City of Kelowna

Agriculture Water Rate Design Engagement Report

May 2018

Introduction

The pending transition of Southeast Kelowna (SEKID) and South Okanagan Mission Irrigation District (SOMID) customers into the City's water system and the separation of the irrigation and domestic water supplies has resulted in the need to review the City's agriculture rate and rate design to ensure fair rates that encourage conservation and support for farming operations.

While SEKID will continue to set the irrigation rates for customers in 2018 and 2019, customers require assurance and advance notice of any changes to the rate design that may affect them. The City committed to consulting with the agricultural community and reporting back to Council on what might be a more appropriate rate design.

Process

The communication and engagement process sought input on water pricing values, priorities, concerns and impacts from stakeholders and the public. This information is necessary in order to outline options for an agriculture rate structure and provide Council with recommendations on a preferred option moving forward after 2019.

Engagement Goals

- Inform customers and stakeholders with balanced and objective information to help them understand the purpose and principles of water rate design
- Engage customers and stakeholders in the rate design process
- Create broader understanding of the roles of the water utility and its customers in water resource stewardship
- Create understanding of the value and importance of efficient water use and water conservation

Guided by an engagement plan reflecting the City's Public Engagement Guiding Principles and Engage Policy, staff facilitated meaningful dialogue with stakeholders across the community (see Appendix A for complete stakeholder list.) Engagement with water customers was not restricted to just SEKID customers, as any current or potential future City agriculture customers will also be affected by any rate design adopted. The broader Kelowna community also had an opportunity to provide input through an online survey.

The engagement process was divided into three phases. It began in mid-September 2017 and wrapped up in mid-March, 2018.

The results detailed in the following pages were gathered through the online survey, face-to-face meetings, and a stakeholder workshop. At the workshop and meetings, attendees participated in in-depth discussions and options were ranked by voting through a show of hands.

The survey was open to all Kelowna residents from Nov. 16 to Dec. 10, 2017 (see Appendix B for a breakdown of who we heard from in the survey.) Opportunities were promoted through the City's news bulletins, gov delivery subscription service, website, social media channels and the City's Get Involved website. In addition, critical stakeholder groups were sent e-mail invitations to forward to their members and the South East Kelowna Irrigation District (SEKID) forwarded an e-mail invitation to its ratepayers.

Results from surveys such as this are a collection of opinions and perceptions from interested or potentially affected residents and are not a statistically significant random sample of all Kelowna residents. Due to its opt-in and open methods, results are qualitative in nature

"Keep in mind the farming community is what Kelowna's roots are and it continues to feed many people today."
– Survey respondent

Engagement results

During the engagement, participants were asked to address four topics:

1. Future water challenges and priorities
2. Rate design tools
3. Conservation objectives
4. Preferred billing options

Topic 1: Future water challenges and priorities

There are some significant differences between the concerns and priorities expressed by agricultural stakeholders and those expressed by non-agricultural water users (residential, commercial, industrial, etc.)

Agricultural stakeholders were primarily concerned about the future cost of water and the consistency of supply. These concerns were expressed by stakeholders at both the in-person events and through the online survey.

> *"If you use more you pay more. That would help promote proper irrigation practices."*
> *– Survey respondent*

For stakeholders, the way in which future decisions will be made regarding water rates for agricultural users was a top concern, because it was felt that there was a lack of clarity around how the utility would be governed. Many stakeholders also expressed a desire for agricultural users to have voting rights at the utility board level.

In terms of cost, the primary concern was on predictability. Farmers need to be able to plan their irrigation and crop practices around a predictable quantity of water as well as a predictable cost of water. There was concern that the costs of water will no longer be a known factor when developing their business plans for the upcoming growing seasons.

Those agricultural users that are currently allocated water in acre/feet for year for a set price (e.g. SEKID ratepayers) seem satisfied with this arrangement and would prefer to see this type of cost structure continue.

In contrast, non-agricultural water users were much less concerned with ensuring low water rates for agricultural customers. Non-agricultural users were much more likely to say that customers who use more water should pay more and that water rates should be in line with the cost of providing water. Non-agricultural water users also placed a higher priority on water conservation than agricultural water users and stakeholders.

