

2013 Annual Performance Report



WHITE ROCK

2013 PERFORMANCE REPORT

Overview

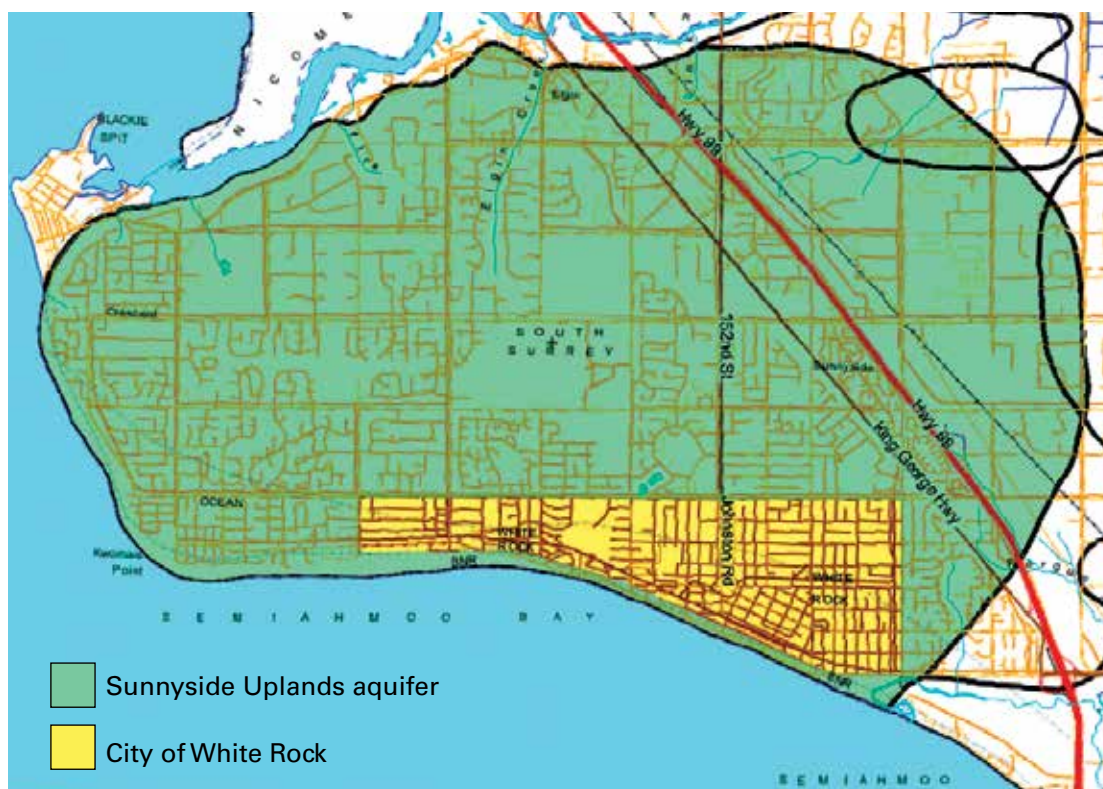
The 2013 Performance Report provides an overview of the achievements of EPCOR White Rock Water Inc. (EPCOR) and looks ahead at plans for 2014. Our key measures of success include a full range of activities, summarized under the headings of About the Utility, Water Quality, Operational Excellence and Safety, and Customer Service and Community.

EPCOR sets these measures, which are submitted to and consistent with our regulators' requirements (B.C. WATER Comptroller's Office and Fraser Health Authority). In accordance with their regulatory process, the B.C. Water Comptroller's Office approves capital program and operations budgets. EPCOR also submits detailed reporting to both the B.C. Water Comptroller's Office and Fraser Health Authority, as required.

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White Rock Source Water



DID YOU KNOW?

EPCOR'S distribution system is comprised of:

- Two pressure zones
- Three water storage reservoirs
- Three pressure reducing valve stations
- A booster station
- 76.6 km of mainly ductile and cast iron pipes ranging in size from 100mm to 300 mm (about 4 inches) to 12 inches in diameter
- 332 hydrants
- 1180 valves



About the Utility

Background

EPCOR White Rock Water Inc. (EPCOR) is Canadian-owned and operated. EPCOR purchased the privately-owned and operated White Rock Utilities on May 1, 2005, and the amalgamation was completed in May 2006. White Rock Utilities has served the White Rock area since 1913.

EPCOR owns the water system assets and operates them on behalf of the residents of White Rock. EPCOR also supplies water to certain adjacent areas in the City of Surrey, and the Semiahmoo First Nation. The utility serves a population of approximately 20,000 people with an average consumption of water of 6.2 million litres (ML) per day.

Every water service in the city is metered. Fire protection service is provided to the residents by means of 332 fire hydrants. The entire water supply comes from a groundwater source called the Sunnyside Uplands aquifer and is provided through seven wells, which range in depth from about 60 to 150 metres (200 to 500 feet). The water is distributed directly to residents with limited treatment.

The distribution system also includes 76.6 km of watermain, of which approximately 10 meters (33 feet) is galvanized iron pipe. We anticipate all of the galvanized iron pipe will be replaced before the end of 2014, as part of our annual pipe replacement program.

