

#### WATER ALLOCATION SYSTEM ANNUAL UPDATE

#### Issue

An annual update on the Water Allocation System is provided for Council's information.

## **Motion Proposed by Administration**

That the 2025 Water Allocation System Update be received as information.

## **Report, Analysis and Financial Implications**

### **Background**

In 2011, Council implemented Water Allocation System for Planning Approvals Policy 11-02, which was superseded in 2021 by Water Allocation Policy CMD-P-3.10. The intent of this policy is to ensure that Planning Applications are approved in an equitable and sustainable manner. Since the adoption of this policy, lands have only been approved for development if sufficient water licence capacity is available to service those lands. This report provides the 2025 status update of Okotoks' Water Allocation System and potential upcoming Planning Applications that are expected to require additional Development Capacity for approval.

# Water Allocation System Status

Planning Approvals in 2024 were for new subdivisions in D'Arcy (Phases 4 and 14) and Wedderburn (Phases 9 and 12), and multiple development permits. These Planning Approvals resulted in the allocation of 70,960 m³ of Common Development Capacity. Year-to-date in 2025, 86,135 m³ of Common Development Capacity has been allocated for Tillotson Phase 2, Ridgemont Phase 1, and a development permit. The Town received a Sheep River water licence transfer which added 160,965 m³ to the available Common Development Capacity. To recognize the positive results of the Town's water conservation efforts, the available Common Development Capacity has been increased by 50,000 m³. Future adjustments may be added at the discretion of the Chief Administrative Officer as appropriate based on the results of ongoing monitoring and analysis. As of the date of this report, there is 126,917 m³ of Common Development Capacity remaining. Table 1 summarizes the remaining Development Capacity for the past three (3) calendar years as at year-end and as at April 15, 2025.

Table 1: Remaining Development Capacity

	Remaining Development Capacity (m <sup>3</sup> )				
	As at December	As at December	As at December	As at April	
Developer	31, 2022	31, 2023	31, 2024	15, 2025	
Common	147,851	73,047	163,052	126,917	
Tristar	13,522	0	0	0	
Burnswest	71,056	0	0	0	
Total	232,428	73,047	163,052	126,917	

Administration has received multiple Planning Applications that have not yet received Water Verification and Assignment Process Clearance Certificates. The Development Capacity requirements for these Planning Applications are estimated using the best available information and is subject to change. Subject to the Water Allocation Policy and other planning processes, the certainty and timing for these Planning Applications to proceed is at the discretion of the applicants. The total additional Common Capacity required for the Planning Applications that have been received to date is estimated to be 117,560 m³ as shown in Table 2.

Table 2: Anticipated Planning Applications Requiring Common Capacity

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Common Assignment (m³)	Notes
1,314	10 NC units
9,041	60 NC units
33,261	256 NC units
13,500	54 TN units
35,250	141 TN units
14,406	5 IBP lots
10,788	182 NC units
117,560	
	1,314 9,041 33,261 13,500 35,250 14,406 10,788

There is sufficient Common Development Capacity in the Water Allocation System for the Planning Applications outlined in Table 2 to advance through the Water Verification and Assignment Process with a remainder of 9,357 m3 available for future Planning Applications. This does not account for any additional Planning Applications that may be received in the remainder of 2025.

Based on the above, the total Development Capacity assignments in 2025 is currently estimated to be 203,695 m³ which exceeds historical norms. For reference, the average annual Development Capacity Assignments since inception of the Water Allocation policy is 65,094 m3; refer to Table 3 for the history of total annual Development Capacity assignments.

Table 3: Total Development Capacity Assignments by Year

	Development		Development
Year	Capacity (m³)	Year	Capacity (m³)
2011	55,578	2018	175,174
2012	12,893	2019	41,559
2013	30,602	2020	33,408
2014	35,692	2021	46,535
2015	111,831	2022	63,751
2016	41,875	2023	169,382
2017	22,071	2024	70,960

In November 2024, construction commenced on the Foothills Okotoks Regional Water Project, a partnership with Foothills County, for a supplemental water solution. This supplemental solution is expected to be operational in 2026 and will provide water for future development.

# 2024 Water Consumption Overview

The Town currently holds 3,885,596 m³ of Sheep River water licences. In 2024, the Town used approximately 2,900,333 m³ to meet demand which resulted in 985,263 m³ of unutilized Sheep River water licence capacity. This magnitude of underutilization is significant and is primarily driven by the divergence of the rate at which the Town is enabling lands for new development (i.e.: land use redesignation and subdivision approval) and the rate at which the development industry is absorbing that land for residential and non-residential construction. This unutilized licence volume is comprised of Operational Reserve, Development Lag, and Common Development Capacity as shown in Figure 1.

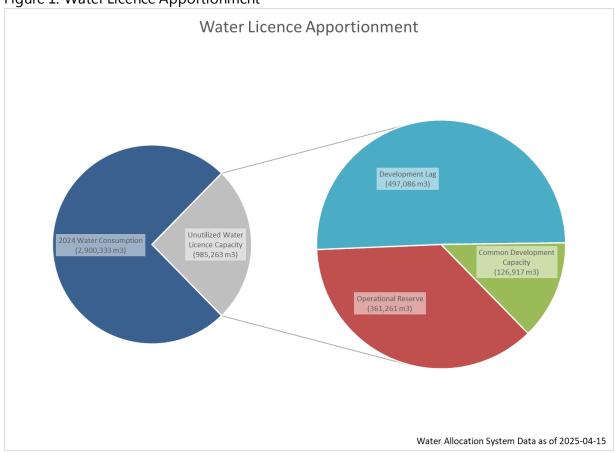


Figure 1: Water Licence Apportionment

#### **Operational Reserve**

The unutilized water licence capacity remaining after accounting for current water demands and the water licence volume managed by the Water Allocation System is referred to as the "Operational Reserve". The Operational Reserve provides the Town with some ability to manage the risks and variability of the water system, such as consumption pattern changes, climate variability, regulatory restrictions, major breaks and system leakage.

