

# MEMORANDUM

**To:** Mayor Kogon and Members of Amherst Town Council

**From:** Jason MacDonald, Deputy CAO

**Date:** March 18, 2019

**Subject:** Fluoridation of Water Supply

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## Issue

Amherst Town Council received a presentation from members of the local community (SOAR) regarding the benefits of fluoridation of the water supply.

At the November Committee of the Whole staff presented a memo regarding a request from SOAR to fluoridate our municipal water supply. The memo detailed the logistics and estimated costs of adding fluoride to our water. In summary, municipal water supply fluoridation is not required, nor is it regulated by the NSUARB. Should fluoride be added to the water the Department of Environment will require the Utility to monitor concentration levels to ensure public safety. The costs associated with fluoridation will not significantly impact our current water rates.

## Other Municipal Units and Organizational Support

### By Province

Province	Percent of population on Fluoridated Systems
British Columbia	1.17%
Alberta	42.43%
Saskatchewan	39.6%
Manitoba	69.01%
Ontario	71.1%
Quebec	2.49%
New Brunswick	1.18%
Prince Edward Island	24.2%
<b>Nova Scotia</b>	<b>46.91%</b>
Newfoundland	1.46%
Nunavat	28.83%
Northwest Territories	64.91%
Yukon	0%
<b>TOTAL</b>	<b>38.7%</b>

<b>Municipal Unit or Jurisdiction (NS)</b>	<b>Fluoride Y/N</b>
Halifax Water	Y
CBRM Water (Excluding Louisburg)	Y
Richmond County	N
Antigonish	N
Stellatron	N
Trenton	N
Pictou	N
New Glasgow	Y
Truro	N
Colchester (Two Utilities)	N N
Inverness	N
Bridgewater	N
Enfield	Y
Elmsdale	Y
Lantz	Y
Shubenacadie	N
Stewiacke	N
Grennwood	N
Windsor	N
Wolfville	Y

Moncton/Riverview/Dieppe added fluoride to the municipal water supply until 2012 at which time it was phased out. At that time Moncton asked the New Brunswick Provincial government to study fluoridation. The New Brunswick government declined to invest in the requested study.

Complete information on Moncton's decision can be found at the CBC website:  
<https://www.cbc.ca/news/canada/new-brunswick/moncton-phasing-fluoride-out-of-water-1.1238210>

There are many links embedded in the website that provide further background and information.

## **What the Province of Nova Scotia Says**

### **Fluoride and Human Health**

"Most Nova Scotians are exposed to fluorides on a daily basis, through the trace amounts that are found in almost all foods and through those that are added to some drinking water supplies to prevent tooth decay.

The fluoridation of drinking water supplies is a well-accepted measure to protect public health and is strongly supported by scientific evidence. It continues to be endorsed by over 90 national and international professional health organizations including Health Canada, the Canadian and American Dental Associations, the Canadian Medical Association, the World Health Organization and the Food and Drug Administration of the United States.

Fluoride is found naturally throughout the world -- in soil, fresh and salt water, and in foods. Fluoride may be used by individuals in the form of toothpastes, rinses or applied professionally in the form of gels, foams or varnishes.

In optimal concentrations, fluoride protects the teeth from cavities without any known harmful effects. Fluoridation of drinking water supplies ensures its benefits are equally available to all, regardless of socioeconomic circumstance.

Provincial governments regulate the quality of drinking water in their jurisdiction. The fluoridation of drinking water supplies is a decision that is made by each municipality, in collaboration with the Province. The decision may also be taken in consultation with residents. For communities wishing to fluoridate their water supply, the optimal concentration of fluoride in drinking water to promote dental health has been determined to be 0.7 mg/L. Health Canada has established the guideline for fluoride in drinking water as a maximum acceptable concentration (MAC) of 1.5 mg/L. Water containing fluoride at, or below, this MAC does not pose a risk to human health.

Health Canada works in collaboration with provinces and territories to maintain and improve drinking water quality. Together, both levels of government develop the Guidelines for Canadian Drinking Water Quality.

