

COMMITTEE REPORT



Date: April 10, 2025
To: Agricultural Advisory Committee
From: K Van Vliet, Utility Services Department Manager

1.0 Purpose

To obtain input from the Agricultural Advisory Committee on proposed amendments to Water Supply Policy 383 and Water Regulation Bylaw 10480 as they pertain to Agricultural Customers.

2.0 Background

Since the South East Kelowna Irrigation District (SEKID) was dissolved in 2018, the City of Kelowna (City) has not allowed for the sale of additional water "Allotment" to agricultural properties using the non-potable water supply. By 2021, rural residences and other domestic customers were serviced with added potable water connections for drinking water sourced from Okanagan Lake. The agricultural lands associated with these properties remained connected to what is now known as the non-potable water system.

Since the transfer of water systems ownership City staff have not increased Allotments while work was undertaken to assess the total volume of water commitments under SEKID, the projected non-irrigation impacts on the system from evaporation, leaks, environmental flow commitments, and the potential impacts of climate change. There were also dam safety concerns at some of the smaller dams and storage reservoirs already in the system. Finally, there were risks associated with adding demand to the fixed reservoir supply in the Hydraulic Creek/McCulloch Lake/Stirling Creek watersheds without fully understanding the risks of shortage and the supply available. On a positive note, much of the domestic needs were removed from Hydraulic Creek licensing. The potential of this available storage for agricultural purposes was included as part of the internal risk assessment.

Since 2018, the City records areas of land allotted a depth of water equivalent to 685 mm. This depth of water represents the maximum amount of water supplied to the property, after accounting for losses due to evaporation, leakage, water system maintenance and other unaccounted for elements. Environmental flow needs for fish passage in Hydraulic Creek and downstream Mission Creek are part of determining the maximum volume allotted through the license commitments.

Current Allotments

Staff recently conducted a review of irrigable areas serviced by the non-potable sourced water from the Hydraulic Creek Watershed. The City obtained a 2023 Agricultural Land Use Inventory (ALUI) in late 2024 from the BC Ministry of Agriculture and Food. This GIS dataset provided an opportunity to both review and confirm current billed area allotment with mapped irrigated areas from the 2023 ALUI dataset. A summary of results is found in Table 1.

Table 1. Summary of Irrigation Allotments – Hydraulic Creek Non-Potable Source

Allotment Type	Number of Services	Allotments			Measured Areas from 2023 ALUI (ha)		
		Area (ha)	Area (ac)	Annual Volume Limit (ML/yr) ¹	Irrigated	Fallow / Built Area	Natural
Irrigation	355	1,685	4,164	11,545	1,460	155	292
SIS ²	318	128	317	879	225	54	214
Totals	673	1,814	4,482	12,424	1,685	209	505

1. ML/yr – Million Litres per year or MegaLitres per year
2. SIS – Small Irrigation Service – All are allotted 0.40 hectares per service (1 acre), but billed by volume used.

Discussion

After six years of operational experience, including two years of managing supply during periods of extreme drought, the City can now confirm that up to 86 additional hectares of land can be connected to the non-potable supply without imposing much additional risk of shortage on its other water license obligations. An additional 86 hectares of allotment will meet a revised upset limit of 1,900 hectares identified in Water Supply Level of Service Policy 383 to be updated on April 28, 2025.

Proposed updates to Policy 383 can be found in Attachment 1 to this report. Key changes to the policy amendment include:

- That staff will track the volume of Allotments within the total volume of water available to ensure that the City does not overcommit available water;
- That staff will maintain a list of Customers that want additional water and that offers for sale will be made based on the timing of request, and;
- That staff will only sell Allotment to a parcel for the area that can be practically farmed.

Updates to Water Regulation Bylaw 10480 are also needed to provide both conditions of purchase, as well as one-time area-based rates to connect to the system. Proposed Bylaw amendments Bylaw 10480 are presented in Attachment 2 of this report.

Notes on Rate Determination

The fee structure was derived for new work to support the 86 hectare allotment increase. Staff have determined that it is reasonable to re-establish Long Meadow Reservoir. This facility was abandoned by SEKID long before 2018 in the face of rising costs to repair its dams and spillways. Improvements to this small reservoir, which is already licensed, will result in a water supply that both guarantees environmental flow obligations and relieves some supply pressures during water short years on McCulloch Lake. The allotment fees proposed here will go towards upgrades to re-establish the reservoir.

The proposed one-time charge for new Allotments is \$13,600 per hectare (approximately \$5,500/acre). Those that obtain this Allotment will then be required to pay annual fees per unit area as per Bylaw 10480. Requests for Allotment increases will be received by Water Operations or Utility Billing and will be available on a first come first serve basis.

As a reference, improvement or irrigation districts charge allotment fees as well. Below are examples from 2024:

Black Mountain Irrigation District (BMID)	\$14,880 per hectare (\$6,024 per acre)
Glenmore Ellison Improvement District (GEID)	\$8,685 per hectare (\$3,516 per acre)
Lake Country (DLC):	\$18,832.50 per hectare (\$7,624.49 per acre)
Greater Vernon Water (GVW)	\$17,400 per hectare (\$7,044.53 per acre)

Conclusion:

Staff have proposed a fee structure for Agricultural properties looking to acquire or increase their Allotment from the non-potable water supply. Once approved, the City will then supply and bill using this allotment according to the parameters in Bylaw 10480 in consistent with updated Water Supply Policy 383.

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Approved for Inclusion:	Nola Kilmartin, Development Planning Department Manager

Attachments:

Attachment A – Policy 383 Water Supply Policy draft amendments (draft)
Attachment B –Water Regulation Bylaw 10480 draft amendments