



**The Corporation of the City of Stratford
Infrastructure, Transportation and Safety Committee
Open Session
AGENDA**

Date: Monday, March 27, 2017
Time: 7:15 P.M.
Location: Council Chamber, City Hall
Committee Present: Councillor McManus - Chair Presiding, Councillor Brown - Vice Chair, Mayor Daniel Mathieson, Councillor Beatty, Councillor Bunting, Councillor Henderson, Councillor Ingram, Councillor Mark, Councillor Ritsma, Councillor Vassilakos
Staff Present: Rob Horne - Chief Administrative Officer, Joan Thomson - City Clerk, Andre Morin - Director of Corporate Services, Ed Dujlovic - Director of Infrastructure and Development Services, Jacqueline Mockler - Director of Human Resources, Carole Desmeules - Director of Social Services, David St. Louis - Director of Community Services, John Paradis - Fire Chief, Tatiana Dafoe - Deputy Clerk, Michael Mortimer - Manager of Environmental Services

Pages

1. Call to Order

The Chair to call the Meeting to Order.

Councillor Clifford provided regrets for this meeting.

2. Disclosure of Pecuniary Interest and the General Nature Thereof

The *Municipal Conflict of Interest Act* requires any member of Council declaring a pecuniary interest and the general nature thereof, where the interest of a member of Council has not been disclosed by reason of the member's absence from the meeting, to disclose the interest at the first open meeting attended by the member of Council and otherwise comply with the *Act*.

Name, Item and General Nature of Pecuniary Interest

3. Sub-committee Minutes

No Sub-committee Minutes to be received at this time.

4. Delegations

None scheduled.

5. Report of the City Clerk

5.1 Request for Angle Parking on McCarthy Road West during the 2017 and 2018 Canadian Dairy XPO (ITS17-011)

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*This item also to be considered at the March 27, 2017 Council reconvene meeting.

Motion by _____

Staff Recommendation: That City Council grant an exemption from Traffic and Parking By-law 159-2008 – Section 8 (No Parking in Unposted Locations) to allow angle parking and parking in the bicycle lane on the north side of McCarthy Road West from Fire Station No. 2 to the Rotary Complex site on April 5-6, 2017 and April 4-5, 2018 from 7:00 a.m. to 9:00 p.m. subject to the following conditions:

- That McCarthy Place and Windmill Gardens continue to have unimpeded driveway access at all times;
- That a distance of 8.8 metres / 29 feet between the rear bumper of vehicles angle parked on the north side of McCarthy Road West to the south side curb is maintained at all times to allow for the safe passage of traffic and emergency vehicles, and;
- Permission is obtained from the property owner/developer for parking on the unassumed road allowance from the Rotary Complex site to the dead end of McCarthy Road West at Fraser Street.

6. Report of the Manager of Environmental Services

6.1 2016 Water Summary Report (ITS17-008)

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*This item also to be considered at the March 27, 2017 Council reconvene meeting.

Motion by _____

Staff Recommendation: THAT the 2016 Water Summary Report be received for information.

7. Advisory Committee/Outside Board Minutes

No Advisory Committee/Outside Board Minutes to be provided at this time.

8. Adjournment

Meeting Start Time:

Meeting End Time:

Motion by _____

Committee Decision: That the Infrastructure, Transportation and Safety Committee meeting adjourn.



MANAGEMENT REPORT

Date: March 27, 2017
To: Infrastructure, Transportation and Safety Committee
From: Joan Thomson, City Clerk
Report#: ITS17-011
Attachments: Letter from Canadian Dairy XPO dated March 15, 2017
 Exhibitor Parking Schedule Diagram

Title: Request for Angle Parking on McCarthy Road West during the 2017 and 2018 Canadian Dairy XPO

Objective: To consider the request from event organizers of the Canadian Dairy XPO for an exemption to Traffic and Parking By-law 159-2008, to allow angle parking on McCarthy Road West during both the 2017 and 2018 Canadian Dairy XPO events.

Background: The City has been approached by organizers of the Canadian Dairy XPO for permission to allow angle parking on McCarthy Road West during their 2017 and 2018 events.