These guidelines are reviewed and revised periodically to take into account new scientific knowledge.”

Source: <https://novascotia.ca/dhw/environmental/fluoride.asp>

### **The Nova Scotia Department of Health Promotion Supports Fluoridation of Municipal Drinking Water Systems.**

<https://novascotia.ca/dhw/healthy-development/documents/Nova-Scotia-Department-of-Health-Promotion-and-Protection-Position-Statement-on-Water-Fluoridation.pdf>

### **The Public Health Agency of Canada Position statement on Community Water Fluoridation**

“Good oral health is essential to our overall health and well-being. In fact, tooth decay is one of the most common and widespread chronic diseases in Canada and worldwide.

Community water fluoridation is an important and often overlooked public health measure that has contributed over the last 70 years to the health of Canadians by preventing tooth decay and thereby improving oral health.

Fluoride is a mineral found naturally in almost all water sources, and in small amounts in food and soil. Fluoride helps to prevent tooth decay by strengthening the enamel layer and making teeth more resistant to acid attacks from plaque bacteria and sugars in the mouth. Water fluoridation is the process of adjusting the level of fluoride in the water to provide optimal dental health benefits.

The big advantage of community water fluoridation is that it benefits all residents in a community, regardless of age, socioeconomic status, education, oral hygiene practices, employment or access to routine dental care, making it a truly equitable public health practice.

Canadian and international studies agree that properly fluoridated water is safe. The likeliest adverse effect is an increased risk of mild dental fluorosis, which causes white specks to appear on the teeth and is usually unnoticeable. There is also no scientific evidence to suggest that children should avoid drinking fluoridated water at the accepted levels in Canadian drinking water.

Many governments and health organizations, including the Public Health Agency of Canada, Health Canada, the Canadian Public Health Association, the Canadian Dental Association, the Canadian Medical Association and the World Health Organization support the fluoridation of drinking water as an important public health measure to prevent tooth decay.

Community water fluoridation remains a safe, cost effective and equitable public health practice and an important tool in protecting and maintaining the health and well-being of Canadians.”

### **The American Water Works Association Statement on Fluoride in Municipal Drinking Water Systems**

“The American Water Works Association (AWWA) supports the recommendation of the World Health Organization (WHO), The American Medical Association (AMA), Canadian Medical Association (CMA), Center for Disease Control, (CDC), and other professional Organizations in the medical community, for the fluoridation of public water supplies as a public health benefit. AWWA supports the application of fluoride in a responsible, effective, and reliable manner that includes monitoring and control of Fluoride levels mandated by provincial, state and / or federal laws and which is subject to community acceptance through applicable local decision-making processes. AWWA supports regular reviews of the most current research on fluoride and the positions of the medical and dental communities.”

### **Typical Arguments Against**

Typically, only organized groups of people could be found that are opposed to the addition of fluoride to drinking water, as opposed to government departments or recognized non-governmental agencies. It is difficult to ascertain who exactly these groups are. Two such groups are Fluoride Alert and Canadians Opposed to Fluoridation. Their websites are listed and provide the opposition side of the argument.

<http://cof-cof.ca/top-ten-arguments-against-fluoridation/>  
<http://fluoridealert.org/>

Their arguments seem to be mainly along the lines that fluoridation is a violation of the individual's right to informed consent to medication and that fluoride is not an essential nutrient. They also indicate that fluoride is either not safe or not proven to be safe. To fully understand their arguments, it is worth investigating their websites.

### **Next Steps**

Should Council be interested in the fluoridation of our drinking water it is recommended that an open house to gather public input be organized. This event should clearly articulate that the Council has been asked to consider this issue by SOAR, that Council and staff do not currently have a position, and that we are looking for public input on the matter.

It should be noted that most municipal colleagues who were contacted on this issue feel that it is hugely controversial and that there does not seem to be a solution that satisfies all stakeholders. One colleague suggested taking the additional cost of adding fluoride to the water supply and using it to purchase toothpaste that can be distributed at local schools.