

# Report to Council



**Date:** June 15, 2020  
**To:** Council  
**From:** City Manager  
**Subject:** Water Utility Update  
**Department:** Civic Operations - Utility Services

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## **Recommendation:**

THAT Council receive for information, the report from the Water Operations Department, dated June 15, 2020.

## **Purpose:**

To provide Council an update on the status of the Water Utility, upcoming initiatives and drivers to ensure that the Utility remains sustainably funded.

## **Background:**

The City of Kelowna Water Utility provides potable water for domestic consumption and firefighting purposes for approximately 80,000 residents. Three large Improvement Districts and about two dozen other smaller water providers service the remainder of the City. With the merger of the South East Kelowna Irrigation District (SEKID), the City now supplies non-potable water to a significant agricultural customer base. SEKID was officially converted on June 4, 2018 and the operational integration has been ongoing since that time. The City has been working to complete the expansion of the city water system into southeast Kelowna to provide potable water to its former SEKID customers for domestic consumption while maintaining the SEKID water supply as a non-potable source for irrigation and firefighting purposes in South East Kelowna. Other capital projects and operating works have been ongoing to ensure the Utility continues to provide water supply services to customers during difficult times associated with COVID-19 pandemic.

## **Discussion:**

### Water Integration Project

The Water Integration Project extended the City's water supply system by constructing a new potable distribution system into southeast Kelowna. The expansion included over 80 kilometers of new water distribution pipe, 3 new water storage reservoirs, 16 new pressure regulating stations or booster pumping stations at a total investment of \$98 million; resulting in the largest capital project the City has ever managed. Construction of Phase 1 is close to completion and these facilities are being tested, commissioned and operated by City staff. The new water system delivers potable water to approximately 2500 households and a population of approximately 6,750 residents in the service area. Phase 1 also included the extension of an adequate supply to the South Okanagan Mission Irrigation District (SOMID). The wells previously operated by SOMID are being decommissioned, and Frazer Lake dam is to be rehabilitated later in 2020.

The transfer of all SEKID responsibilities and function has been completed. City staff now also manage the gravity fed irrigation supply, which provides raw water for over 500 customers. Spring irrigation connection work commenced April 1, 2020 and was completed by April 23, 2020 consistent with past timelines from SEKID. While some farmers would like their agricultural services opened sooner, they may be subject to freezing and therefore generally cannot get turned on before mid-April.

Portions of Phase 2 of the integration project are under construction and will include an extension of a water transmission main along KLO Road to the South East Kelowna bench, a water transmission main in the lower Mission and expansion of a key reservoir on the south-west Kelowna bench. Phase 2 will improve the City's capacity in the south and central areas and its ability to eventually interconnect and provide resiliency with the other independent water supply systems. The interconnection with other systems was a key recommendation of the 2018 Auditor's General Report from 2018 and is consistent with the long-term integrated water supply vision.

### Area Based Water Management

Water management is a multi-jurisdictional issue and it is imperative that all levels of government work collaboratively to protect and manage this resource for supply or flood mitigation purposes. The City of Kelowna is working in partnership with the Regional District of Central Okanagan and the Okanagan Basin Water Board for the preparation of the Kelowna Area Based Water Management Plan. In 2020 Stage 1 of the plan compiled input from internal water managers and operators at the City. These workshops focused on current management practices by various sectors. A Risk Registry is currently being developed and improved water management practices will be the output. Future stages of this plan will invite other purveyors and stakeholders to the planning process.

### Water Meter Replacement Program

In 2019 the Utility conducted a pilot program of meter reading technology and tested it by installing new meters in sample homes to test its applicability and effectiveness. Staff concluded that a new technology based solution was the preferred direction. This technology provides daily consumption and leak prediction data for the Utility and would be available to each customer through a customer portal. Finally, this process is now directly connected and tested to the City's billing system.

Procurement for the supply of water meters and installation plans are underway. The priority will be our new southeast Kelowna domestic customers in 2020. This will be important as we have experienced water demands in southeast Kelowna that are significant; which have been identified as leaks on the private side of the service connections. One location with a leaking service equated to the consumption of approximately 40 typical homes. Metering these homes will not only help the city identify unusual consumption patterns but will ultimately save the customer significant amounts of money.

In 2021 the program will extend to irrigation customers, then the City at large. This technology will help the Utility and customers assess consumption, billing data and assist with water conservation. The replacement of meters in Kelowna was a priority in the City's Asset Management Plan. Funding for the city-wide meter replacement program is included in the 10-year capital plan and is fully funded by utility fees.

### System Growth and Operations

With growth of utility customers, operational and resource requirements have had to keep pace. Changes to the Water Operations Branch over the last year includes new operators and Manager, who will continue to operate the water supply and distribution systems, build a professional and capable work force and provide excellent customer service.

It is critical to assess our systems and ensure that system renewal and expansion maintains pace with the growth of Kelowna. As infrastructure ages asset management plays a key role in providing service to our customers. Growth in Kelowna also requires that water supply and distribution systems keep pace with customer demand. Pumping stations, reservoirs and distribution systems must be assessed, maintained and expanded as Kelowna continues to grow and develop.

The new 500 irrigation customers are served by an aging system which requires maintenance and improvements to service this important customer and business group. This spring the City met the past SEKID schedules and deliverables, however, more work is required in system upgrading and renewal to ensure reliability in the future. While the Utility is in its second year of providing irrigations service, staff are working diligently to better understand this customer group. We believe we have met and exceeded customer demands and expectations.

The Utility is also updating the Water Use Bylaw. With the many changes described above there is a need to revise the bylaw and ensure all interests and requirements are outlined and protected. The Bylaw review is scheduled to come to Council in the fall and will address rates, customer classes and requirements. Rates will also be discussed in a separate report for Council's consideration.

### **Internal Circulation:**

Infrastructure Division  
Utility Planning Manager

### **Considerations applicable to this report:**

### ***Communications Comments:***

### **Considerations not applicable to this report:**

***Communications Comments:***

***Financial/Budgetary Considerations:***

***Legal/Statutory Authority:***

***Legal/Statutory Procedural Requirements:***

***Existing Policy:***

***External Agency/Public Comments:***

Submitted by:

A. Weremy, Water Operations Manager

Approved for inclusion:

A square box containing a handwritten signature in blue ink, which appears to be "JC".

Joe Creron, Deputy City Manager, Operations

cc: