

Corrosion Control Program: Copper Pipes Protection



APRIL 2021

Improving our drinking water quality and protecting against corrosion of copper pipes

Project Overview

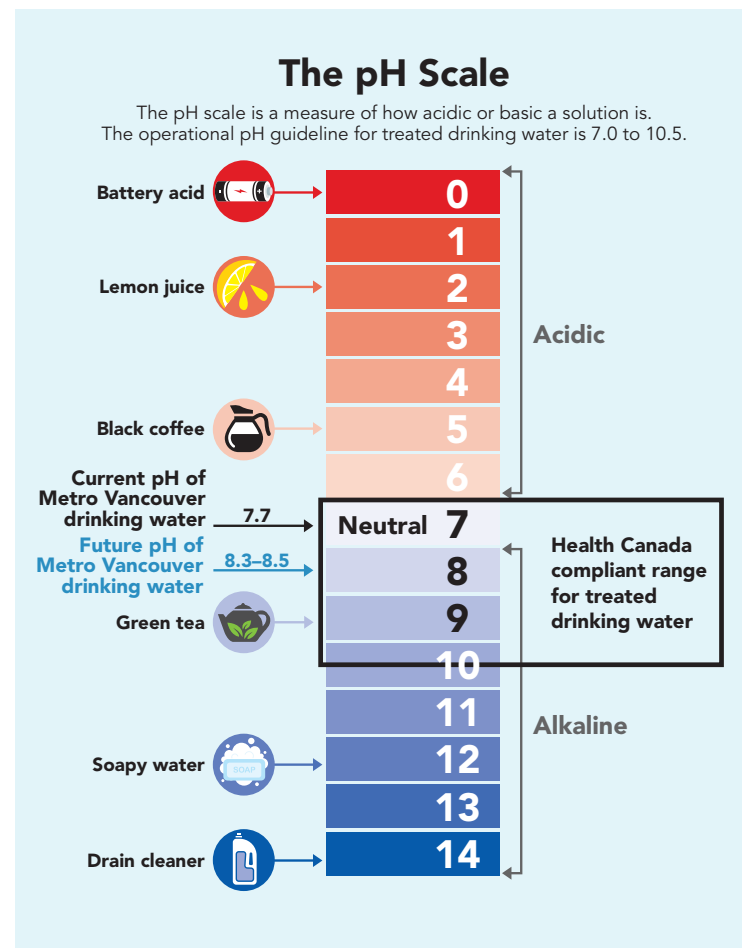
To protect copper pipes and hot water tanks in buildings, Metro Vancouver is planning to increase the pH of the region's drinking water through the use of natural minerals. This increase will:

- Reduce the release of copper from pipes in buildings caused by low pH in the region's water;
- Reduce leaks in pipes caused by copper corrosion;
- Help preserve the lifespan of pipes and hot water tanks; and
- Reduce green stains on tubs, sinks, and grout.

Metro Vancouver currently delivers water with a pH of 7.7, which is compliant with Health Canada's Guidelines for Canadian Drinking Water Quality, which range from 7 to 10.5. Adjusting the pH is an existing key component of Metro Vancouver's water treatment process because our untreated source water is naturally slightly acidic.

Increasing the pH to a target range of 8.3 to 8.5 will make the water less corrosive. To help improve the stability of the target pH level in the water transmission and distribution pipes, the alkalinity will be doubled to about 20 mg/L (expressed as calcium carbonate) using natural minerals. Alkalinity is a measure of the buffering capacity of the water to neutralize acids and bases to help maintain a stable pH level. These changes might prompt some water users such as health care facilities and breweries to adjust and calibrate their operations to the change in pH and alkalinity.