Activities

Phase 1: Inform

- Face- to- face Meetings (including SEKID Board, Agricultural Advisory Committee (AAC))
- Website Update
- Mail-out to stakeholders (including SEKID customers, current City customers, SOMID Customers)

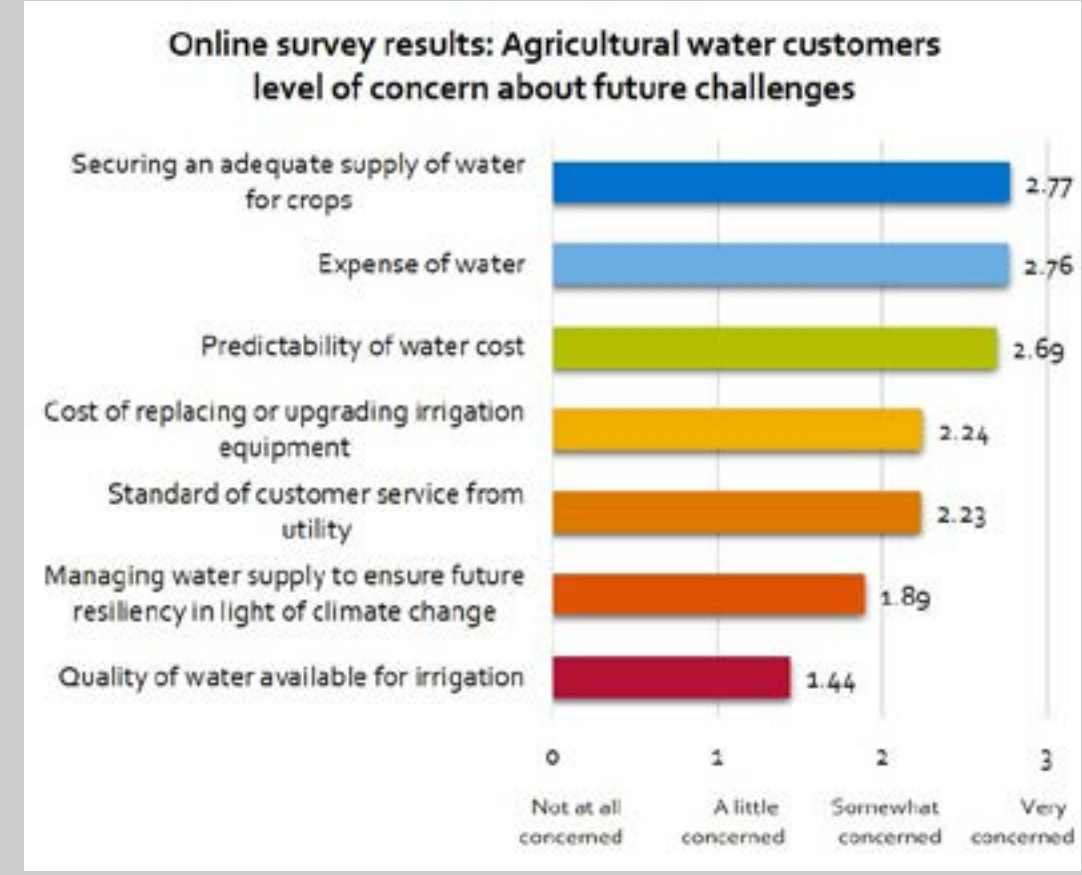
Phase 2: Collect input

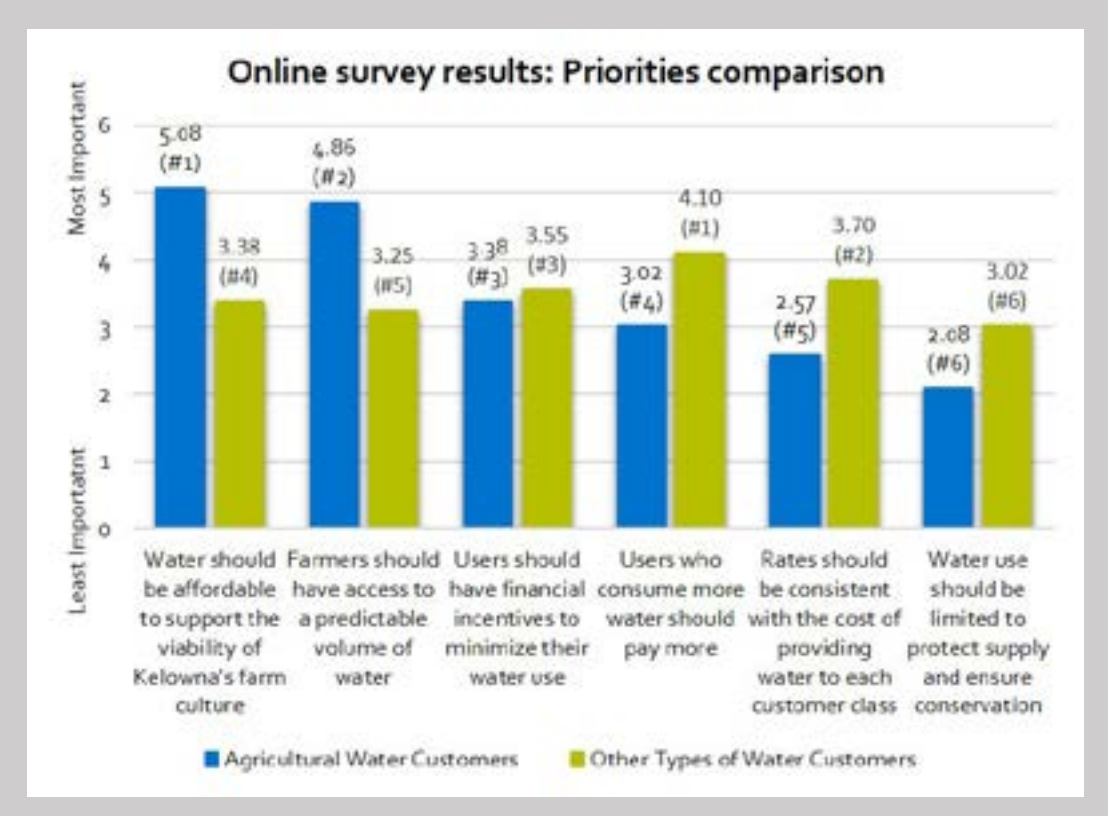
- Face- to- face Meetings (including SEKID Board, AAC)
- Online survey open to all Kelowna residents from Nov. 16 to Dec. 10, 2017
- Stakeholder workshop by invitation
- Public Open House

Phase 3: Review and Report

- Report out of engagement results
- Review 2018 engagement outcomes
- Recommendation and rationale for preferred rate design option
- Council to adopt rate design and set rates for 2020

"Agricultural water users actively growing agricultural crops need to have an affordable, reliable and sustainable source of irrigation water"
– Survey respondent





"Agriculture rates should be in line with other commercial industrial users. They are in business. Thats a cost of doing business"
– Survey respondent

Topic 2: Rate design tools

Agricultural stakeholders and water users were asked to indicate what tools for rate design they would like to see the City use to sustainably manage the supply of water for agricultural customers. An overview of fixed rates vs. variable rates was provided and it was explained that a blending of the two types of rate designs could be created. Most participants (including the SEKID board, industry groups, online survey respondents, and attendees at stakeholder workshops) indicated they would prefer to see a blended rate, or a balanced mix of variable use and fixed volume rates.

It was strongly felt that if agricultural users were to be charged reduced rates, those rates should only apply to bona fide farm operators. For example, the majority of participants in the survey indicated that if a property does not have Farm Status that it should not receive subsidized water rates. Those at the workshops pointed to the need for legitimate agricultural activities to be conducted in order to receive an agricultural rate. It was also noted that SEKID's system currently offers allocations to all agricultural land holders, regardless of whether agriculture is occurring or not. There was little support for lower water rates for recreational or park properties.

