



SaskWater

Water Quality Report 2025







SaskWater is committed to ensuring a long-term, sustainable, quality water supply to our customers.

TABLE OF CONTENTS

4	SaskWater's Potable Water Customers and Water Sources	10	Summary of Situations Where Permit to Operate Requirements Were Not Met
6	SaskWater's Certified Operation and Maintenance Customers and Water Sources	12	Emergency Boil Water Orders
7	Treatment	12	Precautionary Drinking Water Advisories
	Water Treatment Processes		
	Surface Water		
	Groundwater		
	Monitoring Requirements		
8	Transmission		
8	Information		
	Key Drinking Water Parameters and Effects		
8	Explanation of Terms		

SaskWater's Potable Water Customers and Water Sources

SaskWater owns and operates nine water treatment plants serving municipalities and pipeline associations. Each treatment plant has a different source of water as described in the following table.

OWNED WATER TREATMENT SYSTEMS

Our water treatment plant located in...	Draws water from this source...	Delivers potable water to these major users...	And produced this volume in 2025 (in m³)
Melfort	Codette Lake on the North Saskatchewan River	Village of Beatty Star City Farming Co. Ltd. Town of Kinistino City of Melfort Town of Star City Village of Weldon Melfort Rural Pipeline Association	947,860
Elbow	Lake Diefenbaker	Village of Elbow Line 19 Water Pipeline Utility (Loreburn, Strongfield) Lakeside R.V. Trailer Park Ltd.	104,927
Gravelbourg	Thomson Lake	Town of Gravelbourg Thomson Lake Regional Park Authority	119,861
Pierceland	Local Aquifer	Village of Pierceland	59,924
Wakaw	South Saskatchewan River	Village of Annaheim Town of Bruno Town of Cudworth City of Humboldt Village of Lake Lenore Jocelyn LeBlanc Village of Muenster Village of St. Louis RM of St. Louis (Hamlet of Domremy, Hamlet of Hoey, Hamlet of St. Isidore-de-Bellevue) Town of Wakaw SHL Rural Pipeline Association Inc. North Central Rural Pipeline Association Inc. One Arrow First Nation	1,211,200
White City	Zehner Aquifer	Town of White City	349,457
Cupar	Hatfield Aquifer	Town of Cupar	36,922
Melville	Hatfield Aquifer, Melville Aquifer	City of Melville (Yorkville Public Utility Board)	591,906
Meadow Lake	Constructed ponds fed from the Meadow River	City of Meadow Lake (Flying Dust First Nation)	588,389

SaskWater's Potable Water Customers and Water Sources

SaskWater also owns and operates nine water transmission systems. Our transmission business buys water from the City of Saskatoon, the City of Regina, the City of Lloydminster and the Buffalo Pound Water Treatment Corporation and delivers it to customers.

