

Report to Council



Date: April 13, 2016
File: 1890-01
To: City Manager
From: Kevin Van Vliet, Utility Services Manager
Subject: Water Regulation Bylaw Updates

Recommendation:

THAT Council receives for information, the report from the Utility Services Manager dated April 13, 2016, pertaining to Water Regulation Bylaw updates;

AND THAT Bylaw No. 11212 being amendment No. 7 to Water Regulation Bylaw 10480 be forwarded to Council for reading consideration;

AND FURTHER THAT Bylaw No. 11216 being Amendment No. 16 to Bylaw Enforcement Bylaw No. 10475 be forwarded to Council for reading consideration.

Purpose:

To inform Council about proposed changes to the Water Regulation Bylaw.

Background:

The Water Regulation Bylaw sets out the rates charged for use of the City's water system as well as the terms and conditions of use. Proposed updates to the bylaw are necessary to:

- Implement water use restrictions on a permanent basis;
- Reduce the administrative burden of complying with the landscape irrigation provisions to improve compliance;
- Address identified issues with temporary water use;
- Update minor administrative items.

An extensive clause by clause reference of the rationale to the amending bylaw is provided as Appendix 1.

On October 5, 2015 Council passed the following related resolutions:

“AND THAT Council directs staff to bring forward amendments to the Water Regulation Bylaw to provide authority to implement a watering restriction program for the management of the water utility as described in the report from the Utility Services Manager dated October 5, 2015 with respect to Kelowna Water Utility - Consumption update,

.... AND THAT Council directs staff to bring forward amendments to the Water Regulation Bylaw and Bylaw Notice Enforcement Bylaw to provide for enforcement options for when voluntary compliance efforts have been unsuccessful.”

Implementation of Permanent Water Use Restrictions

In response to a Provincial drought declaration in July of 2015, the City Water Utility implemented Stage 1 of our Drought Response Plan which was established in 2010. Stage 1 includes water restrictions based on property address. Properties with an odd numbered address could irrigate on odd calendar days and even numbered addresses could irrigate on even calendar days. The City drought response plan was developed in conjunction with the Improvement Districts in Kelowna, allowing for similar water restriction definitions across the City. The 2010 Drought Response Plan is provided in Appendix 2.

Since the 2015 drought there have been several meetings and discussions around the Okanagan Valley, hosted by the Okanagan Basin Water Board or a Provincial Ministry, to identify lessons learned from the response. One of the underlying themes in the feedback relating to urban and domestic water users is the need for consistent rules and messaging across the Okanagan Valley. With this in mind staff have reviewed regulations in other jurisdictions and discussed the 2015 drought response in depth with the other water providers in the City of Kelowna. Based on consultations with the four Improvement Districts as part of the Kelowna Joint Water Committee it is also anticipated that the Improvement Districts will implement the same Water Use restrictions being proposed in Bylaw 11212.

Staff feel providing a coordinated set of restrictions for all Kelowna water providers is particularly important with the current system of five water districts serving Kelowna residents. Advertising and water conservation messages in local media outlets reaches all residents, not just those in the City water utility. Consistent restrictions will help to reduce confusion about water regulations across the City at least in the “Normal” stage. It is worth noting that the City and the Improvement Districts may still be required to move into different Stages at different as they have different sources. While creating consistent stages will generally help citizens know, understand and comply with regulations, there is still a potential for confusion.

Bylaw 11212 proposes a modified domestic irrigation restriction regime than the odd/even schedule (for Stage 1) currently in the City’s Drought Response Plan and implemented last year. The proposed regime is consistent with that in use by the City of Vernon and Greater Vernon water utility as well as the schedule used in Metro Vancouver. In summary it works as follows:

Water Use Restriction Stage:	Summary of Water Use Restrictions
Normal	Residential and commercial properties can irrigate three days per week. Properties with odd numbered addresses on Tuesday, Thursday and Saturday.

	Even addresses on Wednesday, Friday and Sunday. These rules do not apply to institutional (parks) or agricultural properties, which have their own specific rules.
Stage 1	Very minor adjustments to residential and commercial uses. The Primary objective is increased education and awareness, including a 10 per cent reduction goal in overall water use for all customers.
Stage 2	Residential and commercial irrigation reduced to two days per week. Tuesday and Saturday for odd numbered addresses, Wednesday and Sunday for even numbered addresses. Other uses see further restrictions. Overall goal is a 20% reduction in water use.
Stage 3	Irrigation reduced to 1 day per week. Saturday for odd addresses, Sunday for even addresses. Complete ban on some uses which will affect some commercial businesses. Overall goal is a 35 per cent reduction
Stage 4	Water use to maintain personal health and hygiene only. No watering of lawns and gardens for residential and commercial uses. Used to respond to water supply crisis or extensive ongoing drought.