Although there have been concerns regarding parking in bicycle lanes and access to Windmill Gardens and McCarthy Place (previously Royal Palisade Retirement Home) in previous years, the following motion was adopted at the November 9, 2015 Regular Council meeting:

"That Council support angled parking on McCarthy Road West during the 2016 Canadian Dairy XPO, provided that Windmill Gardens and McCarthy Place are in agreement"

Analysis: This request is for angled parking for 400 vehicles on McCarthy Road West for the 2017 and 2018 XPOs. The exemption is required because angle parking and parking in a bicycle lane are not permitted under Traffic and Parking By-law 159-2008. Specifically, Section 8 – No Parking in Unposted Locations, prohibits parking in such a manner as to obstruct any designated bicycle lane. If the exemption is granted, the bicycle lane on the south side would remain open.

Secondly, it is noted that a portion of McCarthy Road West from the Rotary Complex site to the dead end at Fraser Drive is still an un-assumed road allowance while the subdivisions are under construction. Permission from the property owner/developer is required to allow parking on this portion of the street and is outside the scope of this approval by Council.

Police and Fire have not expressed concerns with the 2017 and 2018 request and are supportive of angle parking on the north side of McCarthy Road West for this event.

Financial Impact: None identified.

Staff Recommendation: That City Council grant an exemption from Traffic and Parking By-law 159-2008 – Section 8 (No Parking in Unposted Locations) to allow angle parking and parking in the bicycle lane on the north side of McCarthy Road West from Fire Station No. 2 to the Rotary Complex site on April 5-6, 2017 and April 4-5, 2018 from 7:00 a.m. to 9:00 p.m. subject to the following conditions:

- That McCarthy Place and Windmill Gardens continue to have unimpeded driveway access at all times;
- That a distance of 8.8 metres / 29 feet between the rear bumper of vehicles angle parked on the north side of McCarthy Road West to the south side curb is maintained at all times to allow for the safe passage of traffic and emergency vehicles, and;
- Permission is obtained from the property owner/developer for parking on the unassumed road allowance from the Rotary Complex site to the dead end of McCarthy Road West at Fraser Street.



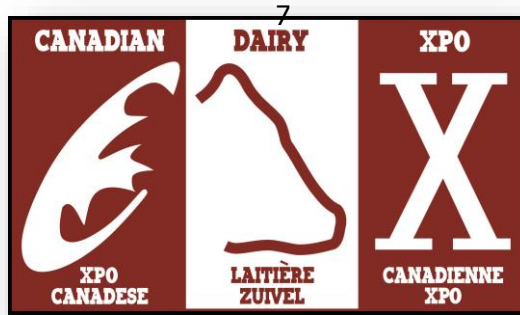
Joan Thomson, City Clerk



Andre Morin, Director of Corporate Services

A handwritten signature in black ink, appearing to read "Rob Horne". The letters are cursive and fluid.

Rob Horne, Chief Administrative Officer



YOUR Canadian Dairy Showcase!

April 5-6 2017

Canadian Dairy XPO (CDX)

Submission date: March 15th 2017

****See supporting diagram labelled Exhibitor Parking Schedule 7:00am – 9:00am*

Council Request:

After a successful 'trial run' of angle parking along McCarthy Rd during CDX 2016, we are requesting permission to continue utilizing the exact same linear area and exact same process during the 2017 AND 2018 Canadian Dairy XPO (2 event request of this proven model).

Reason for Late Request to Council:

Both CDX Management and City of Stratford Facility Management were under the impression that the McCarthy Rd angle parking allowance aligned with the CDX parking lease of the fairground lands, as they were both approved on the same day by Council (November 9th 2015). It came to our attention through dialog at our recent parking team meeting with various groups that this was not the case and we needed approval again for the angle parking along McCarthy Rd. We apologize for this oversight and hence are now asking for a 2-year approval.

The Parking Challenge – The Opportunity!