OWNED WATER TRANSMISSION SYSTEMS

This transmission system...	Purchases water from this supplier...	And delivers potable water to these customers...	And produced this volume in 2025 (in m³)
Buffalo Pound East	City of Regina	Windsor Salt Ltd, Eastview Water Users Co-operative, Town of Grand Coulee, Yara Belle Plaine Inc.	84,388
Buffalo Pound North	Buffalo Pound Water Treatment Corporation	Arm River Farming Co. Ltd, Village of Bethune, Buffalo Plains Cattle Co., Country Springs Water Users, Village of Disley, Dufferin Water Association, Peaceful Springs Water Users Inc, Qu'Appelle Valley Water Users Association, K+S Potash Canada General Partnership	117,131
Buffalo Pound West	Buffalo Pound Water Treatment Corporation	Eight Mile Pipeline Association Inc, Village of Marquis, Marquis Rural Water Users Inc, Parklane Waterline Inc, Parkview Water Users Inc, Village of Tuxford, Tuxford Rural Water Users Inc.	53,445
Prairie North	City of Lloydminster	Town of Lashburn, Town of Marshall	105,554
Saskatoon East	City of Saskatoon	3045 Range Road Water Corp, 3050 Range Road Water Corp, Agrium Canada Partnership, Allan South Rural Water Utility, Town of Allan, Aspen Grove Estates, Bar K Ranch House Ltd, RM of Blucher (Sunset Estates), Village of Bradwell, Canlan Ice Sports (Jemini), Village of Clavet, Closed Creek Resources Inc, RM of Corman Park (Casa Rio/Wood Meadows/Grasswood), Cory Park Mobile City, Dundum Rural Water Utility, Eighth Street Waterline Group Inc, Elstow North Rural Water Utility, English River Enterprises, Southeast Corman Park Rural Water Corp, GNC Bioferm Inc, Green Meadow Estates, Greenbryre Utility Corp, Hwy 394 Water Corp, RM of Dundum – Lakeside Water Utility Ltd, Lost River Water Co. Ltd, Meadow Lark Water System, Potash Corp. of Sask. Inc. – Allan Division, Potash Corp. of Sask. Inc. – Patience Lake Division, Prairie Spirit School Division #41, Schroh Arenas Ltd, South Yellowhead Water Corporation, University of Saskatchewan (Goodale Farms), South Floral Water Corp, SCS Water Group Inc, Teen Challenge Canada	986,279
Saskatoon North	City of Saskatoon	3051 Water Co-operative Ltd, Richardson Milling, Murrion Poultry Farms Ltd, RM of Corman Park (North Corman Industrial Park), Town of Dalmeny, Dalmeny West Water System Ltd, Town of Hague, Town of Hepburn, Hidden Valley Dairy Farm, Intervalley Water Inc, City of Martensville, Town of Osler, Ranch Ehrlo Society, Sask. Valley Rural Water Utility, Wanuskewin Heritage Park, City of Warman	2,660,191
Saskatoon West	City of Saskatoon	Burnco Rock Products Ltd, Chemtrade West Limited Partnership, MS Gas Station Ltd, Potash Corp. of Sask. Inc. – Cory Division, Prairie Pride Chick Sales Ltd, Pratus Development Ltd.	84,256
Saskatoon Northeast	City of Saskatoon	Town of Aberdeen, Highway 41 Water Utility, Lost River Water Co. Ltd, Tower Hills/Settler's Ridge subdivisions, University of Saskatchewan (Kernen Farm)	229,021
Saskatoon Northwest	City of Saskatoon	BizHub Developments Ltd, Yellowhead Industrial Park Water Corp, Brandt Tractor Properties Ltd, RM of Corman Park (Battleford Trail)	64,074

SaskWater's Certified Operation and Maintenance Customers and Water Sources

In addition to operating our own potable water systems, SaskWater provides certified operation and maintenance (COM) services to communities and user groups across Saskatchewan.

COM WATER TREATMENT SYSTEMS

This water treatment plant located in...	Is owned by...	Draws water from this source...	And delivers potable water to these major users...
Kindersley	Town of Kindersley	Infiltration wells adjacent to the South Saskatchewan River	Town of Kindersley
La Ronge	Lac La Ronge Regional Water Corp.	Lac La Ronge	Village of Air Ronge, Town of La Ronge, Lac La Ronge Indian Band
Meota	Jackfish Lake West Water Utility Corp.	Infiltration wells adjacent to the North Saskatchewan River	Village of Meota, Village of Metinota, RM of Meota, Hamlet of Lakeview, Hamlet of Suttons Beach
Vanscoy	Village of Vanscoy	South Saskatchewan River	Village of Vanscoy

