the City undertake a cost of service study which would include a detailed asset management study of the system. Preparation of the asset management plan would
include a complete infrastructure inventory and valuation; detailed condition assessments; and repair, replacement, and refurbishment plans. Once all the studies are completed, the water rate should be revised to ensure full cost recovery.

**Management Response**

Management agrees with this recommendation.

One of the key elements in the cost, revenue and rate study will be the inclusion of an asset management plan. A City of Ottawa Corporate Asset Management Working Group is in the process of developing an integrated asset management plan, expected in Q4 2009.

It is anticipated that this report will provide the necessary information for the cost, revenue and rate study. Further refinement and development of these plans will occur beyond Q4 2009, which will include the continuing development of condition-based assessment and individual asset replacement schedules.

**Recommendation 4**

That the City prepares an integrated asset management plan in conjunction with the streets and sewers that address the following six questions.

1. What assets does the City own?
2. What is the condition of those assets?
3. What level of service are the assets providing?
4. When will the assets need to be replaced?
5. What is the cost of replacement? and,
6. Are the reserve fund balances sufficient?

**Management Response**

Management agrees with this recommendation.

One of the key elements in the cost, revenue and rate study will be the inclusion of an asset management plan. A City of Ottawa Corporate Asset Management Working Group is in the process of developing an integrated asset management plan, expected in Q4 2009. Although many of the elements listed by the Auditor are either well underway or have been completed, the remaining items will be addressed as part the further refinement of this plan beyond Q4 2009.

**Recommendation 5**

That the City meet the new financial report standards as per the Public Sector Accounting Board PS 3150, i.e., amortization of tangible capital assets.

**Management Response**

Management agrees with this recommendation.
The City will meet the new financial report standards as per the Public Sector Accounting Board PS 3150. This will be completed in Q1 of 2010.

**Recommendation 6**

That the City include in their Financial Plans all requirements of O. Reg. 453/07’s Guideline document and Best Management Practices, i.e., a separate cost item associated with source water protection.

**Management Response**

Management agrees with this recommendation.

To comply with the requirements of the Clean Water Act, the Rideau Valley/ Mississippi Valley Source Protection Authority and the South Nation/ Raison River Source Protection Authority are in the process of developing detailed source water protection plans by the provincially mandated timeline of 2012. Implementation will follow municipal and provincial approval of these plans.

The City is required to submit its first financial plan in July 2010. Therefore, it will not be possible to incorporate source protection plan costs into the first plan submission. The first financial plan, being submitted in July 2010, and valid until 2016, will only include those costs that have been determined as of 2010. The financial plan will be developed to allow for inclusion of additional source protection costs, as they become known to the City.

In accordance with Section 5 of *Ontario Financial Plans Regulation 453/07*, there is no restriction on the amendment of financial plans following their submission. Should further costs be identified after the submission of the financial plan in 2010 and as part of the source water protection plan approved in 2012, it may be necessary for the City to revise and re-submit its financial plan.

### 3.3 Review of the City’s Water Fund Compared to Best Practices

#### 3.3.1 Background

The best practices as set out in the National Guide to Sustainable Municipal Infrastructure’s (InfraGuide) document *Water and Sewer Rates: Full Cost Recovery* was the principal document used for this audit in conjunction with the experience within the audit team. Reference was also made to other publications, including:

- The Canadian Water and Wastewater Association and Rawson Academy of Aquatic Science’s ‘Municipal Water and Wastewater Rate Manual’ (Second Edition October 1994);
- The InfraGuide best practice documents: ‘An Integrated Approach to Assessment and Evaluation of Municipal Road, Sewer, and Water Networks’;
• The InfraGuide best practice documents: ‘Developing a Water Distribution System Renewal Plan’; and,

• The new accounting standard PS 3150 of the Public Sector Accounting Board of the Canadian Institute of Chartered Accountants.

3.3.2 Focus of Audit
The audit focused on comparing the City’s revenue and expenses in relation to Best Practices, based on the 2006 InfraGuide Best Practice document Water and Sewer Rates; Full Cost Recovery.

