

Reintroduction of Fluoridation to the Water Treatment Process

RECOMMENDATION(S):

That Council direct Administration to implement Water Fluoridation into the Water Treatment Process.

HIGHLIGHTS

- This report provides Council with results of the Fluoridation Vote of Elector results as part of the General Election in October 2021 and seeks guidance on the reintroduction of water fluoridation as part of the water treatment process.
- What does this mean to Calgarians? If directed by Council, Water Services will reintroduce fluoridation as part of the water treatment process.
- Why does this matter? Reliable and safe drinking water provides the foundation of a healthy and green city. Water treatment is an efficient and cost-effective means to distribute fluoride to a large population, if this is the desired outcome of Council.
- The Community Water Fluoridation Report (CPS2019-0965) issued by the University of Calgary's, O'Brien Institute, was presented to Council in 2019. This report outlined health considerations and social implications related to drinking water fluoridation and was received for the Corporate record. See Attachment 4.
- Potential reintroduction of water fluoridation is not included within the approved Water Utility budget. If approved, operating, maintenance and capital costs are not of the magnitude that would require an associated increase in water utility rates (PFC2020-1338). See Attachment 3.
- As part of the 2021 General Election, 62 per cent of the Vote of Electors voted in favour of reintroducing fluoridation of the municipal water supply. See Attachment 2.
- If Council directs Administration to reintroduce fluoride to the water treatment process, the Water Services anticipates it would take 18 to 24 months to implement.
- Strategic Alignment to Council's Citizen Priorities: A healthy and green city
- Background and Previous Council Direction is included as Attachment 1.

DISCUSSION

Health Canada, Alberta Health and Alberta Health Services will not mandate fluoridation upon The City. However, these bodies do support the practice of fluoridation as a safe and effective public health measure.

As stated in the Cost to Reintroduce Fluoride in the Water Treatment Process Report (PFC2020-1338), the Water Utility has reviewed three options that meet the National Sanitation Foundation certification for fluoridation of potable water and evaluated their suitability for Calgary's water system. If Council were to direct Administration to reintroduce fluoridation, the compound which would be used to fluoridate Calgary's water would be the same as the compound used prior to 2011. This compound is currently used by approximately 75 per cent of the utilities in North America that fluoridate their water.

In the same report to Council (PFC 2020-1338), Administration estimated the overall cost including capital, operating and maintenance to reintroduce water fluoridation at both water treatment plants with a 20-year service life is estimated at \$30.1 million in 2020 dollars, plus \$2 to \$4 million dollars for lifecycle fluoridation maintenance activities. Conceptual capital costs

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were estimated at \$10.1 million with an accuracy of +50 per cent to -30 per cent. The potential reintroduction of water fluoridation is not included within the approved Water Utility budget. If approved, operating, maintenance and capital costs are not of the magnitude that would require an associated increase in water utility rates and Water Services anticipates it would take 18 to 24 months to implement.

A jurisdictional review identified that due to changes in the Municipal Government Act, Council also has the authority to introduce water fluoridation without passing a bylaw (PFC2020-1338).

The City of Calgary provides drinking water to The City of Chestermere, The City of Airdrie, The Town of Strathmore and portions of Foothills County, Rocky View County and Tsuut'ina Nation. Each municipality enters into an agreement with The City that governs the provision of the water to the municipal boundary. These agreements places responsibility for water quality, which included fluoridation, with The City of Calgary and its Council.

As part of the 2021 General Election, 62 per cent of the Vote of Electors (206,320 total cast ballots) voted in favour reintroducing fluoridation of the municipal water supply. All Wards voted in support of reintroducing fluoridation to the water treatment process. Please see Attachment 2 for the Vote of Electors results by Ward and for Calgary as a whole.

STAKEHOLDER ENGAGEMENT AND COMMUNICATION (EXTERNAL)

- Public Engagement was undertaken
- Public Communication or Engagement was not required
- Public/Stakeholders were informed
- Stakeholder dialogue/relations were undertaken

IMPLICATIONS

Social

The scope of this current report is to provide Council with results of the Fluoridation Vote on a Question as part of the General Election in October 2021 and to seek direction to implement the results.

Environmental

Design considerations at the Water Treatment plants would include spill containment, onsite dilution capabilities, and adequate air exchange to minimize operational risks for employees and the environment.

Economic

Current operating and capital budgets do not include the costs associated with drinking water fluoridation. Based on estimated costs, the required investment and expenditure will not require an increase in water utility rates.

Service and Financial Implications

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No anticipated financial impact

Administration does not expect to see an associated change in utility rates or changes to Service Levels Should Council proceed with reintroducing fluoridation.

RISK

Estimated costs are at a Class Five level (+50 per cent to -30 per cent) and cover a significant range. Future work, if directed, may result in a higher cost estimate as designs and material costs are accounted for.

ATTACHMENT(S)

1. Previous Council Direction Background
2. Vote of Electors Results - Reintroducing fluoridation of the municipal water supply
3. Cost to Reintroduce Fluoride in the Water Treatment Process Report (PFC2020-1338)
4. Response to Water Fluoridation in The City of Calgary (CPS2019-0965)

Department Circulation

General Manager/Director	Department	Approve/Consult/Inform
Nancy Stalker	Water Services	Approve
Michael Thompson	Utilities & Environmental Protection	Approve
Kate Martin	City Clerk/Returning Officer	Consult
Doug Morgan	Transportation	Inform
Katie Black	Community Services	Inform
Carla Male	Chief Financial Office	Inform
Jill Floen	City Solicitor	Inform