"The South East Kelowna Irrigation District current methodology of an allotment plus tiers if you go beyond that allotment is the best for agricultural customers. It encourages farms to keep a close eye on their meters and, if they manage their watering correctly, should be able to stay within the allotment. This method should be adopted."
– Survey respondent

In terms of specific rate tools, stakeholders felt that an increasing block rate system would be appropriate, but that the level at which the increase starts as well as the actual price increase, would impact their level of support for this tool. Many believe that the SEKID water allocation system (one price for a set amount of acre-feet of water) should be maintained, and if that quantity is exceeded then the block rate increase should begin at that point. Others questioned the need to conserve water that was being held in the reservoir specifically for agricultural purposes.

Several participants mentioned that although it may be a cumbersome calculation, it could be worthwhile to allocate a different base amount of water based on the type of crops being irrigated, as some crops require more watering than others. This may help to increase the level of water equity amongst farm operators.

Compliance tools such as penalties, fees, tickets, or fines for exceeding water allocation were all supported, however it was underscored that a robust enforcement program would be required in order to ensure that compliance is met.

Very little support was provided for tools such as shutting off water, relating the price of water to the size of the servicing, or using the block pricing tool right from the start of the year.

Other ideas that were raised included:

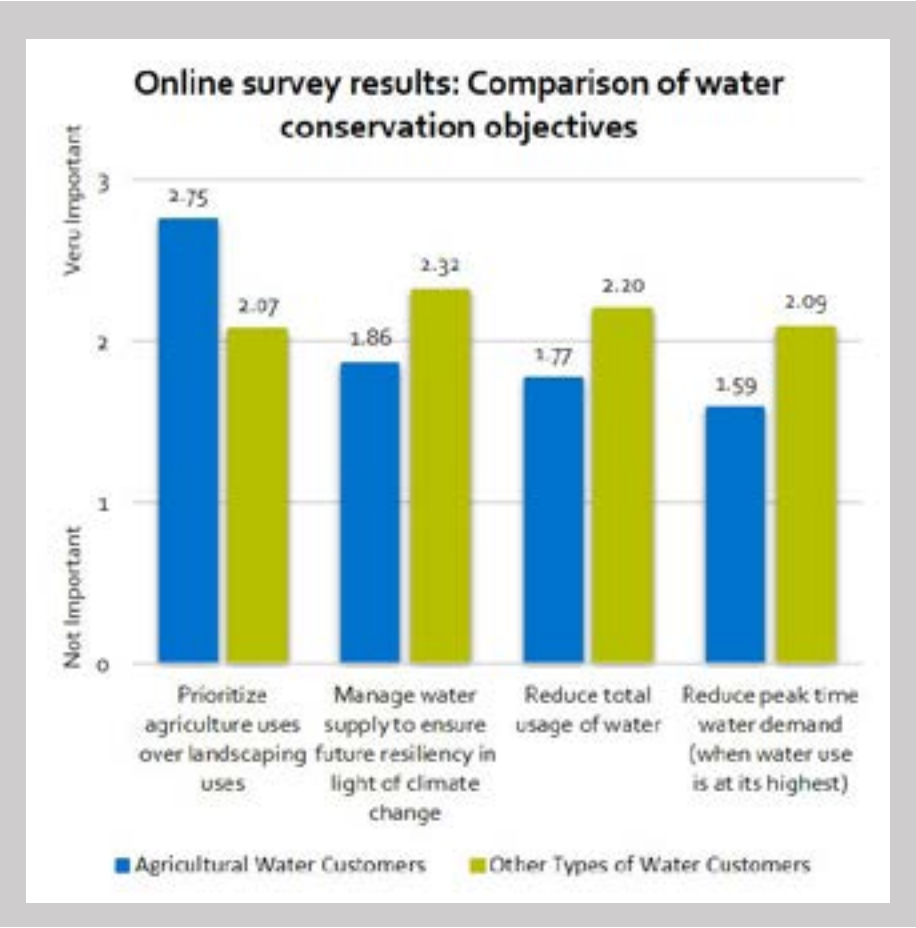
- Continue to use a community-based information approach, whereby when water scarcity is a concern that farmers are simply asked to reduce their use. In previous times of shortage this word-of-mouth and neighbourly policing has worked well
- Explore the possibility of using flow restrictions as a tool under a metered rate
- Consider providing water users with a choice of the type of rate design that they would like to sign up for. This approach could allow personal or farm needs to be built into the rate design
- Ask farmers to pay a premium for predictability
- Set up a water exchange so that unused allocations could be sold to users who go over their allocation
- Possibly leave the current SEKID rate system in place for a few years after the water system integration and see if it continues to work, then to make any tweaks a few years down the road