The aim, as noted in this InfraGuide Best Practice document under Section 2.1 – Background, is for “Full Cost Recovery”.

Revenue sources are identified in ‘Table 3.1: Common Revenue Sources’ of the Best Practice document and include:

1. User rates
2. Bulk rates (same as wholesale rates for two tier systems)
3. Capital charges
4. Provision by subdivider
5. Property taxes
6. Miscellaneous fees and charges
7. Interest revenue
8. Fire protection charge
9. Wholesale rate
10. Grants and subsidies

Types of metered customer rates are identified in ‘Table 3.2: Customer Rates and Formats’ of the Best Practice document and include:

1. One-part rate (only a volumetric or consumption charge)
2. Two-part rate (includes fixed charge and volumetric charge)

The major recommended Best Practices outlined in the documents include the following:

1. Larger municipalities should have a two-part water rate with a fixed meter charge and a volumetric charge.
2. Fire protection costs should be based on property value and be reported to customers as an information item on their Water bill.
3. The Best Practice notes “that fire protection charges based on property assessment comes closest to a user pay charge as there is a relationship between property value and fire protection benefit. Better fire protection lowers insurance costs, and the savings on insurance premiums outweigh the costs of fire protection”.

4. An asset management system should be used including a complete infrastructure inventory and valuation; detailed condition assessments; and repair, replacement, and refurbishment plans.

5. A 20 to 50 year master plan should be developed for major infrastructure and reviewed and updated every 5-10 years.

6. The utility should maintain a 5 to 10 year capital plan identifying the cost and schedule of all projects within the first 5 years and all major projects over the full period, and update this plan every year.

7. The utility should establish a full cost recovery plan for all components of the water services. These cost components would include: source water protection; operations, maintenance and administration; research and development; financial (including depreciation, interest and equity return); capital works (for expansion, upgrade, rehabilitation and renewal including planning, pilot testing, pre-design, design, construction, commissioning and land acquisition); and decommissioning of disused works.

8. The utility should develop financing plans for infrastructure investment using capital reserves, capital funding from current revenues and debt in a combination that assures adequate funding while achieving a reasonable degree of rate stability and an equitable allocation of costs to current and future users.

9. The utility should review financing with due consideration for short-term and long-term needs.

10. The utility should conduct a gap analysis to quantify the difference between expenditure targets and existing expenditure levels.

11. The utility should project revenues for average usage (e.g., average trend over the past five years) and have a rate stabilization reserve fund that can absorb a “bad” year (i.e., wet year) deficit.

12. Revenue certainty is always a concern and as such, the utility should have a fixed charge or minimum bill approach to provide some revenue certainty. However, if too large a proportion of the total bill is shown as a fixed cost, the advantages of the volumetric portion in encouraging careful use is diminished and efficient water users are penalized with a higher average cost per unit of water (i.e., reduces the financial incentive to conserve water).

13. The utility should have special studies conducted periodically to design rates and charges, determine costs to be recovered by these and establish procedures to set their levels.
14. The utility should establish a segregated operating fund to ensure that water revenues are spent only on the water system.

15. The utility should have the user rate and other fees and charges reviewed annually and adjusted as needed so that they will reflect the true cost and generate enough revenue to maintain sustainable investment levels.

### 3.3.3 Audit Criteria

The audit reviewed the full cost recovery principle based on best management practices.

### 3.3.4 Audit Findings and Observations

1. The intent of the City budgeting process for rate-supported programs is that it is based on a “Full Cost Recovery” principle.

2. Revenue Sources for the City include the following key sources:
   - User rates
   - Miscellaneous fees and charges
   - Interest revenue
   - Fire protection charge

3. The City uses a one-part rate (a volumetric or consumption charge).

4. The City has a separate Fire Supply Charge which is recovered based on the size of meter installed.

5. The Fire Supply Charge is not calculated based on the resources dedicated to fire protection.

6. The water system does not have a detailed asset management plan prepared and in place.

7. Estimates of the remaining asset life for many of the system components are not available.

8. In general, based on benchmarking data, the City’s water infrastructure is being maintained near the provincial average. However, since most municipalities in Canada have an infrastructure deficit, this is not a good indication of where the City should strive to be.