COM WATER TRANSMISSION SYSTEMS

This distribution system...	Purchases water from this supplier...	And delivers potable water to these major customers...
Caron/Mortlach Regional Public Utility Board	City of Moose Jaw	Village of Caronport, Hamlet of Caron, Village of Mortlach
City of Meadow Lake	SaskWater	City of Meadow Lake
Global Transportation Hub Authority	City of Regina	CP Rail, Loblaws, SaskPower, Cargill
North Central Rural Pipeline Association	SaskWater	Various connections to the north and south of the Wakaw-Humboldt regional water treatment plant
Town of Star City	SaskWater	Town of Star City
Town of White City	SaskWater	Town of White City
Village of Air Ronge	Lac La Ronge Regional Water Corporation	Village of Air Ronge
Village of Edenwold	Town of Balgonie	Village of Edenwold
Village of Elbow	SaskWater	Village of Elbow
Village of Meota	Jackfish Lake West Water Utility Corp.	Village of Meota

Treatment

Water Treatment Processes

Water treatment removes natural and man-made contaminants from the source water so that it is safe and aesthetically pleasing. The treatment process for a surface water source (like a river or lake) differs from treatment for groundwater (drawn from an aquifer).

Surface Water

Generally, surface water treatment involves either conventional treatment, which consists of screening to remove debris, coagulation-flocculation, clarification or sedimentation, filtration, and disinfection; or membrane treatment, which consists of screening to remove debris, membrane filtration, and disinfection to remove physical, chemical, microbial and other contaminants from the water.

Our treatment plants in Melfort, Wakaw, Gravelbourg, Meadow Lake and Elbow use these types of processes.

Groundwater

For groundwater, the treatment process generally consists of oxidation of iron, manganese and other minerals with aeration and/or other processes followed by detention, filtration and disinfection.

Our treatment plants in Pierceland, White City, Melville and Cupar use groundwater sources with this kind of treatment process.

Monitoring Requirements

SaskWater undertakes water quality testing as required by *The Waterworks and Sewage Works Regulations* and by operating permits issued by the Water Security Agency (WSA) for our water treatment plants and distribution systems.

SaskWater monitors water quality to:

- assess and ensure the safety of the water for our customers
- assess the need for any process adjustments
- determine quality trends and identify potential concerns

We employ more than 60 provincially certified operators who monitor and maintain the quality of water from the initial source to the final point of delivery.

Our highly trained, dedicated operators, technicians, technologists and professional engineers keep abreast of technological changes, water quality, and any upgrading needs of our waterworks systems to meet ever-changing water quality standards and monitoring requirements.

SaskWater also monitors most of our facilities and customer facilities remotely. We have remote monitoring equipment installed in 62 locations, which we either own or operate, allowing continuous facility surveillance. We monitor key water quality parameters, equipment operation and water levels, pressures and flows.



Transmission

In addition to water treatment facilities, SaskWater also owns and provides certified operation and maintenance for potable water transmission systems. There are no treatment facilities on any of these transmission systems.

Information

Further water quality information on potable water that we purchase is available from our suppliers:

- Buffalo Pound Water Treatment Corporation
<https://www.buffalopoundwtp.ca/publications/annual-report>
- City of Regina
<https://www.regina.ca/home-property/water/water/quality-protection/>
- City of Saskatoon
<https://www.saskatoon.ca/services-residents/power-water/water-wastewater/drinking-water> and select from the available reports under Related Documents.

Key Drinking Water Parameters and Effects

As the regulator for water quality, the WSA determines standards which are legally enforceable requirements for drinking water quality as per *The Waterworks and Sewage Works Regulations*. In general, standards are mandatory health parameters for systems that supply water for human consumptive use. The WSA also determines water quality aesthetic objectives, which apply to certain characteristics of, or substances found in, water for human consumptive or hygienic use.

SaskWater’s governing standards for potable water quality direct us to meet or exceed the water quality parameters set by the province of Saskatchewan.

Additional information on water quality, standards and aesthetic objectives can be found here:

- Health Canada – Canadian Drinking Water Quality Guidelines
<https://www.canada.ca/en/health-canada/services/environmental-workplace-health/water-quality/drinking-water/canadian-drinking-water-guidelines.html>
- Saskatchewan – Water and Wastewater Management
<https://www.saskatchewan.ca/residents/environment-public-health-and-safety/environmental-health/water-and-wastewater-management>

Explanation of Terms

Abbreviations

mg/L: Milligrams per litre
(equivalent to parts per million)

NTU: Nephelometric Turbidity Unit

WTP: Water Treatment Plant

RWSS: Regional Water Supply System

⋄: Below detection limits

95th Percentile: Turbidity levels from each filter must not exceed this limit in at least 95 per cent of the discrete measurements made during the period defined in the permit to operate.