A system of fixed watering days for residential and commercial properties has the following advantages over the existing odd address / odd calendar days system (for Normal and Stage 1):

1. Day of week scheduling is easier to remember and track for users than knowing whether or not the current calendar day is odd or even.
2. No need to reprogram controllers and less user confusion around the months with 31 days (they have two odd calendar days in a row).
3. Day of week scheduling has no watering on Mondays which allows easier tracking of compliance as well as allowing for better understanding of water use during the irrigation season for the utility.
4. Moving to Stage 2 or Stage 3 is easier as these stages already rely on day of week scheduling. The change to Stage 2 is simply a removal of Thursday / Friday as irrigation days (as an example).
5. The system is more consistent across the Province and is consistent with the Vernon Water District at this time.

Newer controllers that comply with the Water Regulation Bylaw allow programming for either day of week irrigation, or odd/even irrigation paradigms. The main disadvantage perceived by some customers to the day of week system is that on average odd/even allows for three and a half watering days per week wherein the day of week watering day schedule has 3 days of watering per week.

Staff are aware that there are some large properties in the City that are not able to irrigate all of their landscaped lands within the time limit allowed under the proposed bylaw. Many of these properties contacted us in 2015. Our proposed response is to meet with these individual properties and issue a bylaw exemption permit once we can verify that the intent of the bylaw is being met (ie. landscaped areas are only being watered three days per week). This was successfully managed in 2015. New developments will need to be designed to comply with the bylaw.

Staff are also recommending modifications to the Bylaw Enforcement Bylaw that will allow for bylaw fines to be issued when there are violations to the Water Use Restrictions Bylaw. The

fine amounts being proposed are in line with those in other cities in B.C. Some example fines from around the Province are shown in the table below:

City	Infraction	Ticket \$
Kelowna (proposed)	Normal and Stage 1	\$50
	Stage 2	\$200
	Stage 3 & 4	\$400
Vernon	Wasting water	\$25
	Repeat offence or unauthorized use	\$100
Kamloops	First offence / Repeat	\$100/\$200
Penticton	Stage 1, first offence / Repeat / Ongoing	\$25/\$50/\$500
	Stage 2, first offence / Repeat / Ongoing	\$50/\$100/\$500
	Stage 3, first offence / Repeat / Ongoing	\$100/\$200/\$500
	Stage 4, first offence / Repeat / Ongoing	\$200/\$400/\$500
Surrey	Stage 1	\$200
	Stage 2, & 3	\$250
	Stage 4	\$300
Vancouver (City)	All Stages	\$250

Landscape Irrigation Requirements

The Water Regulation Bylaw includes extensive landscape irrigation requirements for new developments, which are also applicable when existing property owners make significant changes to their landscape irrigation systems. Compliance with this section of the bylaw is low, although it improves every year. Lack of compliance can be attributed to a low level of general awareness of the bylaw requirements and to the cost of bylaw compliance.

Staff have worked with WaterKind, the consultant hired to administer this section of the bylaw on behalf of the City Water Utility, to find ways of reducing the complexity and cost of the bylaw while achieving the desired gains of more efficient overall irrigation systems. The proposed bylaw amendments will achieve these goals as follows:

1. Allowing for a simpler irrigation controller that is practical, meets the City's operational expectations, but is much less costly. The current bylaw requires a "Smart" controller system which can communicate in real time with either sensors or environmental information on the internet. Programming and commissioning efforts for each installation are high. The new irrigation controller requirements are more basic, yet fully functional and more practical. More basic controllers can be acquired at half the cost, and the implementation effort is a fraction of the current requirements.
2. Reducing the enforcement provisions of irrigation controller management in the bylaw. It is proposed that sections be removed requiring access to read people's irrigation controllers, enforcing that they operate a certain way, and the City's ability to shut off irrigation water for failing to comply with the specified landscape irrigation

requirements in the bylaw. The City already encourages efficient water use for single family residential properties through an increasing block pricing structure. The bylaw also has provisions to manage users that are deemed to be wasting water, or excessively and unnecessarily using water. Eliminating some of the irrigation enforcement measures is being proposed to facilitate better compliance with the bylaw and its intention instead of discouraging people from even applying for a permit.

