CITY OF
SWIFT CURRENT
where life makes sense

WATER TREATMENT PLANT
2023 YEAR END REPORT

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SUPERINTENDENT

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Water Treatment Plant Information

The Swift Current Water Treatment Plant serves water to the City and several outlying residents in the Swift Current RM. The water source is the Duncairn Dam which supplies water to the Swift Current Dam. The plant, which is located at the Swift Current Dam, treats and pumps water into the distribution system via South Hill Reservoir.

The Process

Pre-treatment

The process of the water treatment plant involves multiple physical and chemical treatments. The first section of this process is the pre-treatment of the water. Two chemicals are used here. The first is potassium permanganate which removes manganese and reduces tastes and odours. This is followed by Powder Activated Carbon. The carbon removes some disinfection by-products and treats seasonal tastes and odours.

Primary Treatment

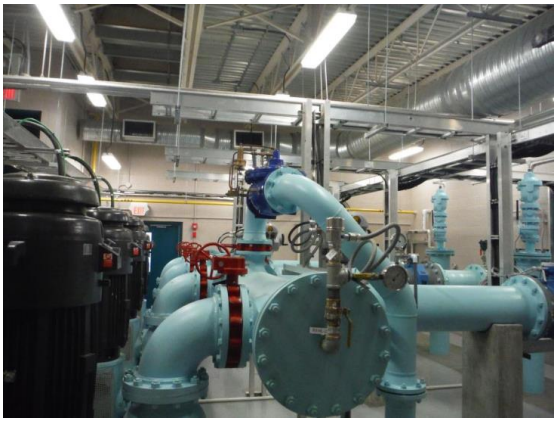
Pre-treatment is followed by Actiflo clarifiers for primary treatment. Primary treatment is coagulation and ballasted flocculation. Aluminum Sulfate is added to help particles in the water to collect and stick together. This process is called coagulation. This is quickly followed by ballasted flocculation when a polymer and Microsand are added to make the coagulated particles heavier.

Filtration

After the Actiflo clarifiers, the pH of the water is adjusted up with sodium hydroxide to a neutral pH of 7.25 and adjusted as needed to ensure treated water is non-corrosive. The filters take out any particles that were not taken out during primary treatment.

Disinfection and Fluoridation

After filtration, chlorine is added for disinfection. Fluoride is added for dental hygiene. This is followed by ultraviolet disinfection which will inactivate any living cell that has not been killed by the chlorine.



Distribution

After the water is disinfected, it is pumped in South Hill Reservoir. South Hill holds around 6,800,000 liters of water. From South Hill Reservoir the water is pumped into the water distribution system and North Hill Reservoir. North Hill Reservoir also holds 6,800,000 liters.

Winter average usage is around 6 million liters of water per day. Summer usage is around 12-15 million liters per day with peak times reaching above 22 million liters of water. The max flow rating for the plant is 26 million liters per day.

Latest Upgrades

2012 – Extensive remodeling done. Actiflo clarifiers with pH adjustment and Ultraviolet (UV) disinfection were added. Along with a new laboratory and chemical storage facilities.

2019 – Replaced Actiflo lamella tube settlers and installed Actiflo air scour cleaning system.

2020 – Installed laser turbidimeters to filter monitoring and upgraded filter control lines to stainless steel. Completed bulk water station upgrade to RFID card system.

2022 – Residual Management pump station completed. This station diverts all WTP residuals away from the Swift Current Creek and sends to the Swift Current Wastewater Treatment Plant.

Capital Items for 2023 Totals

1)	8th Avenue Booster Station Upgrade	$141,376.70
2)	Actuator Valve Replacement	$31,931.42
3)	Chlorine Gas Piping Replacement	$17,236.36
4)	WTP Roof Rehabilitation	$13,356.00
5)	Lab Equipment Replacement	$3,117.46
6)	PLC Replacement Program	$68,918.09
7)	Reservoir & Booster Station Maintenance	$34,854.15
8)	WTP Building & Grounds Maintenance	$2,734.27
9)	North Hill Reservoir Upgrade	$2,850,030.77

Water Treatment Plant Staff Information

Level of Certification:

Superintendent	Class 4 Water Treatment Class 3 Water Distribution
Operator	Class 2 Water Treatment Class 2 Water Distribution
Operator	Class 3 Water Treatment, Class 1 Water Distribution Class 1 Wastewater Treatment Class 1 Wastewater Collection
Operator	Class 2 Water Treatment Class 2 Water Distribution Class 2 Wastewater Treatment Class 2 Wastewater Collection
Operator	Class 2 Water Treatment Class 1 Water Distribution
Operator	Class 1 Water Treatment Class 1 Water Distribution
Labourer	Uncertified

Courses and Conventions:

Two operators and one manager attended the Class 2 Water Treatment exam prep course provided by Hickey Consulting Ltd.

One operator took the Water Treatment volume 1 & 2 course provided by California State University.

One operator attended the Class 1 Water Treatment exam prep course provided by ATAP.

Two operators took the Class 3 & 4 Water Treatment prep course provided by AWWOA.

One operator attended the Gas Chlorination workshop provided by ATAP.

Superintendent took the Water System Operation & Maintenance course provided by California State University.