Aesthetic Objectives (AO)

These 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 hazard. The aesthetic objectives for several parameters (including hardness as CaCO₃, magnesium, sodium and total dissolved solids) consider regional differences in drinking water sources and quality.

Bacteriological Quality

Analysis is performed on a single sample for Total Coliforms, E. Coli and Background Bacteria. All waterworks are required to submit samples for bacteriological water quality; the frequency of monitoring depends on the population served by the waterworks.

Giardia and Cryptosporidium – Source Water

Sampling for this parameter is required from the source water entering the water treatment plant semi-annually (early spring and fall) and following upsets or significant events that may affect source water quality.

Haloacetic Acids (HAA5)

Haloacetic acids are formed when chlorine reacts with organic matter in water. The five regulated haloacetic acids are: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid and dibromoacetic acid. The sum of the concentrations of these five components is referred to as HAA5. The limit for HAA5 is a long-term objective based on an annual average of quarterly samples.

Microcystin LR and/or Total Microcystin Toxins

Sampling for this parameter is required once every month from the treated water at the water treatment plant during the algal bloom period.

Non-potable Water

Water that is *not* suitable for human consumption in accordance with applicable regulations.

Potable Water

Treated water that is suitable for human consumption in accordance with applicable regulations.

Precautionary Drinking Water Advisory

An advisory issued under the authority of Subsection 36(1) of *The Environmental Management and Protection Act, 2010* by Water Security Agency Field Offices (WSAFO) when the WSAFO and Health Region determine that drinking water quality concerns exist but immediate public health threats have not been identified. As an example, it is standard protocol to issue a PDWA when a water main is depressurized to undertake repairs.

Trihalomethanes (THM)

Trihalomethanes are formed when chlorine reacts with organic matter in water. The four THM compounds are: chloroform, dibromochloromethane, bromoform and bromodichloromethane. The sum of the concentrations of these four components is referred to as Total Trihalomethanes. The limit for THM is a long-term objective based on an annual average of seasonal samples.

Water Disinfection

Regulations require a minimum of 0.5 mg/L total chlorine residual in the water entering the distribution system **OR** 0.1 mg/L free chlorine residual is always required throughout the distribution system. Individual Permits to Operate may specify a higher minimum required residual. An adequate chlorine is a result that indicates that the chlorine level is above the required minimums.

Summary of Situations Where Permit to Operate Requirements Were Not Met

The full details of the water quality for the facilities that SaskWater owns and operates are available in the Notifications to Consumers posted to www.saskwater.com. This section provides an overview of the instances in 2025 where facilities did not meet requirements as laid out in their permit to operate. Other than these few instances, SaskWater owned and operated facilities meet or exceed water quality and sampling guidelines.

SaskWater Owned Water Treatment Systems

Meadow Lake Water Supply System

Requirement – Maintain a free chlorine residual of not less than 0.51 mg/L in the water entering the distribution system.

Comment – The free chlorine residual dropped below the required minimum (minimum of 0.07 mg/L reached) from January 24 (19:55) to January 25 (07:50), because a chlorine head malfunctioned. Operators had to switch heads and change all lines and various parts. It dropped again on June 4 (0.24 mg/L) because a cylinder was mistakenly left off, and September 11 (0.48 mg/L) because of chlorine system failure to switch to standby cylinder. Measures were taken to avoid the incidents happening again. The chlorine was adequate 99.9 per cent of the time. The Environment Officer was notified of all incidents.

Requirement – Test on-site for conductivity once per day in the permeate water from the membrane train in operation.

Comment – There was no test performed on the days of June 3, June 4, and June 5. The membrane was offline each day in the morning and; therefore, the daily test was missed.