"Farmers need to know that if there is a dry, hot summer when they need a lot of water, that it will be available. If this is uncertain, then they won't make long term investments. Rationing water to agricultural producers therefore needs to be a last resort."
– Survey respondent

Topic 3: Conservation objectives

Prioritizing agriculture water over other outdoor water use such as landscaping was chosen as a high priority objective by all agricultural stakeholders. Not surprisingly however, it was listed as a low priority by those who where not farmers.

Farm operators generally did not feel that they needed to be encouraged to reduce their use of water on the farm. Many noted that the crops need what the crops need, and distinguished between "conservation" and "wastage." The agricultural community did not feel that much water was being wasted on farms.



Concern was raised that as the water system moves from a small community-based system to a larger municipal system that the value and philosophy of conservation may be lost amongs users. It was noted that neighbours are currently pretty adept at monitoring each other's use and that this community-value based method is a good conservation tool.

Incentives for water conservation was of interest to many agricultural stakeholders. However, many expressed that they would like more information regarding what types of incentives before committing their support. It was felt that timely information being made available online would be a useful tool in meeting conservation objectives.

It was also noted that because domestic users will now get their water from another source, there will be an up to 20 per cent increase in water supply for irrigation uses.

There was low or no support among agricultural stakeholders for any of the following conservation objectives:

- Reduce total water usage
- Climate change resiliency
- Reduce peak water demand times

In terms of climate change resiliency, while the agricultural sector acknowledges that changes to the climate are occurring, there was a strong sense that the need and ability to meet climate change through water conservation is difficult to assess. Additionally, the design of the system is such that there is a fixed amount of water in the reservoir, therefore the feeling among many farmers is that the water that is allocated may as well get used. The SEKID system is currently managed such that at the end of the year after all the water is allocated there is still at least 10 per cent of the volume remaining in the reservoir. Furthermore, there are many landowners who do not use their full allocation. These factors combine to create a sense that the water system is not vulnerable to climate change variability.

"Agricultural users should be held to the same standards as everyone else: pay rates that reflect the cost of the water they use; eliminate practices which are wasteful; and employ methods which require less water in general."
– Survey respondent

"Orchardists in Kelowna have built their business around current agriculture water costs . It would not be good to jeopardize these operations by significantly changing those costs."
– Survey respondent

Several stakeholders noted that the rationale for conserving water would need to be clear. If there is no specific or strong reason for conserving water at a particular point in time, then farmers won't necessarily feel that they need to conserve. Support for the prioritization of conservation objectives also depends on how the conserved water will be used. Will it be re-allocated? Will it be left in the reservoir/lake/stream for ecosystem purposes? Knowing the answers to those questions would help stakeholders determine how to rank the conservation objectives.

