

VILLAGE OF CLINTON



2016 ANNUAL WATER REPORT

Introduction:

The Village of Clinton is required under its operating permit to provide an Annual Report to the users of the system. This report will provide an overview of the maintenance and improvements made to the system including a summary of water test results.

This report will be submitted to Interior Health and be posted to the Village web site. www.village.clinton.bc.ca



Clinton Distribution system

The Clinton water distribution system consists of two raw water reservoirs, a water treatment building, chlorination building, a treated water reservoir, one pressure reducing station and approximately 9.7 kilometers of pipe. Water is fed from the upper reservoir to the lower reservoir via Clinton Creek, once it reaches the

lower reservoir the water is piped into the water treatment building where it is treated, then piped to the chlorination building. The water is treated with Sodium Hypochlorite and then moves into the new 500,000 gallon storage tank. From the storage tank the treated water travels to the pressure reducing station, the pressure coming into the station is 150 psi and leaves to the down town core at 78 psi.

Depending where you live in the community, pressures range from 60 psi to 100 psi by the time it reaches your home. Of the 9.7 kilometers of pipe, 610 meters is 2inch galvanized iron, 703 m 4 inch asbestos cement (ac), 250 m 4 inch polyvinyl chloride (pvc), 4956 m 6 inch ac, 1632 m 6 inch pvc and 1562 m 8 inch ac pipe. The age of these pipes range from 75 years to 7 years old. Life expectancy of the in ground pipes is 80 years for Polyvinyl Chloride pipe, 40 years for galvanized pipe and 50 years for asbestos cement pipe.

Water Consumption:

In 2016 the residents of Clinton consumed 225,761 m³ or 225,761,000 liters of water. Below is a month by month summary of water usage.

January.....	15,464 m ³ or 15,464,000 liters
February.....	13,876 m ³ or 13,876,000 liters
March.....	15,359 m ³ or 15,359,000 liters
April.....	16,804 m ³ or 16,804,000 liters
May.....	24, 006 m ³ or 24,006,000 liters
June.....	29,110 m ³ or 29,110,000 liters

July.....	27,044 m3 or 27,044,000 liters
August.....	24,320 m3 or 24,320,000 liters
September.....	17,469 m3 or 17,469,000 liters
October.....	14, 675 m3 or 14,675,000 liters
November.....	12,770 m3 or 12,770,000 liters
December.....	14,882 m3 or 14,882,000 liters

This averages out to about 997 liters per person per day compared to 1027 liters per person per day in 2015. The provincial average is 350 liters per day. We are continuing to lower our usage which shows residents are conserving water however we have a long way to go.

Below are the previous year's usages:

2015.....	232,531m3 or 232,531,000 liters
2014.....	214,230m3 or 214,230,000 liters
2013.....	237,127m3 or 237,127,000 liters
2012.....	273,585m3 or 273,585,000 liters
2011.....	262,098m3 or 262,098,000 liters

Maintenance:

The regular maintenance completed in 2016 at the Water Treatment Facility involved: tear down and acid washing of the sodium

hypochlorite cell, cleaning of the sodium hypochlorite storage tank as well as cleaning of the backup bleach tank. The fire hydrant and valve on the corner of Bell St. and Cariboo Ave was upgraded in 2016.

2016 Capital Projects:

There was no capital projects in 2016, the Village did apply for two grants. The first was to put in a second pressure zone for the south end of town, (Cariboo Ave, Kelly Lake Road and Teal St.). This grant was rejected. The second grant application was to replace the main water line from the water treatment plant to the pressure reducing station on Macdonald Ave, as well as upgrading the PRV station. We will find out in early 2017 if we get the grant.

Water Sampling and Quality:

In 2016 the Village took samples every week from 8 different locations around town for a total of 206 samples. This is another requirement of our operating permit. The following are locations of sample areas and results.

Water Treatment Facility.....	51 samples.....	no positive results
David Stoddart School.....	38 samples.....	no positive results
Village Office.....	49 samples.....	no positive results
Kelly Lake Road.....	6 samples.....	no positive results
Hugo Subdivision.....	2 samples.....	no positive results
Memorial Hall.....	48 samples.....	no positive results
Reg Conn Washrooms.....	9 samples.....	no positive results

Raw water.....3 samples

AS a result of the new Water Treatment Plant there were no water Quality Advisories or Boil water notices issued in 2016. A full list of sample results for bacteriological and chemical analysis can be viewed at the Village office.

Cross Connection Program:

The Village will be developing a Cross Connection Program over the next couple of years to address the potential for the water system to be compromised by high risk service connections which could introduce contaminated water into the Village's water system.

Water Conservation Plan:

The Village updated the water conservation plan and council adopted it in 2016 and is on the village website for viewing.

Emergency Response Plan:

The Village has an Emergency Response Plan that pertains to the water system. The plan identifies potential problems that could affect the Village's ability to provide safe and reliable drinking water. These problems range from water main breaks to natural disasters, the plan provides a systematic approach for dealing with the emergency. The plan has been updated in 2015 with the addition of the treatment plant and reservoir to the system. The current Emergency Response Plan is available on the Village of Clinton web site.