EPCOR White Rock is regulated by the BC Comptroller of Water Rights (Comptroller). Water rates and terms of service are determined through a regulatory process, which takes place whenever approved rates expire. Rates are based on a fair rate of return to EPCOR for providing water service.

White Rock has uniform structure water rates and three customer groups — single family residential, multi residential and commercial. Current rates expired December 31, 2013. EPCOR filed an application for new revenue requirements and water rates for the period January 1, 2014 to December 31, 2017 on December 16 with the Comptroller.

EPCOR employs seven full-time permanent employees in White Rock. To provide additional technical and operational support, EPCOR has over 450 water professionals, 21 of which are in BC.



Water Quality

Water “aesthetics” are characteristics that impact a customer’s willingness to drink or use the water, but do not necessarily have health impacts. Examples include taste, odour and appearance.

We monitor the physical, chemical, and microbiological characteristics of your drinking water. Our level of testing exceeds our permit requirements set by the Fraser Health Authority.

We also work under Health Canada’s science-based guidelines for drinking water known as the Guidelines for Canadian Drinking Water Quality. These guidelines set the maximum acceptable concentrations of chemical, microbiological and radiological contaminants found in water based on potential health effects. They also address water quality issues such as colour, taste and odour by setting aesthetic objectives (AO).

Groundwater tends to contain more minerals than surface water. These minerals are naturally occurring in the earth’s crust and therefore appear in varying levels in groundwater. See pages 8 to 13 for a detailed analysis of White Rocks’ water quality.

In 2012, Fraser Health added an operating permit condition with respect to arsenic and manganese: “Should arsenic levels trend above the Guidelines for Canadian Drinking Water Quality, a treatment system must be operational on or before December 31, 2018. Should the Guidelines for Canadian Drinking Water Quality deem manganese a health criteria, a treatment system must be operational on or before December 31, 2018.”

Since becoming the operator in 2005, EPCOR has been monitoring arsenic and manganese closely in the well sources and throughout the system and has been reporting on results in annual performance reports and on its website. In total, EPCOR carried out 278 tests for arsenic and manganese in 2013. This past year, the average manganese concentration in the system met Health Canada’s aesthetic objectives, although the level of manganese exceeded the objective in some of the wells. The arsenic concentration met Health Canada’s Maximum Acceptable Concentrations (MAC). Refer to pages 10 and 12 for additional information.

Water Flushing for Commercial Buildings and Schools

Water quality deteriorates when the water is stagnant within piping in buildings for any length of time. EPCOR recommends that building owners or managers have a program to flush the water through drinking water fixtures in the building after periods of no use, such as over weekends and after holidays, before consumption of the water. This is especially important for buildings that are used intermittently, such as schools or daycare facilities. Enough water should be flushed to ensure the water in the piping has been displaced completely. This can usually be determined by running the water until it is cool to the touch. To conserve water, the flushed water can be collected for other uses, such as watering plants.

Quality Assurance

Protecting public health is the priority for EPCOR. Water quality is monitored and continually enhanced through diligent operations and high-quality standards. In 2013, we conducted 7,364 water quality tests.

We have made many quality assurance improvements since EPCOR began operating the White Rock utility in 2005. These include increased water quality monitoring, installation of remote monitoring equipment, development of new security methods to protect the water supply, an ongoing cross connection control program and unidirectional flushing to maintain water quality in the water mains.

We work closely with all regulatory and environmental agencies to provide safe water to the community and meet environmental compliance standards.

Our employees work to provide water in the community that meets or exceeds standards and expectations for safety, reliability and quality. EPCOR White Rock Water is a Class III system. System classification provides an indication of the degree of knowledge and training that is required of an operator of that facility. The Environmental Operators Certification Program (EOCP) has been classifying facilities in BC since 1975 using standards adopted by the Association of Boards of Certification. All operators are certified at the correct levels for the work they conduct. One operator is certified at Level III and three operators are certified at Level II. The community benefits by receiving the technical expertise and knowledge required to deliver a safe and reliable drinking water supply.

Summary

We review the existing water system regularly to assess its current condition and identify upgrades required to meet or exceed utility standards. We continue to implement or enhance our operating procedures and standards. This includes:

- Annual reporting of water-quality information and system upgrades to Fraser Health consistent with provincial regulations
- Supplementary lab training to allow additional parameters to be tested for in the water supply
- Routine sampling for bacteria supplemented by quarterly quality testing for metals. All testing is carried out by accredited B.C. laboratories (BCCDC, EXOVA and AGAT)
- Monthly equipment testing and calibration by local operators, combined with annual testing of all water lab equipment by certified technicians

DID YOU KNOW?

EPCOR works closely with all regulatory and environmental agencies to provide safe water to the community and meet environmental compliance.