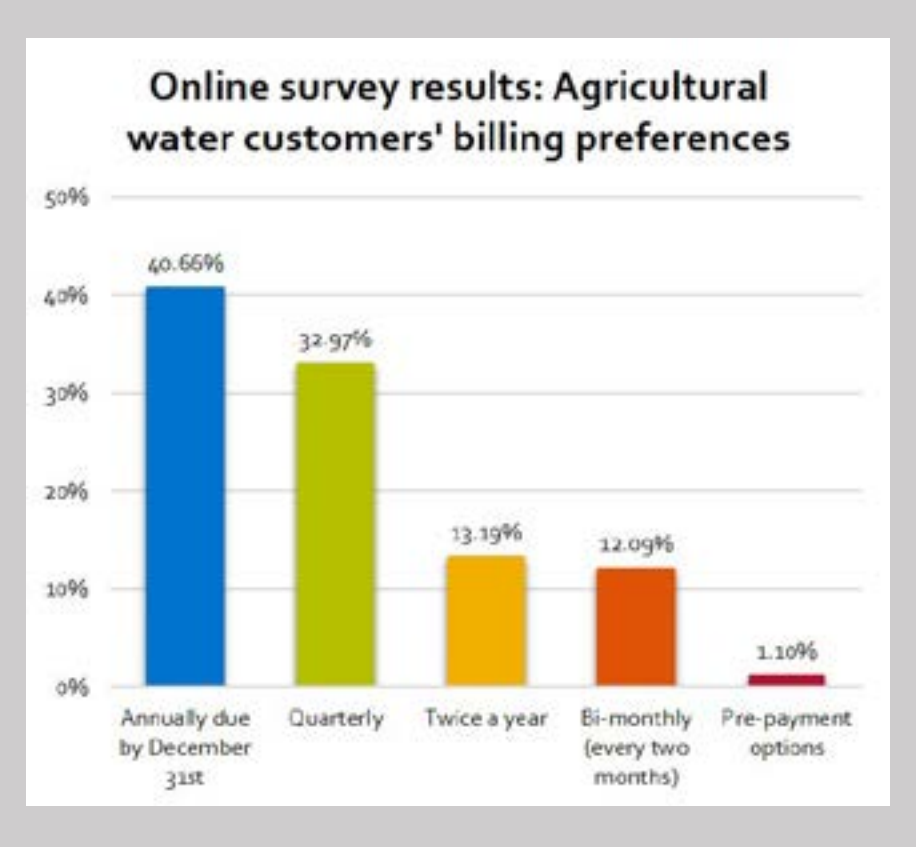
Other comments and ideas from stakeholders regarding conservation included:

- The Ministry of Agriculture's Agriculture Water Demand Model has provided estimates of what each crop requires for water in Kelowna
- Would like to know what type of warning system will be in place to communicate water shortages to agricultural users. What will happen before the water supply runs out? Will there be ample warning before water is shut off?
- Variable rate system design can help to promote conservation if flow rate and allotment are intertwined

In contrast to farmers and other agricultural stakeholders, non-farming water users who responded to the online survey placed a much higher priority on conserving water and ensuring resiliency in light of climate change.

Topic 4: Preferred billing options

Agricultural stakeholders were asked to describe their preferred billing options (e.g. how many bills per year, timing of bills, online access to usage history, etc.). SEKID users currently receive annual water bills, while City of Kelowna customers receive bills every two months.



Stakeholders responded that annual bills are generally preferred over bi-monthly, and that it was important to consider that most users don't use much water during the off-season.

Information availability would be supported on a more frequent basis. In fact, agricultural users would be interested in obtaining usage data more frequently than every two months if possible (monthly or even weekly during the growing season). An online system where each user can log into a personalized account would provide access to more frequent information. While most agricultural users have the capability to access this information online, it was noted that mail-out bills and usage history would be useful as a back-up form of communication.

"Hopefully rates will not be raised for the agriculture consumers. Expenses for growers are high enough now so I feel that we should be concerned whether we are going to support the farmers in the Kelowna area or cause more reason for them to lose their enthusiasm to keep up their vocation."