Duties of Water Treatment Plant Operators

An operator performs many daily activities but whose primary function is the process control of the water treatment plant. Other duties include:

a: Startup, shut down, and making periodical operating checks of plant equipment.

b: Perform preventive maintenance.

c: Load and unload chemicals.

d: Perform corrective maintenance on plant mechanical equipment.

e: Maintain plant records.

f: Monitor plant status and make appropriate process changes.

g: Collect representative water samples and perform laboratory tests on samples.

h: Order chemicals, repair parts and tools.

i: Conduct safety inspections, follow safety rules for plant operation and also develop and conduct tailgate safety meetings.

j: Discuss water quality with the public, conduct plant tours, and participate in department/municipal public relations programs.

k: Communicate effectively with other operators and supervisors.

l: Calculate chemical feed rates, flow quantities, detention and contact times, hydraulic loading, as required for plant operation.

m: Fulfill all requirements of your facility's Permit to Operate.

n: Make or direct emergency repairs of adjustments to the facilities without compromising water quality or safe water quantity.

o: Monitor plant processes, interpret test results and make necessary adjustments.

p: Establish and adjust chemical feed rates.

q: Determine need for and perform filter backwash, clarifier cleaning, etc.

Duties of Maintenance Crew

a: Be able to perform all the duties of the Plant Operator.

b: Building maintenance for Water Treatment Plant and remote stations.

c: General servicing of equipment for Water Treatment Plant and remote stations.

d: Summer yard work for Water Treatment Plant and remote stations.

e: Maintaining 8th Northwest Transfer Station, 6th Northeast Booster Station, North and South Hill Reservoir and maintaining Bulk Water Station.

f: Cover holiday time taken by the Water Treatment Plant staff.

g: Cover time off accumulated by operators working statutory holidays.

h: Cover time off due to sickness or special leave.

i: Painting Water Treatment Plant and remote stations.

List of Water Samples Collected for Lab Tests

Daily samples taken and analyzed at the Water Treatment Plant.

a: Raw water taken from City Dam
b: Actiflo clarifier water
c: Treated effluent water

Requested water samples taken as required by the Water Security Agency

Four water samples collected weekly from various locations within the city. Samples were sent to Provincial Lab for bacteriological analysis. The following samples were sent to the Provincial Lab for analysis:

February	- Trihalomethanes
	- General Chemical- treated water
	- Raw water from City Dam
May	- Trihalomethanes
	- General Chemical- treated water
	- Raw water from City Dam
September	- Trihalomethanes
	- General Chemical - treated water
	- Raw water from City Dam
December	- Trihalomethanes
	- General Chemical- treated water
	- Raw water from City Dam

Five Microcystin toxin samples taken from the treated water at the WTP were submitted during the summer months from June to October. The following samples were sent to the Saskatchewan Research Council for analysis:

February	- Iron, manganese, and chlorophyll A
	- Haloacetic Acid
June	- Iron, manganese, and chlorophyll A
	- Chemical Health & Toxicity
	- Haloacetic Acid
September	- Iron, manganese, and chlorophyll A
	- Chemical Health & Toxicity
	- Haloacetic Acid
	- Pesticides
	- Synthetic Organics
	- Cyanide & Mercury
December	- Iron, manganese, and chlorophyll A
	- Chemical Health & Toxicity
	- Haloacetic Acid

The following samples were sent to the ALS Environmental for analysis:

August	- Giardia & Cryptosporidium
November	- Giardia & Cryptosporidium
	- PFOS & PFOA

List of Water Quality Monitors Online

Turbidity:	Raw Water
	Actiflo Clarifier
	All 10 Filter Effluents
	Treated Water
Chlorine:	Treated Water
	South Hill Reservoir
	North Hill Reservoir
pH	Actiflo Clarifier
	Post Actiflo Clarifier
	Treated Water

Raw Water Source and Supply

Source - Duncairn Dam

Supply – adequate and consistent for 2023

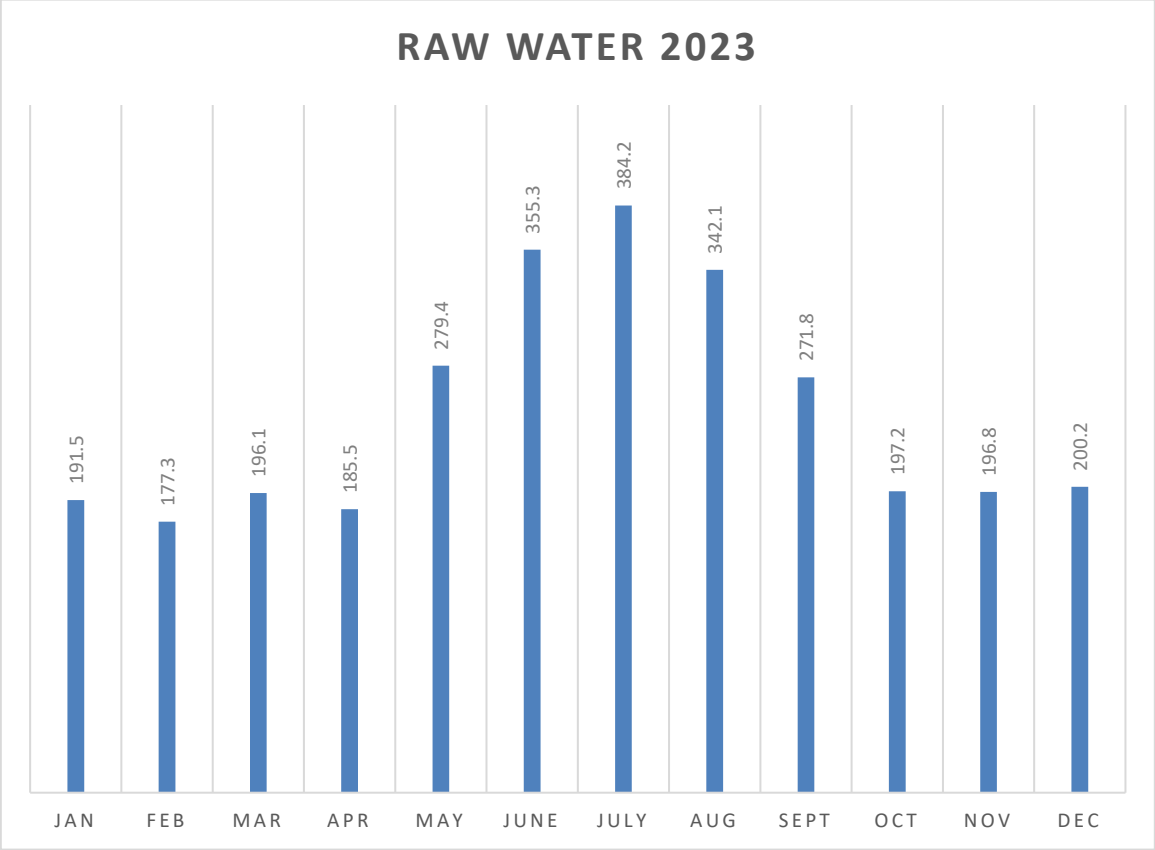
Extreme spring runoff conditions saw the water level at the Swift Current Weir up to 76 cm above normal operating conditions. A State of emergency was declared.