The Canadian Dairy XPO attracts 15,000 dairy producers from across Canada and 350 commercial companies from 30 countries over the 2-days. This represents 2000-2200 vehicles at anyone given time throughout the day. These individuals represent visitors to both the Canadian Dairy XPO and of course the City of Stratford. Many stay in town and drive economic stimulation of businesses such as hotels, restaurants, gas stations, downtown retail etc. It's a joint responsibility of CDX and the City of Stratford to accommodate these guests, while at the same time limiting the inconvenience to residential and commercial neighbours of the Stratford Rotary Complex (SRC). Here is a breakdown of the 3 parking areas that are utilized during the Canadian Dairy XPO annually. These 3 areas provide adequate capacity for the crowds attending CDX:

- Stratford Rotary Complex (main asphalt parking lot) = approx. 700 parking spaces/vehicles
- Old fairground lands south of SRC = approx. 1000 parking spaces/vehicles
- McCarthy Rd Fire Station to dead end @ Fraser Dr = approx. 400 parking spaces/vehicles

Total parking capacity of all 3 parking areas = 2100 spaces/vehicles

Reason for Request:

As you can see from the above, 700 parking spaces does not come close to matching the allowed occupant load of the internal Stratford Rotary Complex. This proves problematic with large national events such as CDX that utilizes the entire Stratford Rotary Complex, including the CDX owned 400ft Cow Coliseum structure. Outside of CDX, inadequate parking can also be observed on a Saturday when there are multi events taking place onsite, that again utilize the entire SRC facility (i.e. soups on event, hockey, farmers market and activities in the Agriplex). In this example, parking also spills out onto McCarthy Rd.

Usage Details/Duration:

It should be noted that currently parallel parking is allowed along McCarthy Rd., but angle parking allows for almost double the cars in the same linear footage.

Where? – north side of McCarthy Rd, over North bike lane to north curb running from the Fire Station (close to Mornington St.), running to the McCarthy Rd dead end at Fraser Dr. After attendee's park, they either walk down the sidewalk to SRC or get on a CDX complimentary heated shuttle X4

When? – this parking area will be utilized on April the 5th & 6th 2017 and April 4th & 5th 2018 from 7am – 9am only, for exhibitor parking. After this timeframe we send cars in the main lot of SRC and then to overflow in the lower parking field (old fairground land).

CDX Consideration for City of Stratford Permanent Residents:

- Now heading into year 5, we have all learned that if we have a plan and if we have adequate parking capacities, then this significantly reduces the traffic congestion we saw in year 1 and 2 and it also significantly reduces parking congestion within residential areas that surround the SRC
- CDX is the first week of April, so weather is of course variable. This parking plan uses the north bike lane, but does not impede the south bike lane along McCarthy Rd. At CDX 2016, 1 cyclist was observed over the 2-days and was voluntarily traveling on the sidewalk
- This parking plan ensures that the entrance to both retirement communities on McCarthy Rd. are kept open at all times and that cars are not using their private parking lots. CDX has hired City of Stratford police that help patrol both these items
- As of CDX 2016, we implemented a neighbor info letter and invite that we had deliver to every resident in the new development off Fraser Dr and that surround the SRC and lower old fairground land. This letter informs residents of the dates and times of CDX and the potential congestion along this stretch of McCarty Rd. The letter also invites them to a complimentary CheeseFEST onsite the first night with 100% Canadian cheese, live entertainment etc. and all totally complimentary. FYI this CheeseFEST event was being sponsored by the City of Stratford (Community Grant Fund) for 4 years and this year for the first time the City of Stratford will not be supporting. Perth County is supporting this CheeseFEST event again

Annual Parking Cost Paid by CDX:

- Stratford Police services
- Private security company
- Rotary Club of Stratford (paid volunteers)
- Shuttle service rental X4
- Pylon rental
- Machine rental to set parking huts
- CDX staff X5

City of Stratford Official Support of this Plan & Process:








- Facility Management (David St. Louis & Jim Bryson)
- Stratford Police (Inspector Sam Theocharis)
- Stratford Fire Department (Chief John Paradis & Rod McDonald)

WE LOOK FORWARD TO PRODUCING ANOTHER WORLD CLASS EVENT FOR THE CITY OF STRATFORD!