Requirement – Maintain a filter effluent turbidity that is < 0.3 NTU 95 per cent of the time if the average raw turbidity is > 1.5 NTU and maintain a filter effluent turbidity of < 0.2 NTU 95 per cent of the time if average raw turbidity is < 1.5 NTU.

Comment – The 95 per cent limit was exceeded on filter #2 in February, the 95th percentile for February was 0.217 NTU. The 95 per cent limit was exceeded on filter #3 in February, November, and December, the 95th percentile limits for February, November, and

December are 0.248 NTU, 0.226 NTU, and 0.203 NTU, respectively. The Environment Officer was notified of all exceedances.

Requirement – Filter turbidity shall never exceed 1.0 NTU.

Comment – Filter #1 exceeded 1.0 NTU on July 18. Filter #2 exceeded 1.0 NTU on May 30, and July 18. Filter #3 exceeded 1.0 NTU on February 1, April 24, May 5, May 6, May 7, June 7, July 18, November 4, and November 5. Filter #6 exceeded 1.0 NTU on April 19, June 7, and July 18. Filter #7 exceeded 1.0 NTU on February 14, April 4, April 19, May 6, June 7, June 10, October 30, November 9, December 1, and December 23. The Environment Officer was notified of all exceedances.

Melville Potable Water Supply System

Requirement – Maintain a total coliform level of zero organisms detectable per 100 millilitres in every bacteriological test.

Comment – Received a positive result from one sample collected on August 19. The follow up (repeat) bacteriological sample was negative, indicating a likely sampling error on the first sample. The Environment Officer was notified.

SaskWater Owned Water Transmission Systems

Buffalo Pound Potable Water Supply System – East

Requirement – Maintain a total coliform level of zero organisms detectable per 100 millilitres in every bacteriological test.

Comment – Received a positive result from one sample collected on October 6. The follow up (repeat) bacteriological sample was negative, indicating a likely

sampling error on the first sample. The Environment Officer was notified.

Prairie North Potable Water Supply System

Requirement – Sample and test continuously for free chlorine residual in the water within the distribution system. Maintain a free chlorine residual of not less than 0.10 mg/L in the water within the distribution system.

Comment – The free chlorine residual dropped below the required minimum on June 7, 10, 11, 16 – 20, and 24 because of abnormal low chlorine residuals from the City of Lloydminster. The residual dropped as low as 0.04 mg/L but was adequate 99.992 per cent of the time. In response to the issue, SaskWater has started adding chlorine to the system to boost the residual and the issue has not re-occurred. The Environment Officer was notified.

Certified Operation and Maintenance Water Treatment Systems

Jackfish Lake West Water Utility Corporation

Requirement – Maintain a filter effluent turbidity that is never to exceed 1.0 NTU.

Comment – The filter turbidity exceeded the maximum allowable limit of 1.0 NTU on May 11 (maximum of 1.398 NTU). The turbidity spiked above the limit at 18:20. The filter shut off on high turbidity by 18:30 and entered a backwash. The Environment Officer was notified.

Kindersley WTP

Requirement – Sample and test for two bacteriological samples per week.

Comment – Samples collected for the week of February 9 could not be tested because of a courier delivery delay. The Environment Officer requested four samples to be performed the week of February 16. Samples for the week of March 30 and the week of September 28 could not be tested because of courier delivery delays. The Environment Officer was notified of all instances. All bacteriological samples tested in 2025 were negative.

Requirement – Maintain a filter effluent turbidity that is never to exceed 1.0 NTU.

Comment – Filter #1 contained a turbidity spike greater than 1.0 NTU on June 2 at 10:45. Filter #3 contained a turbidity spike greater than 1.0 NTU on July 16 at 03:05. In both cases the filters were shut off and backwashed, the turbidity was over 1.0 NTU for less than 10 minutes. The Environment Officer was notified.

Lac La Ronge Regional Water Corporation

Requirement – Sample and test for one bacteriological sample per week.