2023's treated water pumped was 3% below the 5-year average.

2023 was one of the warmest years in 75 years, classified as a drought.

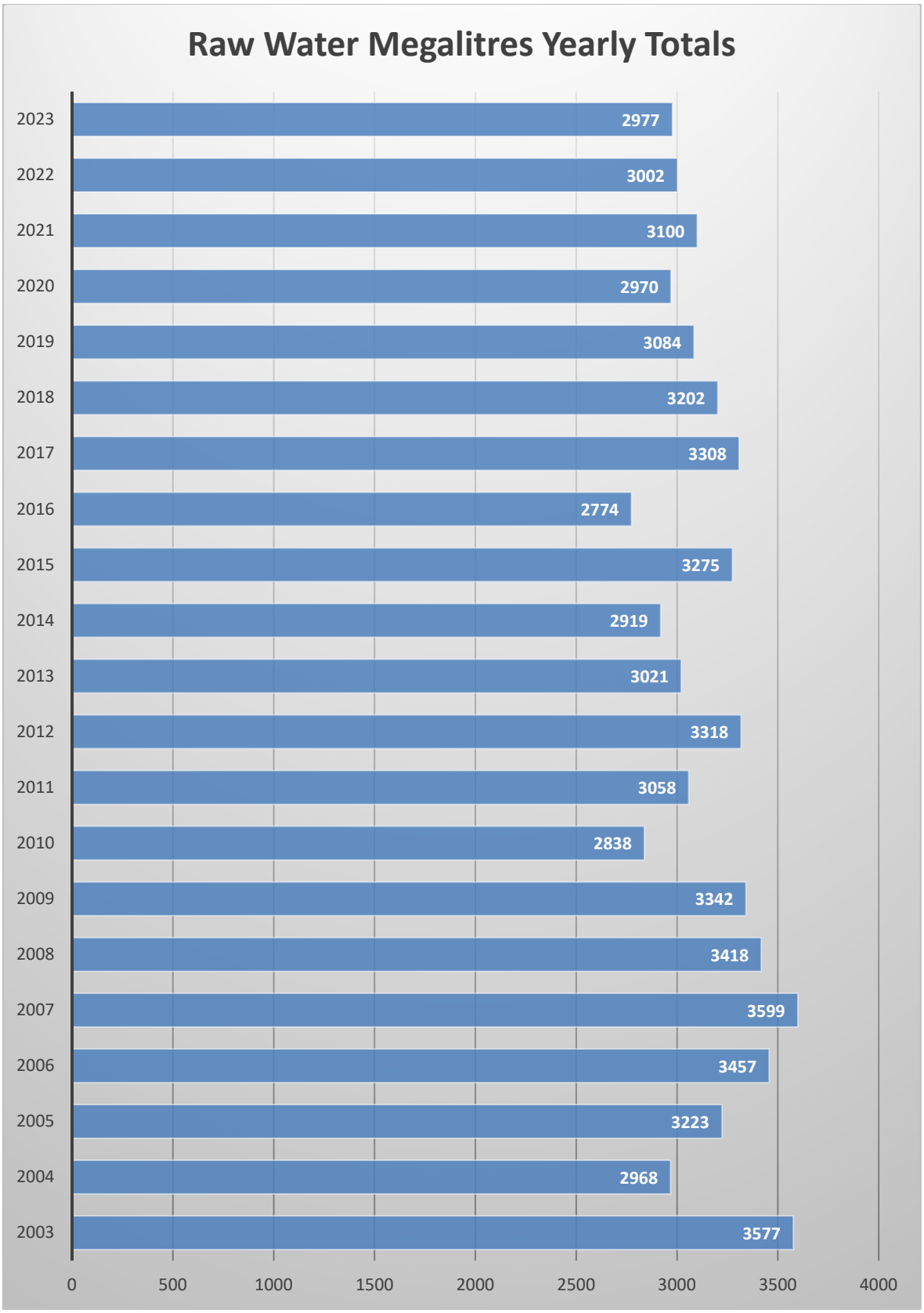
Total Raw Water Pumped Per Month For 2023

TOTAL RAW		
	Megalitres	Imperial Gallons
JAN	191.50	42124111
FEB	177.30	39000547
MAR	196.10	43135969
APR	185.50	40804296
MAY	279.40	61459408
JUNE	355.30	78155074
JULY	384.20	84512185
AUG	342.10	75251480
SEPT	271.80	59787642
OCT	197.20	43377936
NOV	196.80	43289948
DEC	200.20	44037844
Total	2977.40	654936440