9. In many cases the City is using best operation, maintenance and rehabilitation practices in the renewal of their water infrastructure.

10. Replacement cost estimates for the entire system needs to be developed on a detailed basis.

11. No detailed inventory of fixed assets was available.
12. Amortization is not listed as an operating expense; however the Water System budget does include Capital for Life Cycle replacement of assets.

13. Long Range Financial Plans are prepared for the Water System every 4 years. These plans cover operating requirements for 4 years and Capital requirements for 10 years.

14. Capital Investment Plans (10-year forecasts of capital needs) are prepared as part of the Long Range Financial Plans.

15. The City undertakes annual budgeting to establish the user rate and other fees and charges.

16. The City has a very detailed means of calculating development charges which is specified by the Development Charge Act. The City follows the requirements of the Development Charge Act and has developed a Development Charge Bylaw.

17. The means of calculation in the Development Charge Act is based upon the principle of full cost recovery for the growth portion of projects included in the Development Charge Bylaw.

18. The present City Bylaw was adopted on July 14, 2004 and must be reviewed every five years.

19. The Development Charge Act specifies exemptions to Development Charge fees. The City has also opted to have discretionary exemptions to Development Charge fees included in their Development Charge Bylaw (contained in section 7). Where exemptions have been granted, the equivalent amount is to be provided through some other means (e.g., taxes, grants, subsidies) to ensure that full cost recovery is recovered for the growth portion of projects.

20. Although the principle for Development Charge fees is full cost recovery, in reality this does not appear to be the case. There appears to be very little replacement funding provided for amounts lost through exemptions. Also, the City’s transition provisions resulted in large amounts of Development Charge funding not being available and collected as revenue.

21. Some Development Charge estimates for projects as provided by City departments are reduced under a review process. There does not appear to be a mechanism in place to recover lost revenue when the actual project costs are higher than the lower estimated costs.

22. Without a Water Cost of Service Study incorporating an Asset Management Plan, it is not possible to determine if the City is generating enough revenue to maintain sustainable investment levels.

23. The last cost of service study was published in June 1996 and was based on 1994 and 1995 data. Although this is the case, benchmarking data compared to other municipalities’ shows that water infrastructure emergency repairs (water main
breaks, pumping station failures, treatment plant emergency repairs, etc.) are around the average benchmark values, suggesting that the City’s water infrastructure, at present, appears to have an appropriate investment level. However, use of past historic costs is not a good indication of future replacement costs, as they will increase in the future due to the demographics of the system. Also, most municipalities in Canada have an infrastructure deficit and thus comparing average benchmarking data can lead to faulty decision-making.

24. The City has a good understanding of the rehabilitation and replacement cost, and life span, of most of their major water infrastructure (water treatment plants, pumping stations and reservoirs). They also have a fairly good understanding of the costs of the rehabilitation and replacement of their buried infrastructure (water mains and water services). Even though this is the case, the understanding of the life span of buried infrastructure is not an exact science in the water industry as there are numerous factors that can impact the life of a water main (soil conditions, water main material, geographic conditions [i.e., frost penetration], construction methods, depth of burial, etc.). Estimating when the rehabilitation and replacement of buried infrastructure should take place continues to be a focus of the City.

**Recommendation 7**
That the City consider recovering the Fire Supply Charge from the users based on the value of the assets being protected, (i.e., assessed value of the property).

**Management Response**
Management agrees with the recommendation.

The City will consider a number of revenue options as a part of the cost, revenue and rate study. Fire supply charges were moved to the water and sewer bill based on Council direction on January 25, 2006 in report ACS2006-CRS-FIN-0001.

While management will review the recovery of these charges, through its cost, revenue and rate study, it should be noted that fire supply costs and recovery charges must be developed in the context of an overall cost recovery program, and adjusted to the particulars of the municipality for which the revenues are being recovered. A number of factors may affect the strategy in recovering fire supply charges, including the large number of properties owned by other levels of government for which taxes are not collected. It is anticipated that development of an overall cost recovery program that would include fire supply charges would be completed by April 2010.

