

Moving Forward: A Plan of Action for Improving SEKID Water Quality

The South East Kelowna Irrigation District (SEKID) is taking another step in the move toward meeting mandatory provincial water quality standards and ratepayers' demands for higher quality water. Taking into account the feedback received from ratepayers since the Water Quality Improvement Project (WQIP) was introduced in 2012, trustees have developed a feasible funding plan that avoids borrowing by constructing the new system in two phases.

SEKID is still actively pursuing other sources of funding. Should government grants become available, they will be used to accelerate the project and could help reduce rates.

Why does SEKID need improved water quality?

- SEKID's Hydraulic Creek surface water source doesn't meet BC Ministry of Health standards for domestic use. Consequently, it doesn't comply with conditions outlined in SEKID's annual operating permit from Interior Health (IH). Frequent water quality fluctuations result in Water Quality Advisories or Boil Water Notices that generate customer concerns and complaints.
- Because compliance with provincial and IH requirements is mandatory, SEKID trustees and staff have explored a variety of solutions including the Water Quality Improvement Project (WQIP) that was presented to ratepayers in 2012.
- An Alternate Approval Process in 2012 showed that ratepayers do not support borrowing for the project. Trustees have since explored non-borrowing options for the needed improvements, which would provide SEKID customers with a safe, clean, and reliable water supply that meets provincial/IH standards.

How will the WQIP improve water quality?

- The Water Quality Improvement Project (WQIP) presented in 2012 is still the best technical solution and among the least expensive of eight options prepared by technical experts and then reviewed by SEKID trustees and staff. The two-phase WQIP will supply treated groundwater (well water) for domestic use through a new delivery system, and untreated surface water for agricultural use through the existing distribution network.
- All domestic connections will be metered, as are all agricultural connections now. The benefits of metering include water conservation and user-pay billing where customers pay for what they use.

What is the proposed timing?

- Construction will be divided into two phases. Phase 1 includes the higher density McCulloch corridor, Gallagher's Canyon and the Hall Road areas; Phase 2 covers the less populated rural areas.

- Phase 1 will start in 2017 and be completed in 2019. It includes developing two new wells, treatment facilities and distribution networks. This initial construction will serve as the basic infrastructure for the entire project. Phase 2 will start when Phase 1 is finished, with completion expected in 2033.
- Phase 2 customers will receive treated groundwater as the new distribution system is expanded into their areas. Any grant funding will be used to accelerate the project and could help reduce rates.

How will the WQIP be funded?

- The estimated cost of design and construction is \$23.7M for both phases.
- There are currently no senior government grants for SEKID water quality improvements. However, SEKID has been assured in writing by the Minister of Community, Sport and Cultural Development that the district would be eligible should funding become available. And the Integrated Water Supply Plan developed by the Kelowna Joint Water Committee identified SEKID's WQIP as a priority project that will be first in line for eligible and available funding support. If a grant were to be forthcoming, it could be used to accelerate project completion and could help reduce water rates.
- Knowing that SEKID is still required to meet provincial and Interior Health requirements and demands from rate payers for water improvements, trustees are moving forward with a non-borrowing solution that relies on existing reserve funds, revenue from land sales, tolls, taxes and a new water quality levy.

How much will SEKID customers pay?