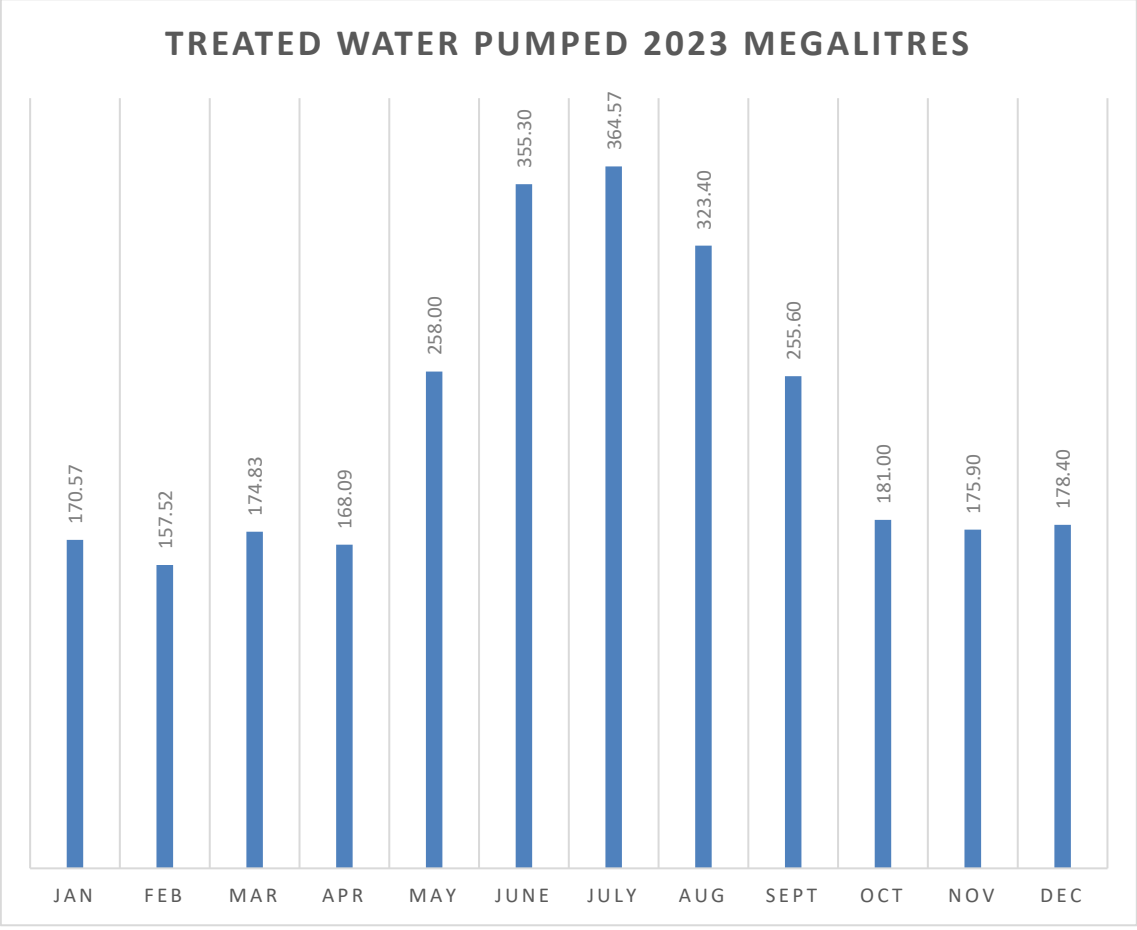
Total Raw Water Pumped Per Year from 2003 - 2023

	Megalitres	Imperial Gallons
2003	3577	786,906,990
2004	2968	652,776,342
2005	3223	709,022,479
2006	3457	760,398,496
2007	3599	791,730,916
2008	3418	751,755,905
2009	3342	735,027,243
2010	2838	624,162,742
2011	3058	672,729,752
2012	3318	729,917,358
2013	3021	664,575,492
2014	2919	641,984,651
2015	3275	720,449,881
2016	2774	610,284,882
2017	3308	727,554,888
2018	3202	704,378,928
2019	3084	679,295,154
2020	2970	653,395,918
2021	3100	653,395,918
2022	3002	660,479,665
2023	2977	654,936,440


Raw Water Megalitres Yearly Totals
2023
2977
2022
3002
2021
3100
2020
2970
2019
3084
2018
3202
2017
3308
2016
2774
2015
3275
2014
2919
2013
3021
2012
3318
2011
3058
2010
2838
2009
3342
2008
3418
2007
3599
2006
3457
2005
3223
2004
2968
2003
3577
0
500
1000
1500
2000
2500
3000
3500
4000

