



Claresholm

REQUEST FOR DECISION

Meeting: March 24, 2025

Alberta Community Partnership Grant (ACP) Regional Water Treatment Plant Distribution By-Product Study

BACKGROUND:

The Town of Claresholm Water Treatment System is a regional system supplying potable water to the Town of Claresholm, Hamlet of Granum, Claresholm Airport Industrial Subdivision and rural customers in the MD of Willow Creek. Town of Claresholm Management working with MPE, Alberta Environment and Alberta Health have taken actions to manage Disinfection Byproducts (DBPs) at the Claresholm Water Treatment Plant (WTP). The focus is on addressing Trihalomethanes (THM) and Haloacetic Acids (HAA) levels, both of which have at times exceeded the Maximum Acceptable Concentrations (MAC) set by Health Canada. Routine sampling of both raw and treated water was performed to measure Total Organic Carbon (TOC) and Ultraviolet Absorbance (UVA). A monitoring program was established to collect baseline data and examine the relationship between TOC and UVA. The goal was to support plant optimization by assessing process outcomes and guiding operational adjustments to reduce organics, which are directly linked to disinfection byproduct (DBP) formation. During routine testing, a TOC/UVA tracking spreadsheet was used to evaluate results. The main objective was to identify a correlation between TOC and UVA. However, the findings did not provide sufficient confidence to confirm a strong relationship.

PROPOSED SCOPE OF WORK:

Despite ongoing optimization efforts, THM and HAA levels continue to exceed regulatory limits. The efforts to manage DBPs at the Claresholm WTP have made some progress, but further optimization and alternative treatment strategies are required to achieve compliance with regulatory limits. Continuous monitoring, testing, and collaboration with external experts will be essential in overcoming challenges and developing a more effective approach in DBP reduction.

A study is required to determine the best process to remove DPD's within the Regional Water Treatment Plant while meeting Alberta Environmental regulations and Alberta Health MAC's.

COSTS/SOURCE OF FUNDING:

The cost of the study would be covered by grant funding, up to \$200,000.00, with no matching contribution from the Town of Claresholm required.

RECOMMENDED ACTION:

Administration is recommending to proceed with the project in 2026 if funding is secured.

PROPOSED RESOLUTIONS:

Moved by Councillor _____ that the Town of Claresholm approve a 2025/26 Alberta Community Partnership grant application in support of the Regional Water Treatment Plant Disinfection By-Product Mitigation Study, and that the Town manage the grant project and related compliance requirements.

PREPARED BY: Brad Burns Utility Services Manager

APPROVED BY: Abe Tinney, CAO

DATE: November 19, 2025