**Recommendation 8**
That the City, in the development of the next Development Charge Bylaw (July 2009), carry out a review of the process followed to ensure that full cost recovery of project costs is in fact taking place.
Management Response
Management agrees with this recommendation.

The full cost recovery policy will continue to be one of the guiding principles, as outlined in the City's Fiscal Framework, of the Development Charge (DC) Bylaw update, to recover the costs of growth to the full extent permitted by legislation (thereby minimizing the financial burden of the costs of growth on existing residents) with the target of applying them to the full extent permitted by legislation. This review will be completed by August 2009.

3.4 Review of the Status of the Related Recommendations of the 2005 Audit of Drinking Water Services

3.4.1 Background
In 2005, the City of Ottawa, Office of the Auditor General, carried out an Audit of the Drinking Water Services Division. Part of the scope of this 2008 Water Rate Audit is to review the specific items covered under the 2005 Audit related to the financial planning, revenue, billing, collection etc. and compare these to the new Financial Plans regulation. It also reviewed the status of the implementations of the 2005 audit recommendations.

3.4.2 Focus of Audit
The audit focused on the previous 2005 Drinking Water Services Division audit items relevant to this 2008 Water Rate Audit.

3.4.3 Audit Criteria
The audit criteria was limited to updating the actions taken by the City of Ottawa on the items of the 2005 Audit that impact on this 2008 Water Rate Audit.

3.4.4 Status of the related Recommendations in the 2005 Audit of Drinking Water Services
Over 50% of the recommendations (9 of 16) in the Auditor General’s 2005 Audit of Drinking Water Services have been fully addressed. The recommendations dealing with water quality (lead services program) and reduction of water loss have progressed very well.

Recommendations that are lagging action by the City include those that are related to corporate structure and service level agreements between Drinking Water Services and centres of expertise (recommendations No. 3 and 24 of the 2005 audit). Those recommendations dealing with software systems (Acquacis, ITX/IIMS, VTAX) are also not progressing as quickly as they should be (recommendations No. 7 and 11 of the 2005 audit).

A listing of all the related 2005 audit recommendations and their current status is provided in Appendix B.
4 CONCLUSION
The overall revenues from the water rate, the fire protection service charges and other miscellaneous water related revenues cover all currently known water system related expenditures. Some water related expenditures are currently unknown, such as source water protection and long-term asset requirements.

The 2008 City Budget projected water reserve fund balances over a ten-year period (2008 to 2017). The balance varies from a low of $1.8 million in 2008 climbing to a projected high of $50 million in 2017. The balances projected are very low for a system the size of Ottawa. A water cost of service analysis (including an asset management plan study) would be required to verify if the balances are sufficient for long-term system sustainability.

The City does not, at present, have a detailed asset management plan developed and in place for use in long-term planning and full costing.

5 ACKNOWLEDGEMENT
We wish to express our appreciation for the cooperation and assistance afforded the audit team by management.
APPENDIX A - Ontario Regulation 453/07 – Financial Plans
Regulation and Associated Guideline Document

List of Major Topics and Principles considered for the City of Ottawa Water Rate Audit:

1. Principle #1: “Ongoing public engagement and transparency can build support for, and confidence in, financial plans and the system(s) to which they relate”.
2. Principle #2: “An integrated approach to planning among water, wastewater, and storm water systems is desirable given the inherent relationship among these services”.
3. Principle #3: “Revenues collected for the provision of water and wastewater services should ultimately be used to meet the needs of those services”.
4. Principle #4: “Life-cycle planning with mid-course corrections is preferable to planning over the short-term or not planning at all”.
5. Principle #5: “An asset management plan is a key input to the development of a financial plan”.
6. Principle #6: “A sustainable level of revenue allows for reliable service that meets or exceeds environmental protection standards, while providing sufficient resources for future rehabilitation and replacement needs”.
7. Principle #7: “Ensuring users pay for the services provided leads to equitable outcomes and can improve conservation. In general, metering and use of rates can help ensure users pay for the services received”.
8. Principle #8: “Financial Plans are “living” documents that require continuous improvement. Comparing the accuracy of financial projections with actual results can lead to improved planning in the future”.
9. Principle #9: “Financial Plans benefit from the close collaboration of various groups, including engineers, accountants, auditors, utility staff, and municipal council”.
10. Section III.2.1 - Preparing a Capital Investment Plan - Overall Objectives: “The capital investment planning approach recognizes the potential pitfalls of basing a capital expenditure budget simply on the amount of funding available within a current revenue envelope after other cash requirements are met. This practice can lead to consistent under-funding, potentially compromising the integrity of the physical infrastructure”.
11. Section III.2.2 - Preparing a Capital Investment Plan – Projection Horizon: “It is recommended that utilities adopt a planning horizon that encompasses the entire life cycle of the asset base when they undertake capital investment planning. Using a horizon that encompasses the full life cycle of all assets may not be immediately
possible but is a good objective to strive towards over time. In the interim, a planning horizon of at least a minimum 35 years is desirable, although utilities that have done limited projection work to-date may wish to start with a smaller period of say 15 to 20 years”.

12. Section III.2.4 indicates Capital Investment Plans should be based on replacing each asset at the end of its useful life.

13. Section III.2.6 provides a guide or starting point for the Asset Life estimates by using Table 3-1 – Starting Point Asset Life Ranges.

14. Section I.2.1.1 – The Change in Approach to Identifying Capital Expenditures: “on the statement of operations, amortization expense is listed like any other type of operating expense”.

15. Section I.2.1.2 – Limitations in Accrual Measures of Current Period Expense: “the presence of an accounting surplus in utility financial statements does not necessarily indicate financial sustainability”

16. Section I.2.1.3 – A Scenario with Past Under-funding makes the following statements: “Revenues that cover only current period expenses, as measured using accrual accounting, will not be sufficient to address short-to-medium-term asset replacements. Deferred maintenance and historic under-investment must be taken into account” and “An ongoing pattern of no or minimal water-reserve account balances may have the effect of deferring timely maintenance, rehabilitation or replacement of assets, and may also be an indicator of historic under-investment”.

17. Section II.3 – Amortization of Tangible Capital Assets: “Amortization is a non-cash expense that reflects the gradual wearing-down or consumption of tangible capital assets. The annual expense is based on the historic cost of the asset, which is apportioned over the useful life of the asset using a depreciation method.”

18. Section II.5.2 – Fire Protection Costs: “In allocating costs to fire-fighting services, two possible approaches are:
   a. Allocate only the incremental costs of additional capacity required in distribution mains and water treatment facilities to support firefighting services. (Incremental is evaluated according to the costs of a hypothetical utility that provides water only for end-use consumption).
   b. Allocate the costs of distribution mains and water treatment plants on a pro rated basis between water service and fire protection, based on each service’s contribution to overall capacity requirements.”
19. Section IV.1.5 – The Differing Nature of Capital Expenditures: “When preparing Funding Plans, capital expenditures can usefully be considered to fall into two distinct categories:

a. Those that are large and occur on an intermittent basis. These include expenditures associated with major single assets, such as water or wastewater treatment plants or major transmission mains. These types of expenditures typically occur infrequently and merit special attention due to their size. External debt is more likely to be used for expenditures of this kind than for smaller assets.