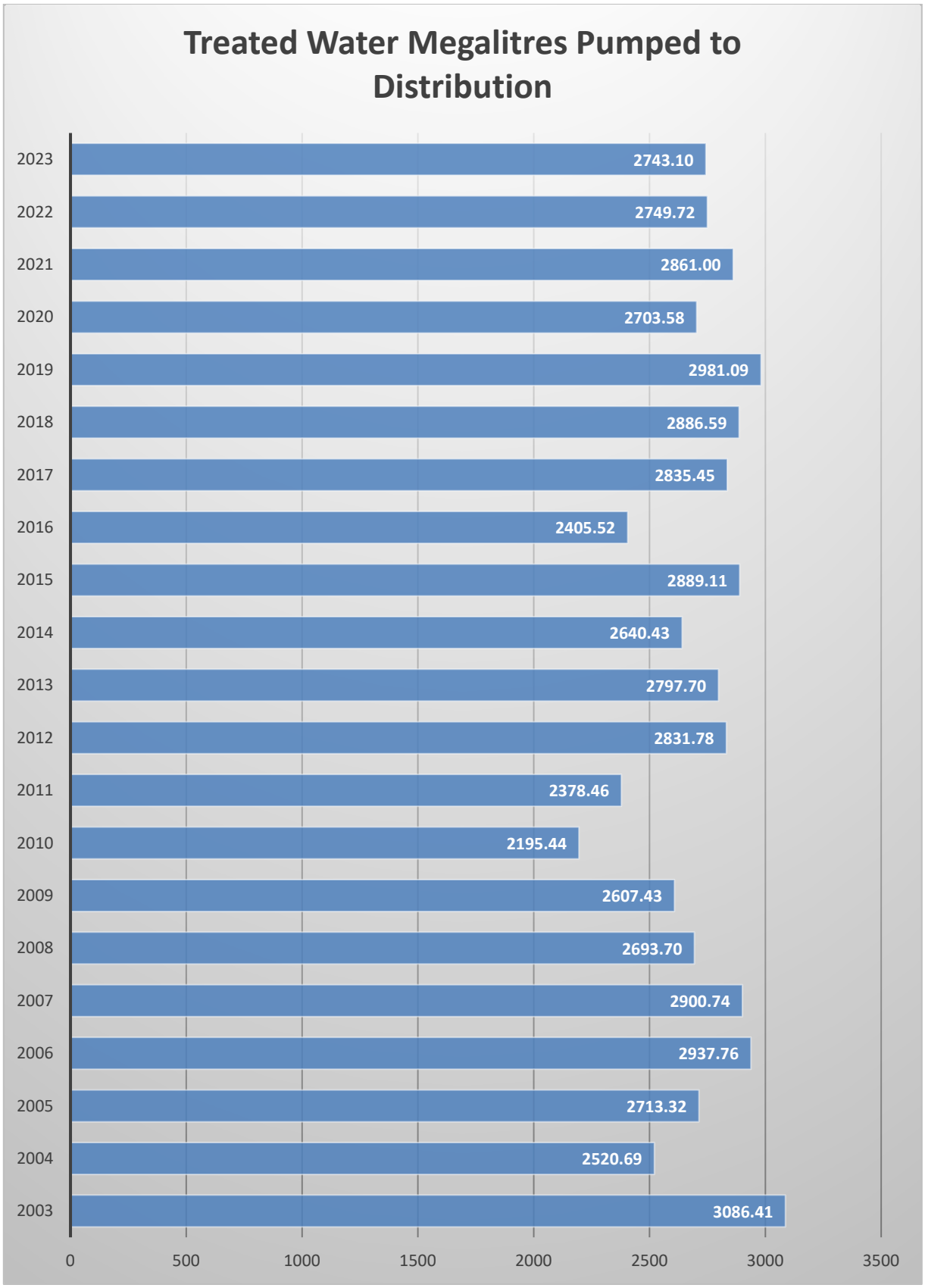
Total Treated Water Pumped into System Per Month For 2023

TOTAL TREATED		
	Megalitres	Imperial Gallons
JAN	170.57	37520155
FEB	157.52	34649556
MAR	174.83	38457224
APR	168.09	36974631
MAY	258.00	56752066
JUNE	335.22	73738091
JULY	364.57	80194189
AUG	323.40	71138055
SEPT	255.60	56224140
OCT	181.00	39814434
NOV	175.90	38692591
DEC	178.40	39242514
Total	2743.10	603397645