Physical and Chemical Water Quality Data for White Rock Source and Distribution System Water¹

September 18, 2013 Samples

SUBSTANCE	UNIT OF MEASURE	NO. OF SAMPLES ANALYZED	MIN	MAX	AVERAGE	GUIDELINES ²
CHEMICALS						
Ammonia	mg/L	30	<0.01	0.12	0.04	—
Fluoride	mg/L	30	0.12	0.26	0.17	1.5 (MAC)
Nitrate (as N)	mg/L	30	<0.01	0.96	0.21	10 (MAC)
Nitrite (as N)	mg/L	30	<0.01	0.09	0.01	—
Total Organic Carbon	mg/L	30	<0.5	0.6	0.5	—
MINERALS						
Alkalinity (total, as CaCO ₃)	mg/L	30	84	120	99	—
Chloride	mg/L	30	6.41	75.40	22.93	250 (AO)
Hardness (total, as CaCO ₃)	mg/L	30	81	106	89	—
Sodium	mg/L	30	8.6	67.0	24.5	200 (AO)
Sulphate	mg/L	30	10.6	24.10	14.87	500 (AO)
Total Dissolved Solids	mg/L	30	142	304	185	500 (AO)
OTHER						
Colour	ACU	30	<5	7	5	15 TCU (AO)
Conductivity	µS/cm	30	211	530	296	—
pH		30	7.48	7.91	7.72	6.5-8.5 (AO)
Turbidity	NTU	30	<0.1	1.0	0.2	—
TRACE METALS						
Aluminum	mg/L	30	<0.005	0.021	0.006	0.1 (OG)
Antimony	mg/L	30	<0.0002	<0.0002	<0.0002	0.006 (MAC)
Arsenic	mg/L	30	0.0034	0.0110	0.0070	0.01 (MAC)
Barium	mg/L	30	0.012	0.024	0.015	1 (MAC)
Boron	mg/L	30	0.01	0.07	0.03	5 (MAC)
Cadmium	mg/L	30	<0.00007	<0.00007	<0.00007	0.005 (MAC)
Calcium	mg/L	30	19.8	25.7	21.6	—
Chromium	mg/L	30	0.0008	0.0044	0.0013	0.05 (MAC)
Copper	mg/L	30	<0.001	0.075	0.013	1 (AO)
Iron	mg/L	30	<0.005	0.280	0.019	0.3 (AO)
Lead	mg/L	30	<0.0001	0.0009	0.0004	0.01 (MAC)
Magnesium	mg/L	30	7.59	10.20	8.61	—
Manganese	mg/L	30	0.002	0.205	0.089	0.05 (AO)
Mercury	mg/L	30	<0.00001	<0.00001	<0.00001	0.001 (MAC)
Potassium	mg/L	30	2.6	4.8	3.5	—
Selenium	mg/L	30	<0.0006	0.0119	0.0014	0.01 (MAC)
Silicon	mg/L	30	10.5	11.2	10.8	—
Uranium	mg/L	30	<0.0005	<0.0005	<0.0005	0.02 (MAC)
Vanadium	mg/L	30	0.0021	0.0055	0.0033	—
Zinc	mg/L	30	<0.001	0.015	0.005	5 (AO)

ABBREVIATIONS	
—	No guideline set by Health Canada
<	Less Than Detection Limit
>	More Than Detection Limit
ACU	Apparent Colour Unit
AO	Aesthetic Objective
as CaCO ₃	Expressed as Calcium Carbonate
GCDWQ	Guidelines for Canadian Drinking Water Quality
HAA	Haloacetic Acids
MAC	Maximum Acceptable Concentration
mg/L	Milligram per Litre
N	Nitrogen
NA	Not Applicable
ng/L	Nanograms per litre
NTU	Nephelometric Turbidity Unit
µg/L	Micrograms/litre
µS/cm	Microsiemens/cm
TCU	True Color Unit
THMs	Trihalomethanes



¹ Summary of results of samples collected from all wells and at multiple locations through the system on September 18, 2013.

² Guideline is either the Maximum Acceptable Concentration (MAC) or Aesthetic Objective (AO) as per the Guidelines for Canadian Drinking Water Quality established by Health Canada. Dash indicates no guideline established.

Physical and Chemical Water Quality Data for White Rock Source and Distribution System Water

2013 Samples

PARAMETER	UNIT OF MEASURE	NO. OF SAMPLES ANALYZED	MIN.	MAX	AVERAGE	GUIDELINES
BACTERIA						
<i>E. coli</i>	MPN/100mL	726	<1	<1	<1	0
Total Coliforms	MPN/100mL	726	<1	1 ¹	1	Less than 10% > 0
CHEMICALS						
Chloroform	mg/L	36	<0.001	0.002	0.001	—
Bromodichloromethane	mg/L	36	<0.001	<0.001	<0.001	—
Dibromochloromethane	mg/L	36	<0.001	<0.001	<0.001	—
Bromoform	mg/L	36	<0.001	<0.001	<0.001	—
Total THMs ²	mg/L		<0.001	0.002	0.001	0.1 mg/L
Monochloroacetic Acid	µg/L	36	<2.0	<2.0	<2.0	—
Monobromoacetic Acid	µg/L	36	<2.0	<2.0	<2.0	—
Dichloroacetic Acid	µg/L	36	<2.0	<2.0	<2.0	—
Bromochloroacetic Acid	µg/L	36	<2.0	<2.0	<2.0	—
Dibromoacetic Acid	µg/L	36	<2.0	<2.0	<2.0	—
Trichloroacetic Acid	µg/L	36	<2.0	<2.0	<2.0	—
Total HAA6 ³	µg/L		<2.0	<2.0	<2.0	80 µg/L
N-Nitrosodimethylamine	ng/L	3	<1.5	<1.5	<1.5	40 ng/L

Notes:

- Resamples taken at the same location, upstream and downstream and analyzed to determine the initial test as a "False Positive."
- Total THMs is the sum of the above 4 parameters.
- Total HAA6 is the sum of the above 6 parameters.

