Overview of the Regional Water Use Regulation and Conservation Bylaw Project

October 2017









Purpose of the Project

To <u>consolidate</u> 20 bylaws, that describe the terms of receiving and providing water services, into a <u>single bylaw for all water systems</u> owned and operated by the RDOS.

This project also provides an opportunity to:

- 1. modernize rules so they are more aligned with best practices, and
- 2. <u>simplify language</u> used in the bylaw so it is easier for everyone to understand.

A bylaw is a form of legislation created and used by local governments to resolve issues and address the needs of citizens.



Helpful Background Information



The Regional District of Okanagan-Similkameen (RDOS) currently owns and operates

8 different water systems:

Faulder, Naramata, Olalla, Gallagher Lake, Loose Bay, Sun Valley, Willowbrook and West Bench

(additional water systems may be added in the future)

These water systems currently have their own unique water sources, treatment and/or filtration systems, water distribution systems, customers, water rates, and bylaws that outline the terms of providing and receiving water services. The goal of this project is to have a single bylaw outlining the terms and conditions of water services in all of these systems. It will not impact current water fees and charges.

RDOS additionally operates (but does not own) the Sage Mesa water system, which is not included in the project or the consolidated bylaw.



What's Wrong with the Current Bylaws?

- They range in date from 1972 to 2013 and their content is very different, which means customers in some water systems could have different levels of service than those in other systems
- Some were inherited from the irrigation districts that operated the water systems before they were acquired by the RDOS and do not follow the format of other RDOS bylaws
- Most do not use current best practices in water system management that would allow the RDOS to do more to encourage efficient water use and ensure water systems are operated sustainably into the future
- It takes lots of time and effort for the RDOS staff to ensure they are applying each bylaw properly



This is an example of a current bylaw written in 1972 - it is scanned (this is how it was digitized), is out of date, and clearly very hard to read!



Project Approach

Grant funding received from the Okanagan Basin Water Board's Water Conservation and Quality Improvement Program for the project

Water
Sustainability
Specialists
Econics hired
to support
the RDOS
with the
project

Compare & contrast of existing RDOS bylaws completed

Review of recent bylaws from other BC local governments & identification of gaps and best practices conducted

Preliminary draft of the consolidated bylaw prepared for all RDOS owned & operated systems Six public open houses hosted to provide information about the draft bylaw & regional water conservation strategy

Draft bylaw revised with input from the public, legal and staff reviews and presented to the RDOS Board



What's Proposed in the Consolidated Bylaw? More Clarity and More Equity for Customers

For example:

- Regardless of which water system a customer is served by and which type of water user they are, they will use a standard process (submit an application form) to apply for new water connections
- The same regulations for outdoor water use will apply to all water systems*

^{*} The proposed five stages can be enacted by RDOS staff at different times in each system, since each system has it's own water supply characteristics and constraints



What's Proposed in the Consolidated Bylaw? Responsibilities and Rights are Clarified

For example:

- RDOS may refuse to grant new water services or may limit service in order to maintain public safety or to maintain existing services to customers
- RDOS may access private property to enforce the terms of the bylaw
- RDOS is responsible for prompt repair of pipes above connection points; customers are responsible for repairs below them (on private property)

Existing bylaws for some water systems have these provisions, but not all do



What's Proposed in the Consolidated Bylaw? More Tools to Improve Water Efficiency

- An ability to meter all water users
- A prohibition against wasteful water use
- A requirement for Farm Use properties to have flow-control devices and water meters*
- Enhanced outdoor water-use regulations that can be enacted at different times in each system

Existing bylaws for some water systems have these provisions, but not all do

* This provision will be phased in over time. Farm Use parcels are defined as those within a water service area and classified as 'farm' by the British Columbia Assessment Authority. The flow-control device proposed is the same as is currently required for agricultural properties served by the Naramata water system (permits flow of five US gallons per minute per acre).



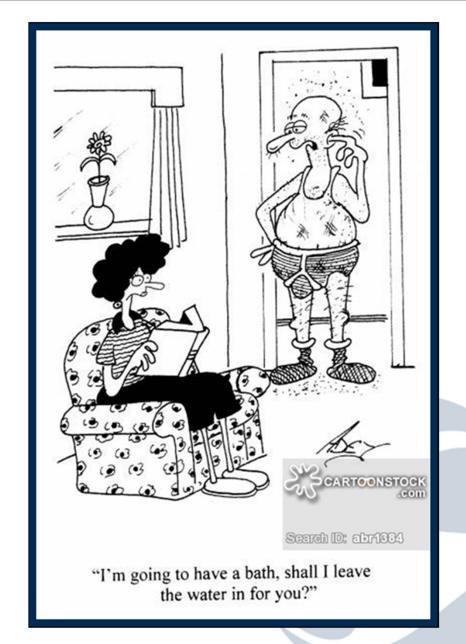
Proposed Outdoor Water Regulations: The 'Water Conservation Stages'

- It's important for the RDOS to be able to get help from water users to reduce consumption during times of drought or other supply shortages.
- Staged outdoor water regulations are commonly used for this purpose.
 They are meant to gradually reduce outdoor water use in response to changes in water supply availability, so that everyone avoids a critical situation where there is not enough water to meet essential uses.
- At the same time, it's important to ensure that outdoor water regulations are reasonable and do not unduly impact water users, especially in early stages, before emergency situations set in.
- With this in mind, we're striving to avoid 'unintended consequences', like the ones in the images on the next 2 slides! This is why we've aligned our proposed stages with what is used in other nearby communities and with best practices.