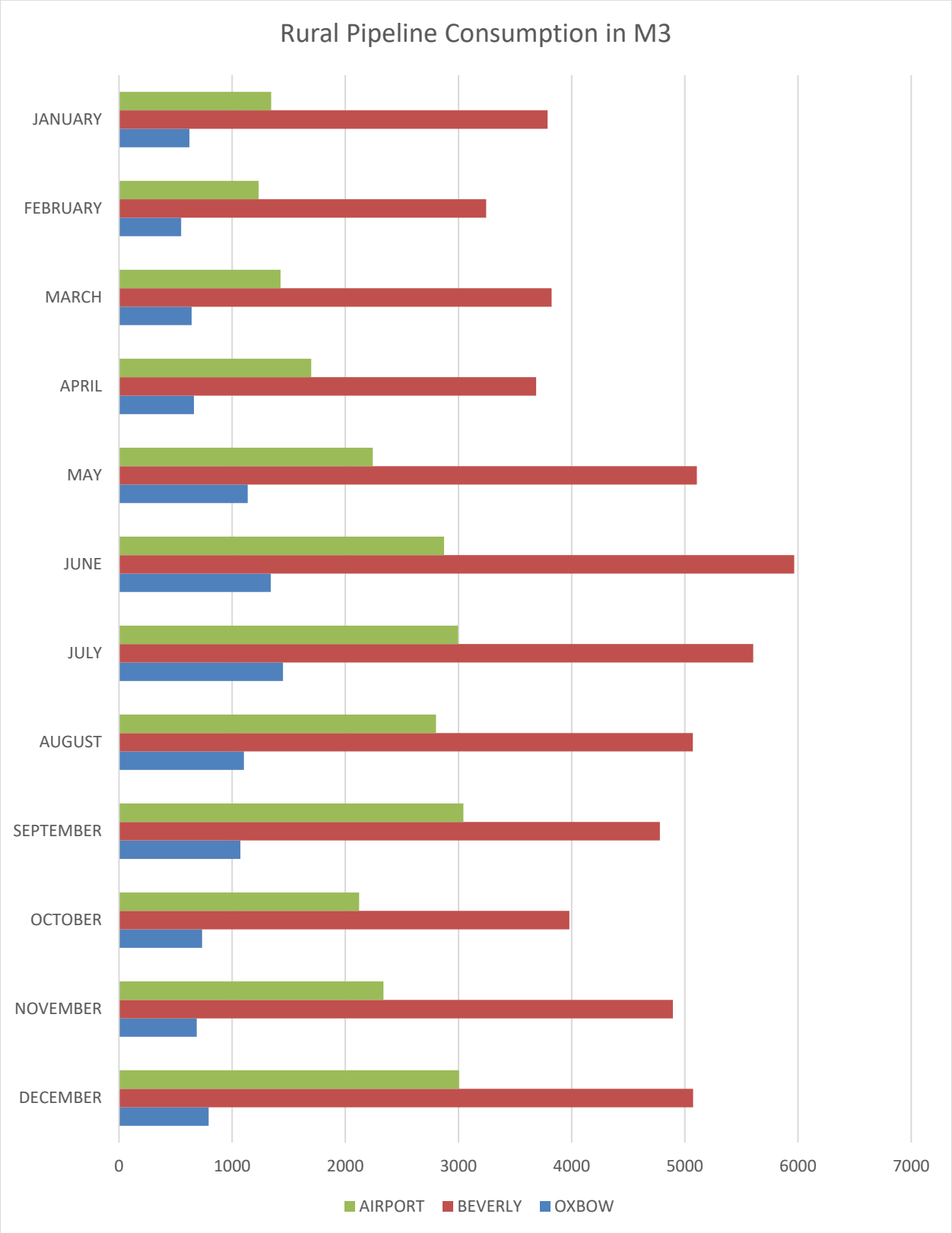


Total Treated Water Pumped into System for Years 2003- 2023

	Megalitres	Imperial Gallons
2003	3086.41	678915288
2004	2520.69	554474284
2005	2713.32	596846961
2006	2937.76	646216859
2007	2900.74	638073597
2008	2693.70	592531164
2009	2607.43	573554417
2010	2195.44	482929286
2011	2378.46	523188058
2012	2831.78	622904518
2013	2797.70	615407966
2014	2640.43	580813402
2015	2889.11	635515355
2016	2405.52	529140426
2017	2835.45	623711805
2018	2886.59	634961032
2019	2981.09	656627753
2020	2703.58	594703789
2021	2861.00	629331309
2022	2749.72	604853841
2023	2743.10	603397645


Treated Water Megalitres Pumped to Distribution
2023
2743.10
2022
2749.72
2021
2861.00
2020
2703.58
2019
2981.09
2018
2886.59
2017
2835.45
2016
2405.52
2015
2889.11
2014
2640.43
2013
2797.70
2012
2831.78
2011
2378.46
2010
2195.44
2009
2607.43
2008
2693.70
2007
2900.74
2006
2937.76
2005
2713.32
2004
2520.69
2003
3086.41
0
500
1000
1500
2000
2500
3000
3500

Rural Pipelines 2023 (Cubic Metres)



Chemicals Used In 2023 (Kg)

	POWER USED kW/H	LIQUID ALUM	CARBON	CHLORINE	FLUORIDE 25%	POT. PERM.
JAN	108585	61132	1915	882	509	176.27
FEB	102416	56492	1773	712	351	184.10
MAR	110182	63220	1961	787	513	221.86
APR	103598	52548	3303	1194	489	562.43
MAY	135860	88624	3993	1244	712	868.55
JUNE	164074	114260	2401	1594	914	827.50
JULY	171636	117972	1921	1618	995	249.77
AUG	156805	102312	1711	1416	894	226.64
SEPT	137027	74124	1359	1103	692	376.41
OCT	101360	46678	986	506	506	247.18
NOV	107761	53244	984	691	465	128.73
DEC	108316	56144	1001	704	499	140.72
Total	**1507620**	**886750**	**23308**	**12451**	**7539**	**4210.16**

Chemicals Used In 2023 (Cont'd)

	CLEARPAC	CLEARFLOC CP 1065	CO2	SODIUM HYDROXIDE	MICROSAND	DIESEL FUEL
JAN	107	125		11840	681.00	42
FEB	93	125		10640	136.20	1296.15
MAR	151	225		12000	1021.50	1284.15
APR	251	100		9160	1021.50	
MAY	128	125		14600	272.40	
JUNE	166	200		21560	408.60	127
JULY	175	275		23880	249.70	
AUG	140	375		20640	499.40	
SEPT		200		14040	681.00	
OCT		100		9521	407.90	
NOV		100		9720	544.80	32
DEC	25	125		10200	136.20	74
Total	**1236**	**2075**	**0**	**167801**	**6060.20**	**2855.30**

Statistics of Treated Water Pumped into System

Event	Date	Megaliters	Imperial Gallons
Peak day for treated water pumped in 2023	29-Jun-23	16.11	3,543,705
Record peak day	28-Jun-88	24.83	5,461,830
Total treated water pumped for	2023	2743.10	603,397,645
Record year high for total pumped water	1988	3370.29	741,359,321
Average treated water pumped per day in	2014	7.23	1,590,376
Average treated water pumped per day in	2015	7.92	1,742,154
Average treated water pumped per day in	2016	6.57	1,445,196
Average treated water pumped per day in	2017	7.77	1,709,159
Average treated water pumped per day in	2018	7.91	1,739,955
Average treated water pumped per day in	2019	8.17	1,797,147
Average treated water pumped per day in	2020	7.39	1,624,869
Average treated water pumped per day in	2021	7.84	1,722,359
Average treated water pumped per day in	2022	7.52	1,654,169
Average treated water pumped per day in	2023	7.52	1,654,169

Saskatchewan Ministry of Environment

Water Security Agency

Drinking Water Quality and Compliance
Cities Long Form – A Template for Annual Notice to Consumers

The Water Security Agency and Ministry of Environment requires that at least once each year waterworks owners provide notification to consumers of the quality of water produced and supplied as well as information on the performance of the waterworks in submitting samples as required by a Minister's Order or Permit to Operate a waterworks. The following is a summary of the ***City of Swift Current*** water quality and sample submission compliance record for ***2023***. This report was completed on ***May 7, 2024***. Readers should refer to Saskatchewan Water Security Agency's Municipal Drinking Water Quality Monitoring Guidelines, June 2015, EPB 502 for more information on minimum sample submission requirements. Permit requirements for a specific waterworks may require more sampling than outlined in the department's monitoring guidelines. If consumers need more information on the nature and significance of specific water tests, for example, "what is the significance of selenium in a water supply", more detailed information is available from: http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index_e.html .