Total Coliforms in White Rock's Distribution System in 2013¹

Month	Number of Samples Analyzed for Total Coliforms	Number of Coliform Samples <1 MPN per 100 mL
January	68	68
February	50	50
March	55	55
April	61	61
May	56	56
June	57	57
July	74	73
August	59	59
September	58	58
October	74	74
November	60	60
December	54	54

Notes:

- All samples were <1 MPN per 100 mL for *E. coli*.

TESTING FOR ORGANIC COMPOUNDS

EPCOR tests drinking water periodically for organic compounds indicated in the Guidelines for Canadian Drinking Water Quality (GCDWQ) and some not included in the guidelines. In 2012, EPCOR tested for 11 groups (279 organic compounds in total) and did not detect any of the compounds in White Rock's drinking water. Having established this baseline information in 2008, EPCOR continues to perform testing for organic compounds every five years. The 2012 test results can be found in our 2012 Annual Performance Report on our website: www.epcor.com. The next tests will take place in 2017.

How to Measure:

- Most substances listed are reported in milligrams per litre (mg/L). One milligram per litre is commonly referred to as one part per million
- One part per million is equivalent to one drop in 1/2 bathtub full of water or one second in 12.5 days
- Some substances are measured in parts per billion. One part per billion is also referred to as one microgram per litre (µg/L)
- One part per billion is equivalent to one drop in 520 bathtubs full of water or one second in 32 years

Trace Metals Water Quality Data for White Rock Source and Distribution System Water

March to December 2013 Samples

SUBSTANCE	UNIT OF MEASURE	NUMBER OF SAMPLES	MIN	MAX	AVERAGE	GUIDELINES
Arsenic	mg/L	278	0.003	0.011	0.008	0.01 (MAC)
Copper	mg/L	278	<0.0005	0.1040	0.0099	1 (AO)
Iron	mg/L	278	<0.01	0.28	0.01	0.3 (AO)
Lead	mg/L	278	<0.00001	0.00488	0.00030	0.01 (MAC)
Manganese	mg/L	278	0.002	0.205	0.083	0.05 (AO)

DID YOU KNOW?

In 2013, EPCOR White Rock conducted 7364 water quality tests.

More water quality information can be obtained at www.epcor.com or EPCOR's White Rock office.



A NOTE ON WATER QUALITY:

Water produced from the White Rock system wells is considered high-quality groundwater. With the exception of the Merklin Street wells, White Rock's groundwater supply does not undergo disinfection. As outlined in this report, EPCOR takes measures to prevent microbial contamination, but there is always a small risk of microbial contamination in any type of water system. Immuno-compromised persons may be more vulnerable to microbial contamination than the general population. This includes people with HIV/AIDS or other immune system disorders or people who have undergone chemotherapy, organ transplants or who have received other treatments that suppress the immune system. We advise that these individuals seek advice about drinking the White Rock water from their physician or other health care provider.

Physical and Chemical Water Quality Data for White Rock Source and Distribution Water for 2013

Summary of the Chlorine Residuals¹

Sampling Location ²	Number Of Samples Collected in 2013	Number of Samples > 0.2 mg/L	Percentage of Chlorine ³ Residuals > 0.2 mg/L (%)
15600 Blk. Moffat Lane	10	4	40
EPCOR Office	13	11	85
Evergreen Day Care	13	8	62
Kent Activity Centre	13	12	92
Merklin & Thrift	51	50	98
Merklin High Reservoir	52	38	73
Merklin Low Reservoir - 25%	51	26	51
Merklin Low Reservoir - 50%	47	23	49
Merklin Low Reservoir - 75%	51	24	47
Peace Arch Hospital	52	51	98
Penny Lane	8	3	38
Stevens STN	14	12	86

¹ Chlorine measured is total chlorine and is mainly comprised of monochloramine.

² In 2010, EPCOR established a chlorine feed at well #6 for the Merklin reservoir site. That chlorine feed continues to serve the Merklin reservoir site, as well as a limited area of the system only (the high east zone), which is supplied by water from the Merklin station.

³ Partial chlorination was implemented in 2010. Chlorine can be found at some locations in the system, but not in others.

