



City of Kelowna
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Council Policy

Water Supply Level of Service

ESTABLISHED: October 28, 2019

Contact Department: Utility Services

Guiding Principle

All residents and water users in the City have a safe, affordable, resilient and sustainable supply of high-quality drinking water and a reliable supply of water for agriculture.

Purpose

To identify the base level of service for the City water utility that meets the needs of our community through responsible management of the resource.

Application

This policy applies to the City water utility and its Customers as established by Water Regulation Bylaw No. 10480.

Definitions

In addition to the following, an expression in this policy has the same meaning as in Water Regulation Bylaw No. 10480.

“Available Fire Flow” means the minimum level of service commitment for water available from the City’s water system at or near the point of servicing.

“Permanent Growth Boundary” means lands within are expected to develop and redevelop to higher intensity uses to accommodate the anticipated growth of the community to 2040 as identified in the Official Community Plan. Lands outside of the Permanent Growth Boundary are not expected to see significant redevelopment pressure.

“Rural lands” are characterized primarily by rural and agricultural lands outside of the Permanent Growth Boundary. Rural lands require a comprehensive neighbourhood planning process before considering the need and capacity of additional water supplies.

“Suburban neighbourhoods” are primarily lower density residential neighbourhoods within the Permanent Growth Boundary but outside of the Core Area and Urban Centres. A suburban neighbourhood is typically characterized by single family homes and are currently the dominant development pattern outside of the Core Area.

Policy Statements

General

1. A City bylaw or policy for water supply will reflect the following priorities (ranked from highest to lowest):
 - a) Safe water for public health;
 - b) Fire suppression, emergency response and risk mitigation;
 - c) Commercial, industrial and agricultural use;
 - d) Irrigation for aesthetics and recreation.
2. The City water utility supports, where feasible, the continued supply of irrigation on agricultural lands from creek water licenses, groundwater licenses, water use communities and other provincially supported water supplies.

Fire Protection

3. Minimum Level of Service within the Permanent Growth Boundary: To areas serviced by the City Water Utility within the Permanent Growth Boundary, the City will provide a minimum flow of 60 litres per second for a duration of 1.5 hours to fight a fire. This minimum Level of Service is measured at a minimum residual pressure of 20 psi (137.9 kPa), with pipe velocities not exceeding 4 metres per second, and/or accessible by a fire hydrant no further than 150 metres distance to the property line (including strata lots) for manual firefighting. The water utility will address infrastructure deficiencies resulting in not meeting the minimum level of service within 10 years of identifying the deficiency.

4. For areas serviced by the City Water Utility outside the Permanent Growth Boundary, a suburban neighbourhood serviced by the City will be supplied with water for fire protection to the design limitations of the constructed water system in that area. For buildings on rural land serviced by the City Water Utility, water for fire protection will be provided to the design limitations of the constructed water system in that area where hydrants have been added.
5. Emergency storage will be 1,350 cubic metres for all new reservoirs constructed in service areas requiring a fire flow of 150 litres per second or less as defined in the Subdivision, Development and Servicing Bylaw No. 7900. Where a zoning requirement requires 225 litres per second (typically "Industrial"), the emergency storage will be 2,025 cubic metres.
6. Available Fire Flow: Available Fire Flow will be informed by hydraulic information from water model results provided by the City or other water purveyor or through approved hydrant flow tests.
 - a) Where existing reservoir and distribution infrastructure capacity exists, the City may be capable of supplying higher fire flow volumes.
 - b) Available Fire Flow will be allocated on a priority basis as follows:
 - i. public firefighting for exposure control and wildfire interfaces,
 - ii. private fire suppression systems installed and maintained to BC Building Code requirements,
 - iii. all other public uses.

Potable Supply

7. The Potable water system will supply clean and safe drinking water to all utility customers to maintain public health and safety and will meet or exceed Canadian Drinking Water Quality Guidelines and regulatory requirements from the Province of British Columbia.
8. The potable water system was not designed to provide the volume of water necessary for extensive agricultural irrigation. Furthermore, it is recognized that the Water Utility must prepare the community for more expensive, filtered water that will be required in the future. Existing water supply, in whatever form, for agriculture must be supported. Wherever practical, potable water will not be used for irrigation of agricultural land. No new allotments of potable water for agricultural irrigation will be provided. A property with Farm Status and an existing allotment on the Potable water system prior to December 31, 2023, is exempt from this exception.
9. An approved backflow preventer used to protect the Potable supply from the Non-Potable water system will be owned, tested and maintained by the Water Utility on behalf of the property owner. All other customer backflow prevention devices will be owned, tested and maintained at the expense of the Customer.

Non-Potable Supply

10. The Non-Potable water system will be maintained and operated to meet federal agricultural water quality guidelines during the irrigation season.
11. Customers with access to the Non-Potable system will be encouraged to use this service for irrigation purposes where supply is available.
12. The Non-Potable water system will be operated outside of the irrigation season to provide fire protection.
13. The Manager will determine the area extent of the Non-Potable water system and the properties served by the system based on the best overall value to the City water utility and consistent with the priorities identified by Council.
14. The area of agricultural land supplied by the Non-Potable water system will not exceed 1,925 hectares. This provides reasonable protection against the risk of water shortage and adequate water to meet the City water utility environmental obligations.
15. A lower priced rate structure is available for non-potable water than potable water in the same customer class to encourage the use of the Non-Potable water supply for irrigation.

Amendments

Last Revised: 24/02/12
Replacing: R1005/19/10/28