Water Quality Standards
Bacteriological Quality

Parameter/Location	Limit	Regular Sample Required	Regular Samples Submitted	# of Positive Regular Submitted (Percentage)
Total Coliform and	0 organisms/100 mL	208	208	0%
E. coli	0 organisms/100 ml	208	208	0%
Background Bacteria	Less than 200 organisms/100 mL	208	208	0%

The owner/operator is responsible to ensure that one hundred percent of all bacteriological samples are submitted as required. Generally analysis is performed on a single sample for all parameters mentioned above. All waterworks are required to submit samples for bacteriological water quality, the frequency of monitoring depends on the population served by the waterworks.

Water Disinfection – Chlorine Residual for Test Results Submitted with Bacteriological Samples

Parameter	Minimum Limit (mg/L)	Free Chlorine Residual Range	Total Chlorine Residual Range	# Tests Required	# Tests Submitted	# Adequate Chlorine (%)
Chlorine Residual in Distribution System	0.1 mg/L free OR 0.5 mg/L total	0.15 – 2.04 mg/L	0.61 – 2.95 mg/L	208	208	100%

*A minimum of 0.1 milligrams per litre (mg/L) free chlorine residual **OR** 0.5 mg/L total chlorine residual is required at all times throughout the distribution system unless otherwise approved. A proper chlorine submission is defined as a bacteriological sample submission form with both the free and total chlorine residual fields filled out. An adequate chlorine is a result that indicates that the chlorine level is above the regulated minimums. An adequate chlorine may be counted even if the chlorine results were submitted incorrectly. A waterworks is required to submit chlorine residual test results on every bacteriological sample they submit.*

Water Disinfection – Free Chlorine Residual for Water Entering Distribution System – From Water Treatment Plant Records

Parameter	Limit (mg/L)	Test Level Range	# Tests Performed	# Tests Not Meeting Requirements
Free Chlorine Residual	at least 0.1	0.44-5.00 mg/L	Continuous	0

A minimum of 0.1 milligrams per litre (mg/L) free chlorine residual is required for water entering the distribution system. Tests are normally performed on a daily basis by the waterworks operators and are to be recorded in operation records. This data includes the number of free chlorine residual tests performed, the overall range of free chlorine residual (highest and lowest recorded values) and the number of tests and percentage of results not meeting the minimum requirement of 0.1 mg/L free chlorine residual.

Turbidity

Parameter	Limit (NTU)	Test Level Range	# Tests Not Meeting Requirements	Maximum Turbidity (NTU)	# Tests Required	# Tests Required
Turbidity	1.0	0.013-0.299 NTU	0	0.299	Continuous	Continuous

Turbidity is a measure of water treatment efficiency. Turbidity measures the "clarity" of the drinking water and is generally reported in Nephelometric Turbidity Units (NTU). All waterworks are required to monitor turbidity at the water treatment plant. The frequency of measurement varies from daily for small systems to continuous for larger waterworks.

Chemical – Health Category

Parameter	Limit MAC(mg/L)	Limit IMAC (mg/L)	Sample Results (mg/L)	Samples Exceeding MAC/IMAC	# Samples Required	# Samples Submitted
Arsenic	0.010		0.0004 - 0.0005	0	4	4
Barium	1.0		0.038 - 0.050	0	4	4
Boron		5.0	0.04 – 0.06	0	4	4
Cadmium	0.005		<0.00001	0	4	4
Chromium	0.05		<0.0005	0	4	4
Fluoride (avg.*)	1.5		0.58	0	52	52
Lead	0.01		<0.001	0	4	4
Nitrate (avg.*)	45.0		0.525	0	4	4
Selenium	0.01		0.0003 – 0.0005	0	4	4
Uranium	0.02		0.0006 – 0.0025	0	4	4

Substances within the chemical health category may be naturally occurring in drinking water sources or may be the result of human activities. These substances may represent a long-term health risk if the Maximum Acceptable Concentration (MAC) or Interim Maximum Acceptable Concentration (IMAC) is exceeded. All drinking water supplies are required to monitor for substances in the "Chemical-Health" category, the frequency of monitoring depends on the population served by the waterworks. Some waterworks add fluoride to drinking water as a means to aid in the prevention of dental decay.

* Results expressed as average values for communities or waterworks which fluoridate drinking water supplies or those with elevated concentrations of fluoride or nitrates.

Chemical – Pesticides

Parameter	Limit MAC(mg/L)	Limit IMAC (mg/L)	Sample Results(mg/L)	Samples Exceeding MAC/IMAC	# Samples Required	# Samples Required
Atrazine		0.005	<0.0002	0	1	1
Bromoxynil		0.005	<0.002	0	1	1
Carbofuran	0.09		<0.0002	0	1	1
Chlorpyrifos	0.09		<0.0002	0	1	1
Dicamba	0.12		<0.001	0	1	1
2,4-D*		0.1	<0.001	0	1	1
Diclofop-methyl	0.009		<0.001	0	1	1
Dimethoate		0.2	<0.005	0	1	1
Malathion	0.19		<0.0002	0	1	1
MCPA	0.10		<0.001	0	1	1
Pentachlorophenol	0.06		<0.002	0	1	1
Picloram		0.19	<0.001	0	1	1
Trifluralin		0.045	<0.0002	0	1	1

Pesticides in drinking water may occur as a result of the use of these substances by humans. These substances may represent a long-term health risk if the Maximum Acceptable Concentration (MAC) or Interim Maximum Acceptable Concentration (IMAC) is exceeded. Mandatory sampling requirements depends on the population served by the waterworks.