ARSENIC

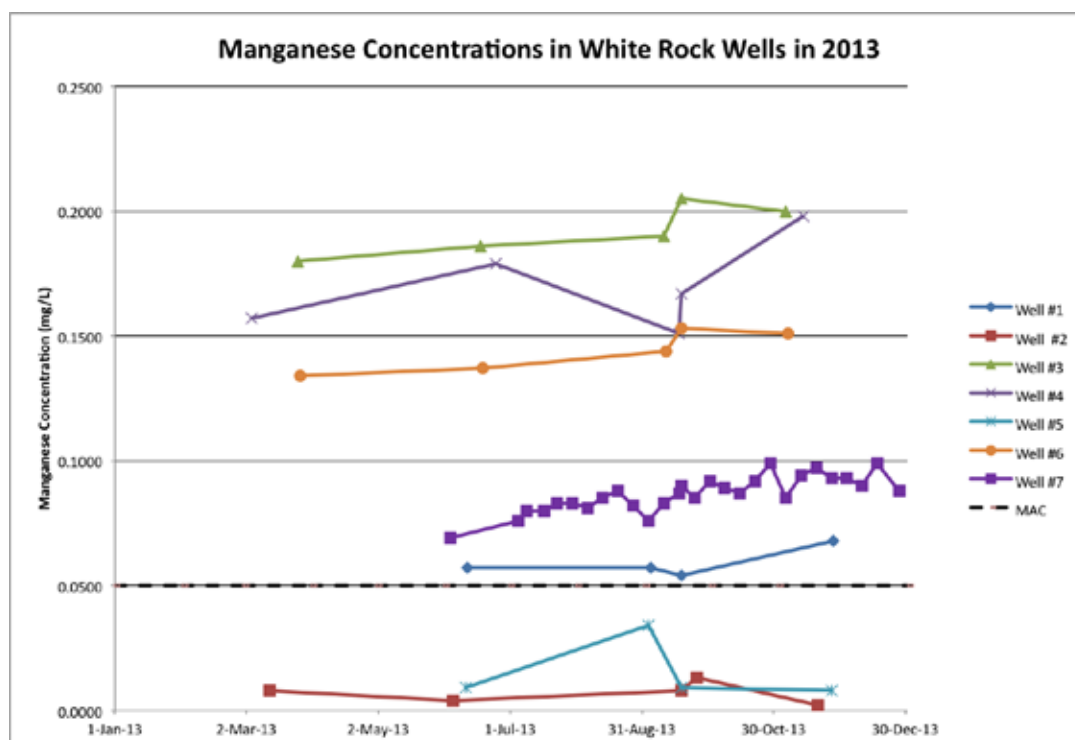
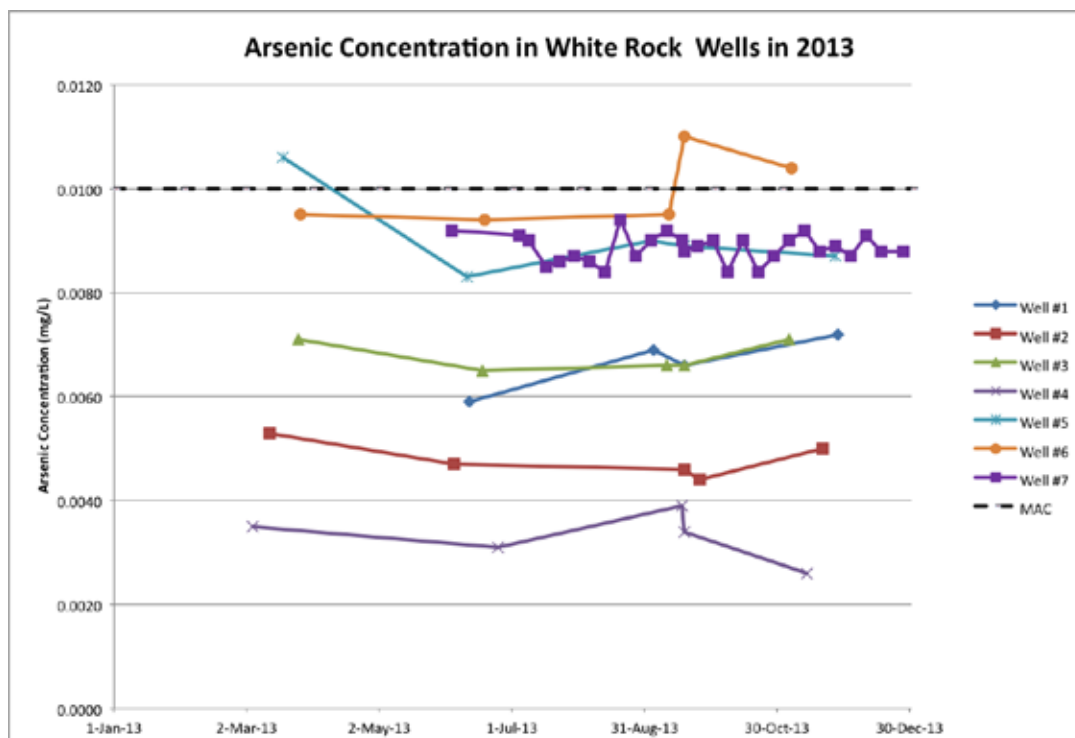
In 2007, Health Canada reduced the Maximum Acceptable Concentration (MAC) levels for arsenic from 0.025 mg/L to 0.010 mg/L. Although the MAC for arsenic is set at 0.010 mg/L, there may be health risks associated at lower levels. Approximately 24% of the samples taken from White Rock's distribution system in 2007 showed arsenic concentrations that exceeded the MAC with the maximum concentration of 0.012 mg/L and an average of 0.008 mg/L. In 2013, 1% of samples taken from the White Rock water system showed arsenic concentrations that exceeded this new guideline limit. EPCOR continues to monitor arsenic levels on a routine basis.

MANGANESE

The GCDWQ aesthetic objective (AO) for manganese is 0.05 mg/L. At levels above 0.15 mg/L, it can cause staining of plumbing and laundry, as well as an objectionable taste. New studies, however, are suggesting some levels of manganese may also be associated with health effects. In 2012, the average concentration was 0.076 mg/L which exceed the AO. The minimum and maximum concentrations were <0.001 mg/L and 0.185 mg/L respectively. In 2013, the average concentration was 0.083 mg/L, which also exceeds the AO. The minimum and maximum concentrations in 2013 were 0.002 mg/L and 0.205 mg/L respectively.



Physical and Chemical Water Quality Data for White Rock Source for 2013



Total Water Quality Management Plan

The Fraser Health Authority has directed EPCOR to implement system chlorination by March 31, 2016.

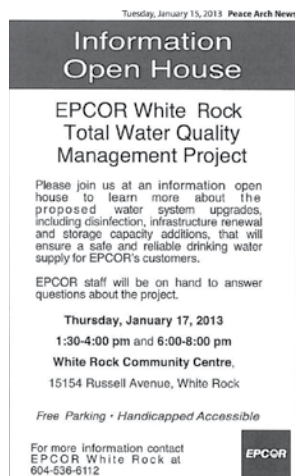
The Total Water Quality Management Project for White Rock includes upgrades to ensure the safe and reliable provision of drinking water to our customers. The project is designed to create a robust multi-barrier system to protect water quality.

The plan is designed to disinfect the water supply at source and maintain the disinfectant residual throughout the reservoirs and distribution system.

EPCOR's Total Water Quality Management Project Application was filed with the B.C. Comptroller of Water Rights on December 6, 2012. The BC Comptroller of Water Rights issued an order on June 27, 2013 granting these approvals, as follows:

"The TWQM project is necessary to treat the water supply and upgrade critical infrastructure in the White Rock system so that customers consistently and reliably receive high quality drinking water that meets both the Fraser Health Authority's water quality requirements and Health Canada's Guidelines for Canadian Drinking Water Quality. The project will ensure that EPCOR meets the operating permit conditions established by the Fraser Health Authority, that chlorination of the water system is in place by 2016¹."

More information about the TWQM Project, including the application, the Comptroller's Decision and regulatory proceeding documents are available for review on our website (www.epcor.com) and also at our office. EPCOR will continue to keep its customers advised as the process continues.



Information Open House Advertisement



EPCOR Information Open House – January 17, 2013

¹ Decision and Order No. 2364

Cross Connection Control

A cross connection is a real or potential connection between the drinking water supply and any source of contaminant. For instance, improper plumbing in homes or businesses can contaminate the public drinking water supply. And as public demand for water reuse options increases, so do the opportunities for potential contamination.

EPCOR has a Cross Connection Control Program to help ensure that the water supply remains safe to drink. The program's goal is to protect the water supply from pollution or contamination. This is done by using backflow prevention devices to prevent water that has entered a facility from flowing back into the drinking water system.

The program is a cooperative effort between water purveyors, plumbing and health officials, property owners and certified testers. The intent is to establish and administer guidelines for controlling cross connections and implement means to ensure their enforcement.

As we continue to further develop and expand our program, EPCOR will provide more information on cross connection control and undertake public awareness initiatives to explain how we can all play our part in protecting the drinking water supply.



Backflow Prevention

Water that flows opposite to its normal direction is called backflow, a problem that can accidentally contaminate drinking water in your home. Backflow conditions are potentially dangerous, but preventable. Backflow is caused by backsiphonage and backpressure.

Plumbing codes have always prohibited any connection whereby potable and non-potable water could mix. Numerous applicable standards are in place to ensure backflow prevention devices meet acceptable standards; they include CSA, AWWA, ASSE, ANSI and IAPMO.



Operational Excellence and Safety

Operational Excellence Highlights

For EPCOR's White Rock staff, operational excellence takes many forms. As outlined in our performance report, this includes care for the environment, our community and the needs of our customers, quality drinking water, service reliability, safety and ongoing capital projects to improve the system.

In many communities across North America, it may take 24 - 48 hours to fix challenging water main breaks and restore full service to customers. In White Rock, however, water main breaks are typically repaired more quickly. In 2013, all breaks were fixed and water was restored in six hours or less.

We proactively manage all infrastructure through regular maintenance, evaluations and improvements.

In 2013, these activities included annual maintenance of all pressure relief valve stations, reservoir inspections and maintenance, water meter maintenance, hydrant inspection and maintenance and exercising and maintenance of distribution system valves.

Our Unidirectional Flushing (UDF) Program uses a hydraulic modeling system to direct water through specific pipes at high velocity. This helps to maintain water quality by preventing the accumulation of material within the piping. This type of program uses less water than other methods. It is also more effective than regular flushing and maximizes pressure throughout the system.

Safety Highlights

EPCOR is committed to safety and actively promotes safe work practices for both our staff and contractors. For 2013, we take pride in again achieving our ongoing goal of zero Lost Time Incidents.

Other safety highlights include:

- A confined space rescue training exercise for improved emergency preparedness
- Continued preventative safety activities such as monthly safety meetings, worksite inspections, worksite observations, and safe work plans prior to any non-routine tasks.

People & Safety Performance Measures	
Activity	Actual Values
	2013
Lost Time Accidents	0
Preventative Safety Activities*	180 hrs/employee

* Preventative safety activities are the routine measures EPCOR takes to promote safety. Examples include our monthly safety meeting, safety training, worksite inspections and observations, and safe work plans.

Capital Program Highlights

We follow a comprehensive set of processes for identifying, approving and executing capital projects.

A water system master plan provides a long-term planning horizon to ensure that the waterworks infrastructure supports existing and future water demands and needs for the City of White Rock and surrounding area. The Master Plan includes an assessment of projected growth and demand patterns. It identifies areas such as system integrity and water sources to address capital infrastructure requirements.

Capital projects during 2013 included:

Water Main Upgrades

- Completion of water main project upgrades at Hospital and Vine Street, Royal Avenue and Oxenham Avenue.

Ongoing Programs

- Meter replacement program: 31 meters in various sizes were replaced in 2013
- Five new hydrants were installed and one existing hydrant was upgraded
- Installed 81 new water service connections

Security Upgrades

- We continued to develop and implement new security measures to protect White Rock's water supply.





Customer Service and Community Investment

Customer Service Highlights

In White Rock, certified staff provide 24-hour emergency services to our customers and have access to EPCOR's diverse team of technical and emergency response specialists.

As part of its commitment to high-quality customer service, EPCOR responds to customer questions and concerns and maintains detailed records to ensure responses are valuable, timely and professional.

Community Investment Highlights

EPCOR is proud to support the communities in which we operate through volunteering, partnerships and funding programs. This past year, EPCOR White Rock was proud to support several local organizations and events:

- South Surrey White Rock Chamber of Commerce Business Excellence Awards
- Semiahmoo House Society's "A Taste of BC's Finest"
- White Rock South Surrey Hospice's Hike for Hospice
- Peace Arch Hospital Foundation Partners in Caring Gala
- City of White Rock's Canada Day by the Bay
- City of White Rock's Tour de White Rock
- Peace Arch Hospital Foundation Great Pumpkin Walk
- The United Way, with employee donations directed to local organizations of their choice
- The South Surrey/White Rock Food Bank with employee annual and semi-annual campaign donations



Peace Arch Gala, 2013

Maximum Day Demand (MDD)

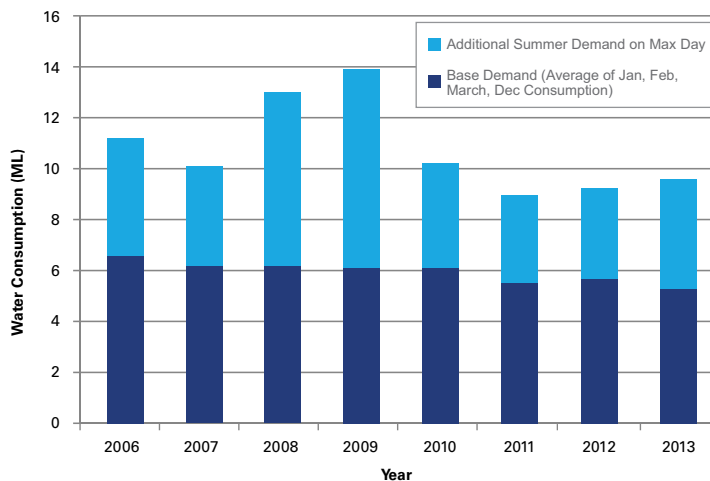
On August 8, 2013, White Rock recorded peak water consumption for the year at 9.7 million litres (ML) of water. Average daily water consumption is 6.2 million litres per day.

We track annual water consumption patterns to ensure that the White Rock system continues to provide sufficient water service to customers. Key to this tracking is the water consumption recorded on the peak day each year, the point of highest demand.

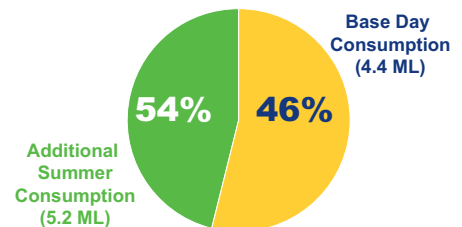
The record of peak demand enables us to design water system resources to meet all customer needs, including firefighting and high-use periods.

On August 5, 2012, White Rock consumed 9.7 ML of water. Demand on the peak day is separated into a base consumption of about 5.3 ML and additional summer consumption of about 4.4 ML. By comparison, the 2012 maximum day total was 9.2 ML. White Rock's average consumption is 6.2 ML a day.

2013 White Rock Peak Day Water Consumption Trends



2013 Peak Day Water Consumption



DID YOU KNOW?