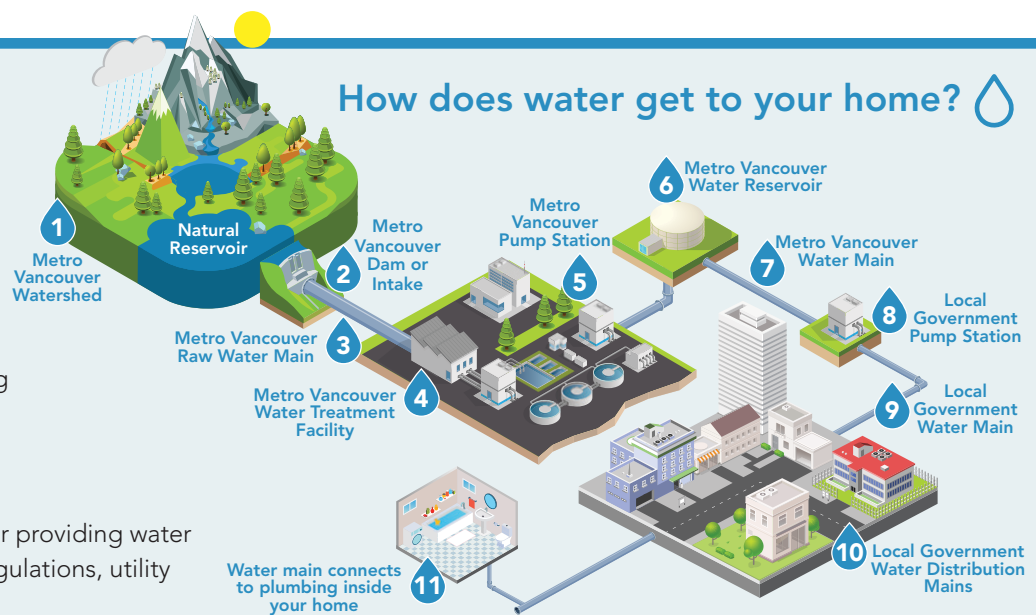
Metro Vancouver will continue to deliver high quality drinking water throughout the region that tastes and smells the same.



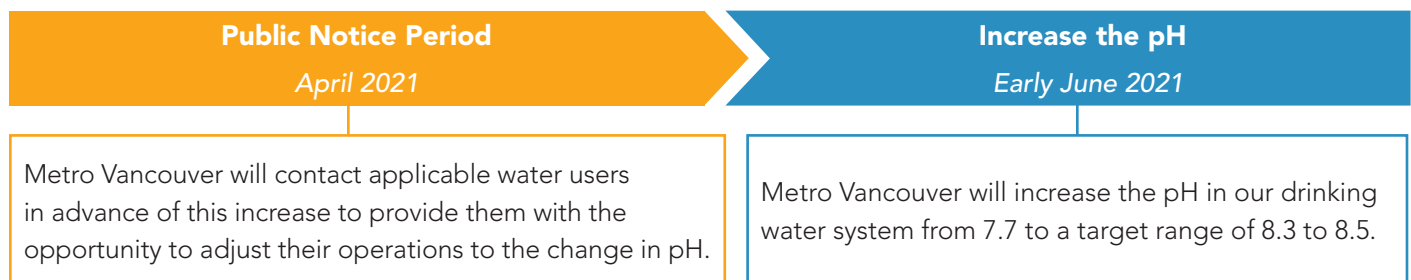
Metro Vancouver and its local governments work together to supply clean, safe drinking water to the region.

Metro Vancouver is responsible for protecting and providing the region's water supply, including: protecting our watersheds; storing, treating and ensuring the quality of our water; supplying water directly to our local governments; and planning for future supply and demand.

Our local governments are responsible for providing water to residents and businesses, enforcing regulations, utility billing, and, where used, water metering.



Project Timeline



Metro Vancouver is committed to the continuous improvement of drinking water quality. The Corrosion Control Program began in the 1990s and involves several steps to reduce pipe corrosion. This upcoming change in pH is an important step in this long-term program to improve water quality and reduce pipe corrosion through the addition of natural minerals to our drinking water.

COVID-19 and Delivery of Essential Services

Metro Vancouver continues to closely monitor developments regarding COVID-19 and our paramount commitment is to maintain essential services to the region while protecting the health and safety of our employees, contractors, residents and businesses. Metro Vancouver's construction projects are key components in ensuring the ongoing delivery of essential services as defined by the Province of BC. Metro Vancouver follows the guidance of the Provincial Health Officer and is taking all necessary measures to ensure our work sites remain safe and healthy.

Contacting Metro Vancouver

Metro Vancouver Information Centre:
604-432-6200 (Monday to Friday from 8 AM to 4:30 PM)
icentre@metrovancouver.org (Please include 'Corrosion Control Program' in the subject line)

metrovancouver
Together we make our region strong