Chemical – Trihalomethanes (THMs) and Haloacetic Acids (HAAs)

Parameter	Limit (mg/L)	Sample Result (avg mg/L)	# Samples Required	# Samples Submitted
Trihalomethanes	0.100	0.0801	8 (one every 3 months)	8
Haloacetic Acids	0.080	0.0687	8 (one every 3 months)	8

Trihalomethanes and Haloacetic Acids are generated during the water disinfection process by a by-product of reactions between chlorine and organic material. Trihalomethanes are generally found only in drinking water obtained from surface water supplies. Trihalomethanes and Haloacetic Acids are to be monitored on a quarterly basis and the Interim Maximum Acceptable Concentration is expressed as an average of 4 quarterly samples. Only water supplies derived from surface water or groundwater under the influence of surface water are required to monitor Trihalomethane and Haloacetic Acids unless otherwise specified in the waterworks permit to operate.

General Chemical

Parameter	Aesthetic Objectives* (mg/L)	Sample Results (average)	# Samples Required	# Samples Submitted
Alkalinity	500	205 mg/L	4	4
Bicarbonate	No Objective	249 mg/L	4	4
Calcium	No Objective	82 mg/L	4	4
Carbonate	No Objective	0 mg/L	4	4
Chloride	250	10.6 mg/L	4	4
Conductivity	No Objective	984 µS/cm	4	4
Hardness	800	393 mg/L	4	4
Magnesium	200	45.75 mg/L	4	4
PH	No Objective	7.40 pH Units	4	4
Sodium	300	68.3 mg/L	4	4
Sulphate	500	314.63 mg/L	4	4
Total dissolved solids	1500	782 mg/L	4	4

All waterworks serving more than 5000 persons are required to submit water samples for the General Chemical category as per their permit to operate. The General Chemical category includes analysis for alkalinity, bicarbonate, calcium, carbonate, chloride, conductivity, hardness (as $CaCO_3$), magnesium, sodium, sulphate and total dissolved solids.

The last sample for General Chemical analysis was required in the ***4th Quarter of 2023*** and were submitted on ***December 11, 2023***. Sample results indicated that there were no exceedences of the provincial aesthetic objectives for the General Chemical category.

**Objectives apply to certain characteristics of or substances found in water for human consumptive or hygienic use. The presence of these substances will affect the acceptance of water by consumers and/or interfere with the practice of supplying good quality water. Compliance with drinking water aesthetic objectives is not mandatory as these objectives are in the range where they do not constitute a health hazards. The aesthetic objectives for several parameters (including hardness as $CaCO_3$, magnesium, sodium and total dissolved solids) consider regional differences in drinking water sources and quality.*

Chemical – Cyanide and Mercury Date of last sample: ***September 12, 2023***

Parameter	Limit MAC (mg/L)	Sample Results	# Samples Exceeding MAC	# Samples Required	# Samples Submitted
Cyanide	0.2	0.002 mg/L	0	1	1
Mercury	0.001	<0.000001 mg/L	0	1	1

Mercury enters water supplies naturally and as a result of human activities. Cyanide can enter source waters as a result of industrial effluent or spill events. These substances may represent a long-term health risk if the Maximum Acceptable Concentration (MAC) is exceeded. Mandatory sampling requirements depends on the population served by the waterworks.

Algal Toxins –Microcystin-LR Date of last sample: ***October 3, 2023***

Parameter	Limit MAC (mg/L)	Sample Results	# Samples Exceeding MAC	# Samples Required	# Samples Submitted
Microcystin LR	0.0015	0.0002 mg/L	0	5	5

Microcystin LR is an algal toxin typically released following die-off on an algal bloom in a raw surface water supply. Samples should typically be collected and analyzed on a monthly basis during periods when algae blooms on reservoirs or other surface water sources occur.

Chemical – Synthetic Organic Chemicals

Parameter	Limit MAC (mg/L)	Limit IMAC (mg/L)	Sample Result(s)	# Samples Exceeding Limit	# Samples Required	# Samples Submitted
Benzene	0.005		<0.0005 mg/L	0	1	1
Benzo(a)pyrene	0.00001		<0.00001 mg/L	0	1	1
Carbon tetrachloride	0.005		<0.002 mg/L	0	1	1
Dichlorobenzene, 1,2	0.02		<0.0005 mg/L	0	1	1
Dichlorobenzene, 1,4	0.005		<0.0005 mg/L	0	1	1
Dichloroethane, 1,2		0.005	<0.0005 mg/L	0	1	1
Dichloroethylene, 1,1	0.014		<0.0005 mg/L	0	1	1
Dichloromethane	0.05		<0.0005 mg/L	0	1	1
Dichlorophenol, 2,4	0.9		<0.0002 mg/L	0	1	1
Monochlorobenzene	0.08		<0.0005 mg/L	0	1	1
Tetrachlorophenol, 2,3,4,6	0.1		<0.001 mg/L	0	1	1
Trichloroethylene	0.05		<0.0005 mg/L	0	1	1
Trichlorophenol, 2,4,6	0.005		<0.002 mg/L	0	1	1
Vinyl Chloride	0.002		<0.0005 mg/L	0	1	1

Contamination of drinking water by synthetic organic chemicals only results from pollution events. Contamination of drinking water in excess of Maximum Acceptable Concentration (MAC) or Interim Maximum Acceptable Concentration (IMAC) may represent a health risk. Mandatory sampling requirements depends on the population served by the waterworks.

More information on water quality and sample submission performance may be obtained from:

City of Swift Current
Bryan Cobb, Superintendent of Water Treatment
306-778-2755
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