EXHIBITOR PARKING SCHEDULE 7:00am - 9:00am



LEGEND

-  Parking
-  Shuttle Hut
-  Controlled Access to Local Traffic & CDX ONLY
-  Stratford Police /Patrol Car
-  Rotary Club Members
-  Security
-  Shuttle Route



MANAGEMENT REPORT

Date: March 27, 2017
To: Infrastructure, Transportation & Safety Committee
From: Mike Mortimer, Manager of Environmental Services
Report#: ITS17-008
Attachments: 2016 Water Summary Report

Title: 2016 Water Summary Report

Objective: To present the 2016 Water Summary Report to members of Council as per Ontario Regulation 170/03.

Background: The owner of a drinking water system shall ensure that, as per Ontario Regulation 170, a Summary Report is prepared no later than March 31 of the following year and presented to members of Municipal Council.

In past years, the Summary Report has been prepared in conjunction with the Annual Water Quality Report for Council. Beginning in 2016, these reports were prepared independently of each other as there are different regulatory requirements and deadlines for each report.

The Annual Report regulatory requirement is to have the report available to the public by February 28 of each year. This requirement was met and the report can be found on the City of Stratford website.

Analysis: This 2016 Water Summary Report serves as a comprehensive review of performance of the drinking water system as it relates to regulations and criteria that fall under the municipal drinking water licensing program. It has been prepared in accordance with O. Reg. 170/03.

There was one non-compliance in 2016 and this was noted in the Ministry of Environment and Climate Change Inspection (February 2017).

The operations and maintenance manuals did not meet all requirements of the Drinking Water Works Permit and Municipal Drinking Water License. While disinfection practices were practiced at all times, and the absence of other non-compliances confirms this, descriptions of the protocol and processes to ensure disinfection were not as detailed as stipulated in the Permit and License.

The actions required were completed in November 2016 (before the final report was prepared). These actions included updating and submitting updated detailed descriptions of the processes used to achieve disinfection at each facility. All operations staff were trained on the changes.

There are no other issues or concerns noted in the 2016 Water Summary Report. All other performance requirements have been met.

The Report will be posted on the City of Stratford website and will be available, in hard copy form, at the City Annex, Infrastructure and Development Services, 82 Erie Street, 3rd Floor.

Financial Impact: Potentially, a financial impact could occur if requirements of the Acts and Regulations are not met, resulting in non-compliance penalties and loss of public trust.

Staff Recommendation: THAT the 2016 Water Summary Report be received for information.



Mike Mortimer, Manager of Environmental Services



Ed Dujlovic, Director of Infrastructure and Development Services



Rob Horne, Chief Administrative Officer



The City of Stratford

Water Distribution and Supply



Summary Report

2016

City of Stratford Members of Council

March 27, 2017

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2016 SUMMARY REPORT

1.0 OVERVIEW AND BACKGROUND

Safe Drinking Water Act

Ontario Regulation 170/03, Schedule 22-2, requires that owners of municipal drinking water systems prepare a summary report and present this report to the members of Municipal Council by March 31 of each year. The report is prepared for the previous calendar year and the following criteria must be included as per the regulation:

- a) list the requirements of the Act, the regulations, the system's approval, drinking water works permit, municipal drinking water licence, and any order applicable to the system that was not met at any time during the period covered by the report.
- b) for each requirement referred to in clause (a), that was not met, specify the duration of the failure and the measures that were taken to correct the failure.
- c) A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows.
- d) A comparison of the summary referred to in (c) to the rated capacity and flow rates approved by the system's approval, drinking water works permit or municipal drinking water licence.

This Summary Report also serves as a comprehensive review of performance of the drinking water system as it relates to regulations and criteria that fall under the municipal drinking water licensing program.

Municipal Drinking Water Licensing Program

A Municipal Drinking Water License (MDWL) is required to operate the drinking water system. The Municipal Drinking Water License (# 074-101 - Issue Number 3) was re-issued in December of 2016 and is valid until June 24, 2020. The re-issuance was initiated by the Ministry of Environment and Climate Change (MOECC) due to regulatory amendments that required timelines to be outlined in the MDWL. A copy of this license can be viewed at 82 Erie Street, 3rd Floor Engineering.

