

# Report to Council



**Date:** February 25, 2019  
**File:** 1890-20  
**To:** City Manager  
**From:** Senior Engineer - Infrastructure  
**Subject:** Water System Integration Policy

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## **Recommendation:**

THAT Council receives, for information, the report from the Senior Engineer – Infrastructure dated February 25, 2019, with respect to the Water System Integration Policy;

AND THAT Council endorse the vision for City-wide integrated water supply and distribution as per the '2017 Kelowna Integrated Water Supply Plan – Value Planning Study' dated February 2017;

AND THAT Council approve Policy No.378 titled 'Water Systems Integration Policy' as attached to the report of the Senior Engineer – Infrastructure dated February 25, 2018;

AND FURTHER THAT Council rescind Council Policy No.31, 'Municipal Water Supply Within City Boundaries'.

## **Purpose:**

To formalize the vision and policy for city-wide integrated water distribution systems for domestic and agricultural users and to enable actions leading to development of a city-wide water system for the City of Kelowna.

## **Background:**

### Vision of a City-Wide Water System Integration

In February, 2017, City Council received a report by a Value Planning consultant titled '2017 Kelowna Integrated Water Supply Plan'. The report outlined the findings of a team of senior engineers and planners who had assessed engineering studies that were completed over the prior ten years by the City of Kelowna and Kelowna's large irrigation and improvement districts. The objective of this consultant's work was to determine the best-lowest cost long-term technical solution for achieving public health objectives, simplifying system administration, maintaining agricultural interests and achieving an efficient and resilient system, without regard to how the system would be governed.

Including the larger Improvement Districts, there are more than 25 different independent water systems operating within the City. These organizations provide water service to their customers with only limited

interconnectivity between providers. The water supply for these utilities comes from a variety of water sources including Okanagan Lake, Mission Creek, Mill Creek, Scotty Creek and Hydraulic Creek, as well as from groundwater aquifers. These sources vary in water quality; some that have not met drinking water quality guidelines in addition to other significant aesthetic issues related to taste, odour and colour.

The Value Planning consultant noted that, while technically these water quality issues can be solved independently by each provider, these independent solutions will be very costly, creating substantial rate inequity for Kelowna's citizens. In addition, independent systems with fewer water source options, are less resilient and costlier to operate. The most sustainable solution is to integrate the water systems over time to better meet the customers' water service expectations relative to serving the demand, protecting public health, improving the aesthetic qualities of the water, providing redundancy of supply, ensuring resiliency, addressing impacts of climate change and having equity in both services and costs.

The 2017 Kelowna Integrated Water Supply Plan presented a vision of a city-wide integrated water system. The vision includes separation of domestic and agricultural irrigation systems in rural areas and using the most appropriate water sources for each. The best quality water sources would be preserved and consolidated for potable (drinking) water use and the lower quality water supplies would be preserved for irrigation use.

#### Water Integration Policy

Several independent water purveyors continue to supply domestic and/or irrigation water within the City boundary. These purveyors have struggled to provide potable water that consistently meets Canadian Drinking Water Quality Guidelines. To date, the City has incorporated several of these private or public water systems, and is in the process of integrating the South Okanagan Mission Irrigation District (SOMID). Our vision now, for the reasons stated above, is to work towards a fully integrated city-wide water system. To facilitate and clearly communicate this, a new Council policy is recommended.

Policy No.378, Water Systems Integration Policy is recommended to define the criteria and process by which the City integrates private and public water systems into its Water Utility. At present, the City does not have jurisdiction to unilaterally do this and must rely on either the independent utility or the Province to initiate the process. One incentive for an independent system is the ability of the City to access senior government grants. The proposed City Policy supports Provincial Policy that funding will only be made available through amalgamation with the City. However, in some cases the subject water system is not able to continue operating for various reasons and/or senior government grants aren't available. Where there are insufficient senior government grants to cover the full cost of integration, the City will consider establishing a Local Area Service and recover the net cost of the integration from the benefiting properties.

Provincial guidelines note that independent water systems may only apply through the City to access senior government funding. Through enactment of this policy, Council is requiring that, prior to any applications for senior government funding, proposed capital improvements will include physical integration with the City Utility.

In the interest of achieving its goal of a city-wide integrated water system, the City will establish detailed integration plans. These plans are to ensure the reliable and sustainable provision of clean, safe drinking water for public health and reliable water supply for agriculture and fire protection in the most affordable and efficient manner for all citizens of Kelowna irrespective of current water system boundaries or service area.

This policy identifies the guiding principles, criteria and process required for a water system to integrate with the City water utility and for Council to support senior government funding for water system improvements.

Policy No.31, Municipal Water Supply Within City Boundaries (1976), is now inconsistent with the City's vision of a city-wide water system. It is therefore recommended to be rescinded.

**Internal Circulation:**

Division Director, Infrastructure  
Division Director, Corporate Strategic Services  
Utility Planning Manager  
Utility Services Manager  
Deputy City Clerk  
Communications Consultant

**Existing Policy:**

Existing policy concerning the major water Improvement Districts operating within the City has been in place since 1976. It is now inconsistent with the City's plans for city-wide water service subject to Council's approval of the recommendations within this report.

**Considerations not applicable to this report:**

Financial/Budgetary Considerations  
Legal/Statutory Authority  
Legal/Statutory Procedural Requirements  
Personnel Implications  
External Agency/Public Comments  
Communications Comments  
Alternate Recommendation

Submitted by:

R. Westlake, P.Eng.  
Senior Engineer

Approved for inclusion:



A. Newcombe, Division Director, Infrastructure

Attachment 1 - Council Policy No.378 (new) 'Water System Integration Policy'

Attachment 2 - Council Policy No. 31, (rescind) "Municipal Water Supply within City Boundaries"

cc: Deputy City Manager  
Division Director, Infrastructure  
Division Director, Corporate Strategic Services  
Deputy City Clerk