– Survey respondent

Appendix A: Agricultural Stakeholders

Direct interest:

- SEKID Board of Directors
- Agricultural Advisory Committee (AAC)
- SEKID Agricultural Customers
- Current City Agricultural Customers
- SOMID Agricultural Customers
- City Council

Indirect interest:

- Industry Groups
- Other Water Improvement Districts/Communities
- Summerland Research and Development Centre Regional District of Central Okanagan
- First Nations

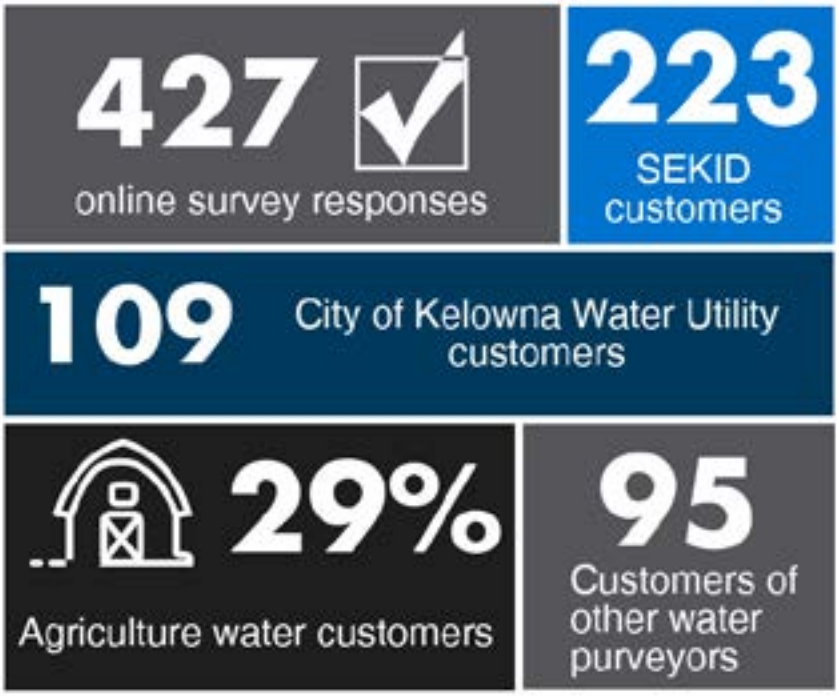
During the stakeholder workshop the following organizations were represented:

- City of Kelowna Agricultural Advisory Committee (3 members attended)
- Okanagan Basin Water Board
- BC Fruit Growers Association
- South East Kelowna Irrigation District (Board members, Executive Director and customers)
- Summerland Research and Development Centre
- Regional District of North Okanagan Water Sustainability Coordinator
- UBC Okanagan
- Summerhill Winery
- Wise Acre Farm Distillery
- Stirling Orchards
- Goraya Family Farms (cherries)
- Dendy Orchards (cherries)
- Day's Century Orchards (pears)

Appendix B: Online Survey - Who we heard from

Breakdown by water purveyor:

- 223 SEKID customers (52.22 per cent)
- 109 City of Kelowna water utility customers (25.53 per cent)
- 33 Glenmore-Ellison Improvement District (GEID) customers (7.73 per cent)
- 30 Black Mountain Irrigation District (BMID) customers
- 11 South Okanagan Mission Irrigation District (SOMID) customers
- 10 Rutland Waterworks District (RWD) (2.34 per cent)
- 11 respondents indicated they get their water from other sources



A majority respondent (266 or 62.30 per cent) indicated they are a residential, commercial, industrial or other type of water customer:

- 126 SEKID customers
- 82 City of Kelowna water utility customers
- 23 BMID customers
- 19 GEID customers
- 9 RWD customers
- 5 SOMID customers
- 2 respondents indicated they get their water from other sources

A total of 123 respondents (28.81 per cent) indicated they are agricultural water customers:

- 94 SEKID customers
- 8 GEID customers
- 6 SOMID customers
- 6 BMID customers
- 2 City of Kelowna water utility customers
- 0 RWD customers
- 7 respondents indicated they get their water from other sources

A total of 38 respondents (8.90 per cent) indicated that they do not pay for water directly. Instead they pay for it through rent, strata fees, etc.:

- 25 City of Kelowna water utility customers
- 6 GEID customers
- 3 SEKID customers
- 1 BMID customer
- 1 RWD customer
- 0 SOMID customers
- 2 respondents indicated they get their water from other sources