There are five requirements that must be achieved in order to obtain an MDWL.

- A valid Drinking Water Works Permit
- A valid Permit to Take Water for each source
- An Operational Plan
- Must have an Accredited Operating Authority
- A Financial Plan approved by City Council

2016 SUMMARY REPORT

Drinking Water Works Permit (#074-201 – Issue 2)

The Drinking Water Works Permit (Issue Number 3) was re-issued in December of 2016 and is valid until June 24, 2020. The re-issuance was initiated by the MOECC due to regulatory amendments that required timelines to be outlined in the Drinking Water Works Permit. A copy of this Permit can be viewed at 82 Erie Street, 3rd Floor Engineering.

Permit to Take Water (# 6661-77DL9X)

The Permit to Take Water (PTTW) expires on July 1, 2017 and includes water taking information and record keeping requirements for 11 production wells and several monitoring wells. The application for the new permit was submitted in early January 2017 and the new permit is expected to be issued in spring of 2017.

Operational Plan

An Operating Authority must establish and maintain a Quality Management System (QMS) in order to become accredited. This QMS is documented in an Operational Plan which must be accepted by the Ministry of Environment and Climate Change. The Operational Plan contains 21 elements and numerous appendices and tables and is reviewed and amended on a continuous basis. The City of Stratford Operational Plan can be viewed at 82 Erie Street, 3rd Floor Engineering.

Accredited Operating Authority

The Safe Drinking Water Act, 2002 requires Owners and Operating Authorities of municipal residential drinking water systems to have an accredited Operating Authority. There are specified minimum requirements that must be met in order to become accredited by a third party Accreditation Body.

The Certificate of Accreditation expires on May 1, 2019 and a surveillance audit has been scheduled for April 3, 2017.

Financial Plan

A Water and Wastewater Rate Study was completed by Watson and Associates in 2014 for the City of Stratford and meets the requirements of the Municipal Drinking Water Licensing Program. This study was sent to the Ontario Ministry of Municipal Affairs and Housing in 2015.

2016 SUMMARY REPORT

2.0 HEALTH RELATED NOTIFICATIONS – BOIL WATER ADVISORIES (BWA) / DRINKING WATER ADVISORIES (DWA)

The City of Stratford, in collaboration with the Perth County District Health Unit, ensures a safe water supply. There were no BWA or DWA issued during 2016.

3.0 REGULATORY COMPLIANCE

REGULATIONS & DOCUMENTS

All municipal owned and operated water systems are governed under the Safe Drinking Water Act, 2002, Ontario Water Resources Act (OWRA), and associated regulations. The following regulations, and associated standards and documents, are all applicable, and most relevant, to the compliant operation of the City of Stratford Drinking Water system:

- Ontario Regulation 170/03
- Ontario Regulation 169/03
- Ontario Regulation 128/04
- Wells Regulation 903 (OWRA)
- Drinking Water Quality Management Standard
- Municipal Drinking Water License
- Drinking Water Works Permit

Ontario Regulation 170/03

This regulation includes requirements for:

- Sampling and analytical testing (microbiological and chemical)
- Adverse incident reporting
- Corrective actions
- Continuous water quality monitoring

Ontario Regulation 169/03

This regulation includes requirements for:

- Water Quality Standards

Ontario Regulation 128/04

This regulation includes requirements for:

- Classifications of Drinking Water Systems
- Certifications and responsibilities of Operators
- Proper record keeping of the drinking water system

2016 SUMMARY REPORT

Wells Regulation 903

This regulation includes requirements for:

- Well maintenance
- Well specifications

Drinking Water Quality Management Standard (DWQMS)

This Standard specifies:

- Minimum requirements for the Quality Management System to allow for the accreditation of the Operating Authority

Municipal Drinking Water License

This document includes requirements for:

- Specific conditions / testing / monitoring
- Flow limits through the treatment system
- Regulatory relief conditions
- Operations & Maintenance manual criteria

Drinking Water Works Permit License

This document includes criteria for:

- Making alterations to the system

2016 SUMMARY REPORT

NON-COMPLIANCES & ADVERSE WATER QUALITY

2016 Ministry of Environment & Climate Change Annual Inspection

On an annual basis, the MOECC conducts an inspection of the drinking water system. The MOECC drinking water system inspections focuses on compliance with the Safe Drinking Water Act, related regulations, and other documents, as referenced above.