Comment – One sample collected for the week of September 28 was not able to be tested because of a courier delivery delay. The Environment Officer was notified. All bacteriological samples tested in 2025 were negative.

Village of Vanscoy

Requirement – Maintain a total coliform level of zero organisms detectable per 100 millilitres in every bacteriological test.

Comment – Received a positive result from one sample collected on October 13. The follow up (repeat) bacteriological sample was negative, indicating a likely sampling error on the first sample. The Environment Officer was notified.

Certified Operation and Maintenance Water Transmission Systems

City of Meadow Lake

Requirement – Based on the average of quarterly samples, the limit for HAA5 must be < 0.080 mg/L.

Comment – The annual average of quarterly HAA5 for 2025 was 0.089 mg/L. This was the result of membrane treatment at the water treatment plant being inoperable in the first quarter of 2025. The Environment Officer is aware.

Village of Air Ronge

Requirement – Sample and have test off-site fluoride once every week from representative locations in the distribution system.

Comment – The fluoride sample was missed being tested the week of June 8 due to confusion during this time caused by the wildfire situation in Air Ronge. The Environment Officer was notified.

Village of Meota

Requirement – From January 1 to August 7; Test once per day for free and total chlorine residuals in the water within the distribution system.

Comment – Chlorine residuals were not tested on May 10, 11, 16, 18, 24, 25, 30, June 1, 7, 8 because of a misunderstanding in the newly issued permit. The Environment Officer was notified.

Emergency Boil Water Orders

There were no emergency boil water orders (EBWO) issued on any SaskWater owned or operated facilities in 2025.

Precautionary Drinking Water Advisories

A Precautionary Drinking Water Advisory (PDWA) is issued when drinking water quality concerns exist but immediate public health threats have not been identified. They are commonly issued as a result of power outages or maintenance that may result in depressurization of the distribution system.

In 2025, the Buffalo Pound water treatment plant, which is owned by the Buffalo Pound Water Treatment Corporation, underwent extensive capital upgrades. Due to this work, there were thirteen (13) PDWAs issued for the Buffalo Pound Potable Water System-North and fourteen (14) PDWAs issued for the Buffalo Pound Potable Water System-West.

- **Buffalo Pound Potable Water System – North** had PDWAs issued on March 7, March 20, April 15, May 12, May 28, June 25, July 21, August 6, October 1, October 15, October 24, November 12, November 19.
- **Buffalo Pound Potable Water System – West** had PDWAs issued on: March 7, March 20, April 15, April 29, May 12, May 28, June 25, July 21, August 6, October 1, October 15, October 24, November 12, November 19.

There were an additional five (5) PDWAs issued on SaskWater owned potable water systems in 2025, for a total of thirty-two (32) issued for SaskWater owned systems for the year.

- **Saskatoon Potable Water System – North East** had a PDWA issued on January 21 due to depressurization caused by a water line break.
- **Saskatoon Potable Water System – East** had a PDWA issued on October 16 due to

depressurization caused by SaskWater upgrades to the pipeline.

- **Buffalo Pound Potable Water System – East** had a PDWA issued on July 14 due to depressurization caused by a City of Regina leak repair.
- **Buffalo Pound Potable Water Systems – North and West** had PDWAs issued on September 3 due to an unplanned shutdown of the Buffalo Pound water treatment plant due to a power failure.

Where SaskWater provides operation and maintenance services to community or rural pipeline association-owned systems, there were seven (7) PDWAs issued in 2025.

- **The Caron/Mortlach Regional Public Utility Board** had PDWAs issued on April 29 and June 24 due to planned upgrades to the distribution header.
- **The Jackfish Lake Water Utility** had PDWAs issued on May 31 due to a power outage and July 26 due to depressurization.
- **The Northern Village of Air Ronge** had a PDWA issued on June 25 due to depressurization caused by a planned hydrant relocation and on October 10 due to a hydrant repair due to a leak.
- **The Village of Meota** had a PDWA issued on May 31 due to a power outage.





SaskWater