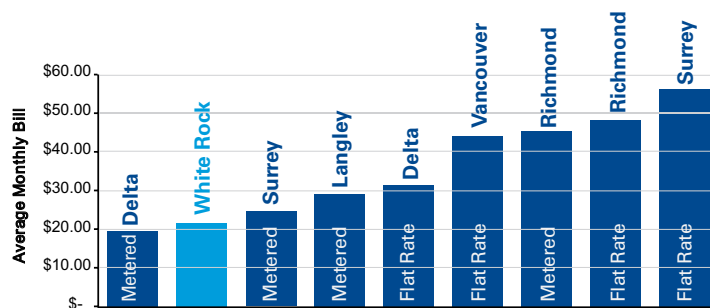
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CUSTOMER SERVICE INDEX								
ACTIVITY		2013	2012	2011	2010	2009	2008	2007
Customer calls received, responded to and resolved	Meter Issues	34	38	57	142	35	82	111
	Aesthetic Issues: - Odour/manganese	47	42	39	45	100	33	56
	Backflow tests	312	311	322	283	51	157	41
	Water main breaks	TBA	9	10	10	12	10	11
	Line leaks/breaks	TBA	3	16	14	0	2	12
	Water Pressure	17	28	22	9	56	14	0
	Boil Water Notice related calls	0	0	0	251	N/A	N/A	N/A
	Total:		431	466	754	254	298	231
Customer satisfaction index*	Water Service Supplier	91%	N/A	N/A	95%	N/A	N/A	N/A
	Quality of tap water	92%	N/A	N/A	95%	N/A	N/A	N/A
Community Events Supported		8	7	10	7	8	10	8

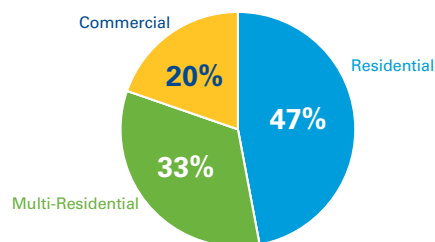
* Customer survey conducted in 2013.

Comparative 2013 Residential Monthly Water Rates

Based on average consumption of 825 ft³ (or 23 m³) per month



2013 White Rock Water Consumption by Customer Group



2013 Typical Water Household Consumption



What's Ahead?

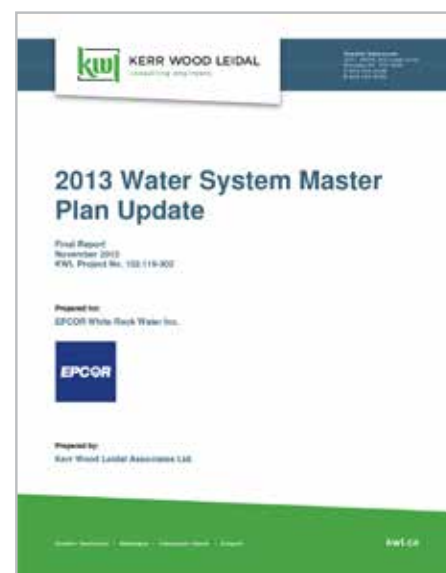
Beyond short-term projects and day-to-day operations, EPCOR White Rock's primary focus for 2014 includes Water Quality, Operational Excellence and Safety, and Customer Service and Community Investment.

Water Quality – We will continue to work with our regulators, Fraser Health Authority and the BC Comptroller of Water Rights, to implement the approved Total Water Quality Management Project. To ensure the provision of safe and reliable water for our customers, we will continue our 24/7 monitoring of White Rocks' water, system operation and laboratory equipment. By increasing awareness of the need for efficient water use, we will continue to focus on public awareness and education for our customers, as part of our groundwater management/protection and cross connection control programs.

Operational Excellence and Safety – EPCOR supports a workplace free of occupational injury and illness and minimizes harm to people and the environment. We continue to encourage our staff to attain the highest levels of environmental and safety certification. This results in increased operational knowledge and a safer, more productive work environment. We are committed to EPCOR's Safety Program to ensure the safety of the public and our staff. This includes ongoing training in the Workplace Hazardous Materials Information System, the transportation of dangerous goods, construction safety, confined space rescue and fall protection.

Capital Program – We continue to update system security and SCADA controls and we will continue our ongoing capital maintenance program for water infrastructure to ensure system reliability and efficiency. This includes implementing capital construction recommendations from the Total Water Quality Management Project and our Water System Master Plan, to meet current and future guidelines and regulations. Additional information on the Water System Master Plan is located on our website: www.epcor.com.

Customer Service and Community Investment – We will continue to enhance customer communication to increase awareness of White Rock's water supply and the importance of using it wisely. To support this, we continue to monitor, track and follow up all customer inquiries and concerns. We will also continue to support our community through event sponsorships, volunteering and other activities.



DID YOU KNOW?

EPCOR White Rock's Emergency Response Plan (ERP) is the tool employed to prevent or minimize losses to people, property and environment during an emergency or disaster. EPCOR ERP plans are to be partially or fully activated in the event of an emergency or disaster which exceeds the normal function of daily operations. The ERP was developed using a common EPCOR structure to enable a prompt and coordinated response to any emergency affecting EPCOR sites/locations. Some examples of an emergency situation would be water contamination resulting in a boil water notice, fire or earthquake affecting plant operations. Also included in the ERP is a list of stakeholders, their contact information and preferred methods of communicating with them in an emergency situation.

EPCOR believes that effective emergency planning is an ongoing process requiring the input of everyone who will be involved in its implementation. Therefore, EPCOR employees and other concerned parties are expected to play an active role in all stages of the emergency planning process. The ERP is reviewed and updated regularly as new information becomes available. The ERP is also reviewed by Fraser Health on a routine basis.

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