Findings

In 2016, the City of Stratford Drinking Water System received an inspection rating of 97.07%. A copy of this inspection can be viewed at 82 Erie Street, 3rd Floor Engineering.

The inspection was conducted in February 2017 and the inspection period was from August 1, 2015 to December 31, 2016. The inspection noted one non-compliance issue and this is summarized in Table 1 along with the corrective action status.

Date	Description	Corrective Action Required
Feb 9, 2017	The operations and maintenance manuals did not meet the requirements of the Drinking Water Works Permit and Municipal Drinking Water License issued under Part V of the SDWA.	The Owner shall ensure that all operational and maintenance staff are trained and provided with an up to-date working copy of operations and maintenance manual. (Completed February 2017)

2016 SUMMARY REPORT

2016 Non-Compliances

An operating authority is also self-regulated to identify and report non-compliance issues under the Safe Drinking Water Act, Municipal Drinking Water License, Drinking Water Works Permit and Ontario Water Resources Act.

Findings

There were no other non-compliances, outside of the inspection, identified by the Operating Authority in 2016.

Adverse Water Quality Incidents

Any adverse water quality incidents, as per Ontario Regulation 170/03, are summarized in the City of Stratford Annual Water Quality Report. This report is found on the City of Stratford website or can be viewed at 82 Erie Street, 3rd Floor Engineering.

It should be noted that water quality exceedances for Fluoride and Sodium were observed in samples taken in 2016. However, reporting for these exceedances was not required. For both parameters, a result exceeding the concentration in the Ontario Drinking Water Standards is only required to be reported and corrective actions taken, if it has been 57 months since the last report.

The next reporting requirement for Fluoride, for all treated entry locations, is June 26, 2018.

The next reporting requirement for Sodium, for all treated entry locations, is June 16, 2018.

2016 SUMMARY REPORT

DWQMS & MUNICIPAL DRINKING WATER LICENSING PROGRAM

Third Party Audit and Accreditation

On an annual basis, a third party accreditation authority conducts an audit to determine whether the Quality Management System conforms to the requirements of the Ontario Ministry of the Environment's Drinking Water Quality Management Standard (DWQMS).

In April of 2016, SAI Global completed an on-site audit with 3 non-conformances noted. These findings were included in the Management Review.

Internal Audit

As per the DWQMS, an internal audit is to be conducted once per year.

In May of 2016 an internal audit was conducted by qualified city staff. The findings were included in the Management Review.

Management Review

As per the DWQMS, an annual Management Review is to be conducted and findings conveyed to the Owner. A Management Review was conducted on June 7, 2016. The review included findings from the internal and external audits, MOECC inspections and other prescribed items. Council received the report on August 8, 2016.

Infrastructure Review

As per the DWQMS, an annual Infrastructure Review is to be conducted to ensure the adequacy of the infrastructure necessary to operate and maintain the drinking water system. The findings are to be conveyed to the Owner.

The 2015 Infrastructure Review was conducted in November of 2016. The 2016 Infrastructure Review will take place in April of 2017 and both reviews will be presented in one report to Council.

2016 SUMMARY REPORT

4.0 HYDRAULIC PERFORMANCE

Production Wells and Treated Flows

There were no flow exceedances of the Permit to Take Water or Municipal Drinking Water License in 2016.

The following tables (APPENDIX A) summarize the flow rates for 2016, including Municipal Drinking Water License Schedule C flow limits, treated water monthly and average daily volumes, and raw water instantaneous flow rate maximums.