3. Replacing the report requirements, as outlined in Schedule C of the bylaw, with simpler reporting requirements and a more performance based outcome.

Temporary Water Use

The city water utility currently has the following challenges / concerns with temporary water use for construction.

1. Less than half of single family construction sites are obtaining temporary water use permits. All will use water on a temporary basis during construction, even if for final plumbing testing, etc. Larger residential and commercial projects have a high level of compliance in obtaining permission for Temporary Water.
2. A small number of properties become occupied that do not have water meters. This causes challenges and some conflicts between the City and the property occupant reflecting poorly on the City and the Builder,
3. Unknown Temporary Use is not allowing the City to confirm safe water use practices during construction and ensure payment for City water infrastructure (e.g. water infrastructure available for firefighting).

The proposed changes include:

1. Assigning a water account upon building permit application for new buildings (not renovations). This will reduce red tape by eliminating the time required for builders to go to the Works yard and fill out the paperwork for a permit (one window approach).
2. Beginning to charge a Temporary Use fee for the water service two months after approval of the Building Permit. This fee will be similar to the fixed fee component of residential water services for single family homes, or for two-inch water services for other, larger properties. The fee assumes that very little water will actually be consumed and ensures some financial contribution to the Utility for access to the water system, including water for firefighting. The two month grace period assumes that it could take up to two months before combustibles are stored on site and the site benefits from our water system (whether water is used or not).
3. The Temporary Use will transfer to the appropriate metered water account upon installation of the water meter.
4. If a water meter is not installed the Temporary Use Fee will increase by 20 times upon substantial completion of the building as defined by the Builders Lien Act. This increase will bring the Temporary Use fee to similar rates as those charged for unmetered properties. The fee assumes a significant amount of water will be consumed and encourages water meter installation.

Staff met with representatives of UDI and the Canadian Home Builders Association on February 17 to review the proposed changes to temporary water use and discuss any concerns that they might have. The City has received a letter in response to the proposed changes from UDI which is found in Appendix 3.

Administrative Items

There are a number of changes within the bylaw to address more minor administrative items including (but not limited to):

1. Grammar changes to ensure compliance with proposed changes to the Utility Billing Customer Care Bylaw;
2. Using a map to define the Beaver Lake Industrial area (for water rates) instead of defining by legal property description. This allows continuity after properties are subdivided or amalgamated;
3. Removal of references to Bare Land Strata Plan as we treat that property type the same as Multi-family properties
4. Clarification around definitions relating to water meter locations, and the ownership of those locations;
5. Broadening the potential uses of hydrants (by permit) as well as the ability to better define or restrict hydrant use if necessary;
6. Removing the option of having water services dedicated to Fire Protection. Operationally the City has not been allowing dedicated fire services for some years. This will bring consistency between the bylaw and Utility operations.

An extensive clause by clause list of proposed changes along with an explanation is provided in Appendix 1.

Internal Circulation:

Stephen Fleming - City Clerk
Jodie Foster - Communications Supervisor
Greg Wise - Bylaw Services Manager
Andrew Reeder - Utility Planning Manager
Lynn Walter - Revenue Manager
Doug Patan - Building and Permitting Manager

Legal/Statutory Authority:

City of Kelowna Water Regulation Bylaw 10480

External Agency/Public Comments:

A letter from the Urban Development Institute is included as Appendix 2.

Communications Comments:

Communications staff will develop a communications plan to notify City of Kelowna Water Utility customers of new water restrictions and provide communications tools to support them through the change.

In addition, the consultant hired to deliver the Water Smart program in 2016 will continue to work with residents, as well as landscape and irrigation specialists to develop awareness of the bylaw and its regulations and to work toward compliance.

City staff will also work with the Building Department to provide support communication information to help builders understand and comply with the new requirements for temporary water use.

Considerations not applicable to this report:

Legal/Statutory Procedural Requirements:

Existing Policy:

Financial/Budgetary Considerations:

Personnel Implications:

Alternate Recommendation:

Submitted by:

K. Van Vliet, Utility Services Manager

Approved for inclusion:

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

Joe Creron, Divisional Director, Civic Operations

cc:

Jodie Foster - Communications Supervisor

Greg Wise - Bylaw Services Manager

Andrew Reeder - Utility Planning Manager

Lynn Walter - Revenue Manager

Doug Patan - Building and Permitting Manager