Proposed Outdoor Water Regulations: The 'Water Conservation Stages'

- 5 standard stages are proposed
- RDOS staff will make decisions about when to enact each stage in each water system based on factors like water levels in supply reservoirs/wells, weather forecasts, and how responsive water users were to previous stages
- These four principles were used to design the proposed outdoor water use regulations:
 - 1. Reduce 'peak' summer water use (Water use can be 4-5 times higher in the summer! This puts a lot of pressure on water supplies and infrastructure)
 - 2. Be more consistent with other local water service providers
 - 3. Avoid undue impacts to livelihoods and the local economy
 - 4. Minimize impacts on home-based food production



Summary of Proposed Water Conservation Stages

	Stage 0 ' New Normal' (year-round unless a higher stages is in effect)	Stage 1	Stage 2	Stage 3	Stage 4	
Goal	Ongoing efficiency	10% reduction overall	25% reduction overall	50% reduction overall	Critical needs only (90% reduction overall)	
Residential & commercial lawns and non-food gardens	Manual sprinklers: 3 days/week (6-10am & 6-10pm) Automatic sprinklers: 3 days/week (12:01am-6am)	Manual sprinklers: 2 days/week (6-10am & 6-10pm)	Manual sprinklers: 1 day/week (6-10am & 6-10pm)	Manual sprinklers: not permitted		
		Automatic sprinklers: 2 days/week (12:01am-6am)	Automatic sprinklers: 1 day/week (12:01am-6am)	Automatic sprinklers: not permitted		
		Drip irrigation: 3 days/week (12:01am-6am)	Drip irrigation: 2 days/week (12:01am-6am)	Drip irrigation: 1 day/week (12:01am-6am)	Not permitted	
	Drip irrigation & hand-held watering: any day, any time	Hand-held watering: 3 days/week (6-10am & 6-10pm)	Hand-held watering: 2 days/week (6-10am & 6-10pm)	Hand-held watering: 1 day/week (6-10am & 6-10pm)		
Residential food gardens & fruit trees/ shrubs	3 days/week (6-10am & 6-10pm) Automatic sprinklers: 3 days/week (12:01am-6am) Automatic sprinklers: 3 days/week (12:01am-6am) Drip irrigation & hand-held Drip irri	Manual sprinklers: 3 days/week (6-10am & 6-10pm) Automatic sprinklers: 3 days/week (12:01am-6am) Drip irrigation & hand-held watering: any day, any time	Manual sprinklers: 2 days/week (6-10am & 6-10pm)	Manual sprinklers: 1 day/week (6-10am & 6-10pm)		
			Automatic sprinklers: 2 days/week (12:01am-6am)	Automatic sprinklers: 1 day/week (12:01am-6am)		
			Drip irrigation: 3 days/week (12:01am-6am)	Drip irrigation: 2 days/week (12:01am-6am)		
			Hand-held watering: 3 days/week (6-10am & 6-10pm)	Hand-held watering: 2 days/week (6-10am & 6-10pm)		



Summary of Proposed Water Conservation Stages

	Stage 0 ' New Normal' (year-round unless a higher stages is in effect)	Stage 1	Stage 2	Stage 3	Stage 4
Goal	Ongoing efficiency	10% reduction overall	25% reduction overall	50% reduction overall	Critical needs only (90% reduction overall)
Residential & commercial outdoor cleaning	Use a device or hose with an automatic or spring-loaded shut-off nozzle, or a mop and bucket, any day, any time.	Use a device or hose with an automatic or spring-loaded shut-off nozzle, or a mop and bucket up to two days/week, unless ordered by a regulatory authority (i.e. WCB, public health inspector, etc.) and except for safety purposes (i.e. windows/lights/licenses on cars/boats/ATVs)	Use a device or hose with an automatic or spring-loaded shut-off nozzle, or a mop and bucket up to one day/week, unless ordered by a regulatory authority (i.e. WCB, public health inspector, etc.) and except for safety purposes (i.e. windows/lights/licenses on cars/boats/ATVs)	All outdoor cleaning with water prohibited unless ordered by a regulatory authority (i.e. WCB, public health inspector, etc.) and except for safety purposes (i.e. windows/lights/licenses on cars/boats/ATVs)	All residential outdoor cleaning with water prohibited unless ordered by a regulatory authority (i.e. WCB, public health inspector, etc.) and except for safety purposes (i.e. windows/lights/license s on cars/boats/ATVs)
Farm Use	No restrictions Early morning and late night irrigation encouraged to reduce evaporation	Voluntary reduction of 10% encouraged Early morning and late night irrigation encouraged to reduce evaporation	Voluntary reduction of 25% encouraged Early morning and late night irrigation encouraged to reduce evaporation	Voluntary reduction of 50% encouraged Early morning and late night irrigation encouraged to reduce evaporation	Mandatory water restrictions. Outdoor water use prohibited except for livestock and minimal maintenance of perennial fruit trees



Summary of Proposed Water Conservation Stages

- Exemptions and/or special provisions are proposed for:
 - Newly planted lawns, trees, gardens (establishment periods exempt)
 - Filling pools and ponds (provisions for notifying the RDOS and/or seeking permission for large volumes at different stages)
 - Public, commercial, institutional playing fields, boulevards, cemeteries, and parks (separate provisions to accommodate working hours)
 - Golf courses (separate provisions to maintain business viability)
 - Regional District water main flushing and hydrant maintenance (exemption from stages 0 & 1, restrictions for stages 2-4)
 - Harvested rainwater or water supplied from private systems (exemption)
 - Water use ordered by a Fire Marshall (exemption)

Please contact us if you want more information about the proposed regulations for any of these specific uses: water2017@rdos.bc.ca



We Welcome Your Feedback!

- Please consider answering the questions we've provided on the website by sending us an email, or send us your own questions or comments about the draft bylaw: water2017@rdos.bc.ca
- We'll use any feedback received by Friday,
 November 3 to help revise the draft bylaw before it is presented to the RDOS Board