b. Those that occur on an ongoing basis. For example, a utility may need to replace some portion of its water mains annually, resulting in a base level of capital expenditures. For these types of expenditures, it is more likely that annual cash flow can be used to meet planned expenditures.”
APPENDIX B - 2005 Auditor General’s Audit of Drinking Water Services - Status of Related Recommendations
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<tr>
<td>2</td>
<td>That representatives from DWS, the FSU and Accounts Payable develop a mutually acceptable solution to address DWS information requirements with respect to utility invoices such as Hydro Ottawa.</td>
<td>Management agrees with this recommendation. The first priority for Hydro Ottawa invoices is that they be paid within the time limits established. Staff will work together to find a mechanism to provide the consumption information and other data required by DWS by Q3 2006. Financial Services continues to work with Hydro Ottawa to develop a more cost effective manner of processing the many hydro invoices the City receives while still providing the information the operating groups require. As part of an Ad Hoc solution DWS needs to identify their major hydro usage facilities so that the requested information can be provided by FSU as part of an interim solution. As of 4 February, 2006 DWS has selected the following accounts to begin work on an interim solution: Lemieux Island WPP, Huntman Bridge PS, Blighs Bridge PS, Ottawa South PS, Orleans Reservoir, Montreal road WPP, Britannia WPP, and Carlington Heights PS.</td>
<td>75%</td>
<td>75%</td>
<td>The interim solution of getting the largest water facility accounts information to the Drinking Water Services Division is appropriate. But, this process is moving slowly and should be given higher priority.</td>
</tr>
<tr>
<td>3</td>
<td>That the service level agreements between DWS and centres of expertise be reviewed jointly by both parties on an annual basis as part of the budgeting cycle and adjusted to document actual or expected service levels</td>
<td>Management agrees with this recommendation. This review will be initiated in conjunction with the work related to Recommendation 24. Further work on this recommendation must await further progress on Recommendation 24 (governance structure review of the delivery of water services). DWS requires senior level decision on governance structure, further direction is required for the Branch to move forward on this recommendation</td>
<td>25%</td>
<td>25%</td>
<td>There is minimal work, if any, being completed on this recommendation.</td>
</tr>
<tr>
<td>4</td>
<td>Responsibility and accountability for the maintenance program for water meters and remote receivers should be clearly defined and acceptable service levels established with priority given to areas where the potential for lost revenue is greatest</td>
<td>Management agrees with this recommendation. Service standards need to be established for repair times and better communication introduced between the two work groups. Both groups need to understand the priority setting mechanism and look at the revenue loss and customer service when establishing work plans. A review will be undertaken in 2006. This has been completed with responsibility confirmed within the Customer Services.</td>
<td>100%</td>
<td>100%</td>
<td>Action is completed on this recommendation.</td>
</tr>
<tr>
<td>6</td>
<td>The rationale for meter reading frequency should be reviewed as part of the study of meter reading technology, taking into account the benefits to customers and water volume accountability of frequent, accurate readings</td>
<td>Management agrees with this recommendation. A study of meter reading frequency will be undertaken to determine the most cost-effective frequency. The frequency issue could be improved dramatically through the introduction of Automatic Reading Technology. Consolidated management of all aspects of meter maintenance and meter reading may provide improved productivity, water accountability and information reports. This initiative is not included in the 2006 work plan or budget and will be included in the 2007 Corporate Services Departmental work plan. Completing Council approved the AMR project. Meter reading frequency will be increased to once a month when project is implemented. Cost analysis of maintaining/improving the level of meter reading frequency is being evaluated until AMR is deployed. Subject to Council approval the 4 year capital budget, an RFP will be issued to begin the development of the new technology. Intermediate measures will be put in place to address the issues during the development phase. Apr 2/07: Council approved the capital budget and an RFP will be issued in 2007 to begin the deployment of the new technology. Intermediate measures have been approved as part of the budget process to address the issues during the deployment phase. May 30/07: Council has approved the capital budget and an RFP will be issued in 2007 to begin the deployment of the new technology. Intermediate measures approved as part of the budget process have been implemented to address the issues during the deployment phase. Selection of appropriate technology is proceeding during 2008. Once the technology has been selected meter reading</td>
<td>100%</td>
<td>90%</td>
<td>The only remaining implementation component of this recommendation is the meter reading frequency which can only be completed once the the Automatic Meter Reading (AMR) project is implemented and evaluated.</td>
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## APPENDIX B: Assessment and Comments - Status of Recommendations & Implementation