- A new monthly water quality levy will cover the majority of WQIP costs. The levy will be supported by annual increases in water tolls and taxes, as in previous years.
- The new monthly water quality levy will be staged, starting with Phase-1 properties and then followed by Phase-2 properties until the project is complete.
 - Starting July 2015, **Phase-1 properties** will pay \$20 per domestic unit per month until 2024. The Phase-1 levy will be reduced to \$10 per month in 2024 until the project is complete.
 - Phase 1 includes **Hall Road customers** who currently receive well water, however, their system does not comply with regulatory requirements and must be updated as part of the WQIP. This well water supply is 'interruptible,' meaning that if the well shuts down, or if there is a fire in the area, affected residents would then receive water from Hydraulic Creek, which does not meet provincial health standards. This area will continue to receive water from the existing well on O'Reilly Road until the new system is developed in 2017, and then the well will be shut down. The levy that Hall Road users pay now will be eliminated July 1st, 2015 when the whole district comes under the new WQIP community system. The new levy will be \$20 per month starting July 1st, 2015.
 - **Phase-1 commercial customers**, on the monthly billing cycle, will pay the \$20 per month levy per connection in addition to their regular flat-rate or consumption-based bills.
 - The **Phase-2 levy** would be applied when Phase 1 is complete, at a reduced rate of \$10 per unit until that unit is on the new water system. Once Phase-2 properties receive new water, they will pay the same levy as Phase-1 properties until the project is complete. Any Phase-2 properties that have not received new water by 2024 will have the levy reduced to \$8 per month until they receive new water.
- **Water tolls** will continue to increase 5% per year until both phases are complete. This works out to about \$2.30 more per month in 2015.
- The annual **water tax** will also continue to increase 5% per year to the end of 2020, then decrease to 2% per year until the project is complete. This works out to about \$3.80 more for all of 2015.
- For example, the quarterly water billing cycle effective July 1st for a single-family dwelling in Phase 1 will be \$202.95 plus the yearly water tax of \$79.20 per acre or parcel.

How does this compare with rates from other water suppliers?

- The planned average rate for a typical SEKID residential user is \$74.25 per month. In comparison, average monthly rates in the Okanagan range from a low of about \$40 per month to a high of about \$130 per month. Given SEKID's source and distribution characteristics, the planned rate structure can be considered very reasonable.

BACKGROUND

What is SEKID?

- Located on Kelowna's east bench and bordered on the north by Mission Creek, the South East Kelowna Irrigation District (SEKID) is BC's second largest irrigation district.
- With more than 2,000 domestic connections, 420 agricultural connections, and 25 commercial and institutional connections, SEKID supplies about 20 percent of Kelowna residents over an area of 2,400 Ha (9,000 acres).
- South Kelowna and the Gallagher's Canyon and McCulloch Road areas are supplied with chlorinated surface water collected by the McCulloch Reservoir/Hydraulic Lake diversion system and then diverted to about 1,200 connections through a complex 90-kilometre network of underground pipes.
- SEKID has three existing wells. The Hall Road area's 171 connections are supplied by groundwater from the O'Reilly Well. East Kelowna Road Wells #1 and #2 are used only to supplement the Hydraulic Creek surface water supply in drought years.

What water quality standards is SEKID required to meet?

- SEKID's Hydraulic Creek surface water source has posed water quality challenges since it was first tapped in 1920.
- Surface water originates in a watershed, so is impacted by all natural and human activities and events within the watershed.
- SEKID and all other water suppliers serving more than 500 people are required to meet the 4-3-2-1-0 Drinking Water Treatment Objectives (Microbiological) for Surface Water Supplies in BC. These include:
 - 4-log (99.199%) reduction or inactivation of viruses
 - 3-log (99.9%) reduction or inactivation of *Giardia* and *Cryptosporidium*
 - Two treat processes for surface water
 - Less than or equal to one NTU (nephelometric turbidity unit) of turbidity
 - Zero E. coli and fecal coliforms.
- SEKID's surface water supply does not meet these provincial water quality objectives for domestic use. Water quality fluctuations—and the resulting Water Quality Advisories or Boil Water Notices—generate ongoing customer concerns and complaints.
- Annual operating permits from Interior Health depend on compliance with provincial requirements, therefore upgrades are necessary.

How can I learn more about the WQIP?

OPEN HOUSES

Join us at the first **Open House April 30th from 4pm-7pm at the East Kelowna Hall**. This is a drop-in session where you can learn more and ask questions of trustees and staff. The second **Open House is on May 21st from 4-6:30pm at the East Kelowna Hall**.

WEBSITE / EMAIL

Visit www.sekid.ca for information and updates or email info@sekid.ca.