There has been a clear downward consumption trend as a result of water conservation measures (e.g.: outdoor watering schedule and community outreach) and operational improvements (e.g.: Water Treatment Plant process optimization and enhanced leak detection) as shown in Figure 2. It is worth noting that total consumption has remained in a relatively stable range over this period despite Okotoks' continued growth. This has resulted in a significant decrease in per capita consumption (5-year rolling average decreased from 301 LPPD in 2014 to 261 LPPD in 2024). These efforts should continue so that a healthy Operational Reserve can be maintained as this will continue to provide flexibility to the Town's operations.

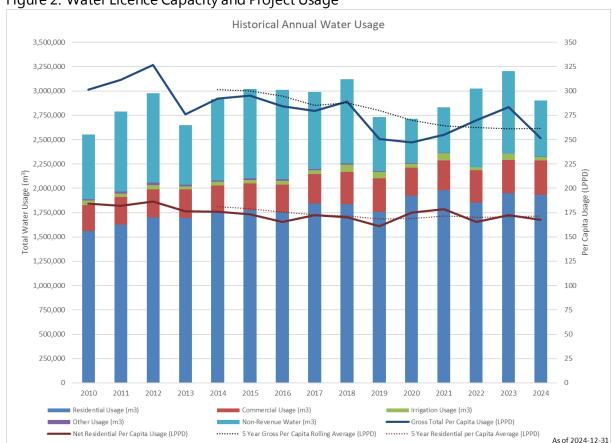


Figure 2: Water Licence Capacity and Project Usage

#### Development Lag

The term "development lag" refers to the period of time between the initiation of a land development project and construction completion. In the context of the Water Allocation Policy, project initiation relates to when Development Capacity is assigned and a Planning Application is approved, and is deemed complete when occupied and consuming water. Once units are consuming water, the full impact of the development approval is realized and must be managed within the Town's usable water licence inventory.

In a normal development cycle, the water allocation related to development lag is typically absorbed within approximately four (4) years as illustrated in Figure 3. This assumes that subdivision servicing is completed within one year of land use redesignation and parcel development (e.g.: home construction) is completed within the subsequent three years. There are a number of factors that can influence this timeline such as market factors and the size, type and complexity of the development.

Figure 3: Typical Development Timeline



Using historical trends and future estimates for building permits considering increasing growth pressures, Table 4 shows a range of projections for buildout time and absorption rate of the current development lag.

Table 4: Residential Land Absorption Projections

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	Water	Number	Annual	Buildout
Land Use	Allocation (m <sup>3</sup> )	of Units	Absorption Rate	Time (Years)
Single-Dwelling			150-200	
Residential	189,731	752	units/year	4-5
			100-200	
Multi-Dwelling Residential	196,840	1,131	units/year	5-11
Non-Residential & Other	110,515	48	20,000 m³/year	5-6

Based on these projections, there is a minimum of 4-5 years for the current residential land inventory to be absorbed, but could exceed 11 years if the residential growth rate remains consistent with recent historical trends or is tempered by other factors as shown in Figure 4.

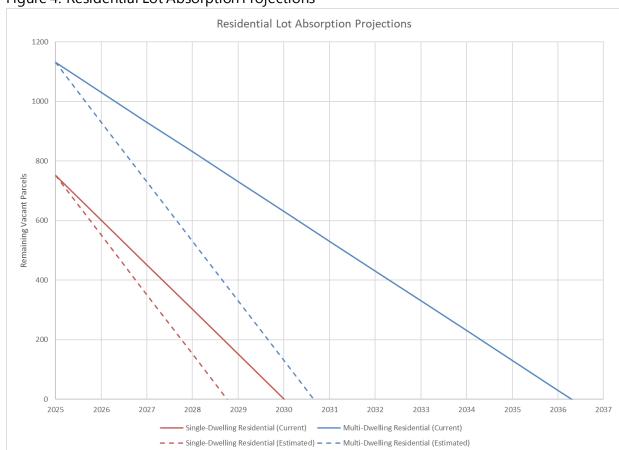


Figure 4: Residential Lot Absorption Projections

Absorption of non-residential parcels is difficult to predict as these sites are typically designated for specific purposes (e.g.: schools) or are driven by individual business interests. Based on known development projects and historical trends, the Development Capacity absorption rate for non-residential development capacity is assumed to be 20,000 m³/year which would result in a buildout time of approximately 5-6 years.

Information about the Water Allocation System, including policy, guidelines, remaining Development Capacity, and mapping of all previous assignments, is publicly available at the Town of Okotoks' website: <a href="https://www.okotoks.ca/your-services/buildingservices/engineering/water-allocation-system">https://www.okotoks.ca/your-services/buildingservices/engineering/water-allocation-system</a>

# **Strategic Plan Goals**

$\boxtimes$	Responsibly Managed Growth		Demonstrated Environmental	
$\boxtimes$	Strong Local Economy		Leadership	
	Organizational Excellence		Enhanced Culture & Community Health	

# **Environmental Impacts**

n/a

# **Community Engagement Strategy**

n/a

### **Alternatives for Consideration**

n/a

### **CAO Comments**

This report is provided on an annual basis to highlight water trends in both development and consumption. The impacts of the new watering schedule on consumption can be shown with the data from 2024 as well as the analysis on development lag and water consumption.

# Attachment(s)

n/a

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