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<td>7</td>
<td>A formal assessment of the Acquacis system should be conducted to determine if the system can cost effectively meet user needs and ensure the achievement of divisional and strategic objectives</td>
<td>Management agrees with this recommendation. Once the new meters and reading technology are selected, a review of the Acquacis will be undertaken. This will form part of the 2007 Corporate Services Departmental work plan.</td>
<td>A review of Aquacis as the water billing software is scheduled for 2008. In the interim several enhancements and features have been integrated to address issues and concerns.</td>
<td>25%</td>
<td>25%</td>
<td>Management are still waiting for the outcome of the AMR project (see report recommendation No. 6 above) prior to undertaking a review of the AcQuacis system.</td>
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<tr>
<td>10</td>
<td>A formal communication process for by-passes observed by meter readers, or CSOS maintenance staff should be developed by CSOS along with the associated action measures, including notification of By-Law enforcement</td>
<td>Management agrees with this recommendation. A reporting process is already in place, and used by both Meter Maintenance staff and Meter Readers. Open by-passes are not in compliance with the Water By-law, and each reported offence is followed by issuance of a fine to the building owner. Although the process works and is used by both groups, formal and written documentation of the procedures is lacking. This will be resolved in Q1 2006.</td>
<td>This has been completed.</td>
<td>100%</td>
<td>100%</td>
<td>Action is completed on this recommendation.</td>
</tr>
<tr>
<td>11</td>
<td>Procedures to reconcile water accounts with property tax accounts (VTAX), meters installed (ITX/IIMS) and building permits issued should be developed to help mitigate the risk of incomplete billings</td>
<td>Management agrees with this recommendation. This initiative will assist in ensuring that all customers are being billed. Currently, this cannot be accommodated within existing resources. Additional resources will need to be identified as part of the 2007 Corporate Services Departmental work plan and budget.</td>
<td>As of April 2007 the integration of a link between tax and water accounts has been completed. There has been no further progress as no budget authority has been approved to resource the design of and staff the endeavor of tracking account set-up from building permits.</td>
<td>25%</td>
<td>25%</td>
<td>The action of completing this recommendation is dependant on the allocation of resources.</td>
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<tr>
<td>12</td>
<td>Processes related to activating accounts for new development should be reviewed to facilitate identification of developers/contractors that may use water that should be billed or that turn on water without notifying the City</td>
<td>Management agrees with the intent of this recommendation. The Water By-law is very clear on that subject: only City staff are allowed to turn on or off water on the system. The By-law is enforced with fines on every reported infraction. Some water that is used in new developments is unauthorized and unbilled. A review, to be completed by Q1 2007, is currently underway to improve compliance on building construction related usage and a process to bill new developments using water.</td>
<td>This has been completed.</td>
<td>100%</td>
<td>100%</td>
<td>Action is completed on this recommendation.</td>
</tr>
<tr>
<td>14</td>
<td>That CSOS review options to improve compliance (reporting and payment) by flusher hydrant users including the cost effectiveness of creating dispensing stations and the use of stronger By-Law enforcement</td>
<td>Management agrees with this recommendation. The Flusher Hydrant Program is an honour-based system, relying on the user to self-report water usage. It is expected that some users will not report some of their usage. Staff attempted to quantify theft, as reported in the Audit. Staff will be assessing the cost / benefit of constructing bulk water dispensing stations through the City to ensure full metering, regulated water withdrawal flow rates, surge protection and backflow safety features. This assessment will be completed by Q4 2006.</td>
<td>This has been completed.</td>
<td>100%</td>
<td>100%</td>
<td>Action is completed on this recommendation.</td>
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<td>15</td>
<td>The internally established collection target should be re-evaluated by Revenue and Collections management</td>
<td>Management agrees with this recommendation. This target will be reviewed in 2006.</td>
<td>This has been completed.</td>
<td>100%</td>
<td>100%</td>
<td>Action is completed on this recommendation.</td>
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<tr>
<td>17</td>
<td>The City should implement a cross-connection control program in accordance with the InfraGuid's Best Practice – &quot;Methodologies for Implementing a Cross-Connection Control Program&quot;.</td>
<td>Management agrees with the intent of this recommendation. A high risk item that would require it to be a priority action item at this time. Staff, if requested, would bring a report forward in Q2 2007 outlining a proposed program and long term cost for Committee's consideration.</td>
<td>A report is scheduled to be prepared and tabled with the Planning and Environment Committee (PEC) in Q2 of 2008.</td>
<td>75%</td>
<td>25%</td>
<td>There is still no cross-connection control program in place. Once a report is brought forward and approved by Council, it will take resources to complete this recommendation.</td>
</tr>
<tr>
<td>18</td>
<td>The City should implement a proactive lead services replacement program.</td>
<td>Management agrees with intent of this recommendation. The Branch is fully aware of the recommendations contained in the Walkerton Report. The City currently treats drinking water so that it will remain in compliance with all federal and provincial guidelines for lead content in drinking water. Monitoring programs have confirmed the effectiveness of this approach. A report will be presented in Q3 2006 outlining a proposed strategy to Council for addressing lead services.</td>
<td>On 23 January, 2008 Council adopted an annual capital program dedicated to proactive lead services replacement and a public outreach program. The 2008 Budget approved this initiative as an annual program. During 2008, and in time for Council’s consideration as part of the 2009 Rate Budget, staff will provide Council with a potential accelerated lead service replacement program that would see all City-owned lead services replaced by 2014.</td>
<td>100%</td>
<td>100%</td>
<td>Action is completed on this recommendation.</td>
</tr>
<tr>
<td>21</td>
<td>The City should identify a specific group to lead and be responsible for all water loss reduction programs</td>
<td>Management agrees with this recommendation. A report came forward in Q1 2006, to outline the Water Loss Control program to reduce water losses. The Branch will coordinate a steering committee to improve overall water accountability. The DWS division will be responsible for water leakage reduction.</td>
<td>This has been completed with a group established within Water Distribution.</td>
<td>100%</td>
<td>100%</td>
<td>Action is completed on this recommendation.</td>
</tr>
<tr>
<td>22</td>
<td>Utility Services should bring forward a report to Council addressing all elements of their water loss strategy</td>
<td>Management agrees with this recommendation. A report covering this program has been prepared and was tabled with Committee in Q1 2006.</td>
<td>This has been completed with a total of 3 reports submitted to PEC. The last updated report was submitted to the PEC on May 27, 2008.</td>
<td>100%</td>
<td>100%</td>
<td>Action is completed on this recommendation.</td>
</tr>
<tr>
<td>24</td>
<td>The governance structure of the delivery of water services should be reviewed and restructured to ensure accountability of an individual below the level of the City Manager for the water fund and services funded by the water fund</td>
<td>Management agrees with the intent of this recommendation. The first step should be to identify a specific individual to oversee the entire system. Whether to move to one distinct separate organization should be fully studied to determine the costs and benefits of doing so. This review will be initiated in Q3 2006.</td>
<td>This issue is still outstanding and must be addressed, and a decision taken by Senior Management. Until that is completed, Branches and Divisions cannot move forward on this.</td>
<td>25%</td>
<td>25%</td>
<td>There is minimal work, if any, being completed on this recommendation.</td>
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<td>25</td>
<td>That Financial Services re-examine the allocation of costs to the water fund and identify current costs for all elements</td>
<td>Management agrees with this recommendation. This review will be completed by Q4 2006 consistent with the rules of the report “Watertight: The case for change in Ontario’s water and wastewater sector” (if adopted) and allocation methodology adopted through GMBI.</td>
<td>Finance completed a review of the allocation of these costs associated with the 2008 budget. Revised cost allocations were reflected in both the 2008 tax supported document as well as the 2008 rate budget. In 2007 the City Treasurer completed a detailed analysis of the costs to be allocated to the water and sewer operations. The results confirmed that the current amount that was being allocated to the water and sewer operations was appropriate. In 2007 Finance proposed to identify the recovery of these costs within the departments that provide the services within the first and second categories, making the true administrative charge allocation more understandable and more transparent. These figures were identified in the 2008 rate budget.</td>
<td>100%</td>
<td>100%</td>
<td>Action is completed on this recommendation.</td>
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