Chestnut Street Well and Pumphouse			
	Raw Peak Flow Rate (Max = 2500 L/min)	Treated Water (MDWL Limit = 3600 m ³ /day)	Monthly Average (m ³ /day)
January	1483	296	152
February	1484	216	131
March	1483	196	139
April	1469	234	139
May	1478	269	155
June	1470	223	134
July	1462	295	181
August	1461	408	192
September	1465	412	246
October	1464	1799	315
November	1478	1048	333
December	1474	740	457
Average			215
Maximum	1484	1799	

Mornington Street Well and Pumphouse			
	Raw Peak Flow Rate (Max = 3410 L/min)	Treated Water (MDWL Limit = 4910 m ³ /day)	Monthly Average (m ³ /day)
January	63	68	22
February	2808	597	227
March	2942	597	178
April	2844	586	357
May	2836	588	371
June	2797	568	356
July	2768	865	386
August	2764	4215	443
September	2796	500	245
October	2805	503	329
November	2807	1437	355
December	1972	1739	291
Average			297
Maximum	2942	4215	

Lorne Avenue Well and Pumphouse			
	Raw Peak Flow Rate (Max = 1370 L/min)	Treated Water (MDWL Limit = 1973 m ³ /day)	Monthly Average (m ³ /day)
January	1012	160	95
February	1012	210	110
March	1012	160	100
April	1031	280	88
May	1017	180	96
June	1002	200	104
July	1015	310	118
August	1149	180	96
September	1016	280	122
October	1021	170	107
November	1038	200	121
December	1030	170	109
Average			106
Maximum	1149	310	

Dunn Road Well and Pumphouse			
	Raw Peak Flow Rate (Max = 5000 L/min)	Treated Water (MDWL Limit = 7200 m ³ /day)	Monthly Average (m ³ /day)
January	2153	2920	1735
February	2192	2910	1772
March	2557	2940	1855
April	2236	2910	1736
May	4021	2930	1588
June	2743	1970	1306
July	2397	1920	1211
August	2543	1880	1195
September	2177	2470	1280
October	2337	2700	1706
November	2290	1960	461
December	2133	2900	1237
Average			1424
Maximum	4021	2940	

O'Loane Avenue Well and Pumphouse			
	Raw Peak Flow Rate (Max = 3406 L/min)	Treated Water (MDWL Limit = 4905 m ³ /day)	Monthly Average (m ³ /day)
January	2949	1640	1013
February	2965	1560	937
March	2980	1820	885
April	2980	1790	1145
May	2980	4080	1675
June	2949	4080	2830
July	2933	4080	2981
August	2949	4030	2669
September	2949	4020	2237
October	3012	2110	1183
November	2949	4200	2308
December	2965	1620	879
Average			1729
Maximum	3012	4200	

Romeo Street Pumping Station			
	Raw Peak Flow Rate (see individual flow rates FW 1, 2, 3, 4, 6, 7)	Treated Water (MDWL Limit = 17012 m ³ /day)	Monthly Average (m ³ /day)
January		6263	5610
February		6267	5407
March		6509	5402
April		6334	5663
May		6982	6086
June		7583	6460
July		7704	6416
August		7353	6354
September		7017	5948
October		6840	5702
November		6001	4868
December		6199	5352
Average			5772
Maximum		7704	

Romeo Street Pumping Station Raw Peak Flow Rates – Field Wells 1,2,3,4,6,7 (PTTW allowable water taking is per individual field well)						
	FW1 (L/min)	FW2 (L/min)	FW3 (L/min)	FW4 (L/min)	FW6 (L/min)	FW7 (L/min)
January	998	956	926	987	2979	0
February	999	957	929	992	2939	3177
March	1004	963	934	1001	2837	2470
April	1000	958	933	992	2767	2367
May	1003	958	914	994	2965	2379
June	989	957	882	985	2925	2400
July	1010	954	785	981	2888	2413
August	0	956	725	981	2831	2378
September	0	961	694	985	2837	2401
October	0	964	1015	988	2854	2482
November	0	966	1035	994	2948	2501
December	0	971	1018	997	2869	2447
Average						
Maximum	1010	971	1035	1001	2979	3177
Max Limit	1136	1136	1136	1136	3858	3410