Kaleden
Irrigation District

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November 10, 2021

Ms. Subrina Monteith,
RDOS Area 'I' Director

via email to: smonteith@rdos.bc.ca

Dear Subrina:

The Kaleden Irrigation District Board of Trustees and staff would like to thank you again for your support, both in ensuring the eligibility of KID for the RDOS Community Grant-In-Aid Program and in approving the 2020 Community Grant to KID for assistance in acquiring screw-on retrofit vacuum breakers in bulk, and producing "doorhanger" information packages, in order to reduce the possibility of cross-connection contamination of our community's water supply.

In compliance with the *RDOS Electoral Area Community Grant Guidelines*, please find enclosed our Completion Report detailing how the grant funds were spent for this project. If you would like additional information or copies of receipts, please advise and we will endeavor to provide.

KID had planned to submit another project of general benefit to the Kaleden Community in 2021, but due to a variety of issues arising (not the least of which was COVID-19), staff time was fully committed to higher priorities this year, as well as completing the cross-connection project. Once settled into the "New Normal," we hope to apply in 2022 for another Community Grant to turn another project into reality as well.

Sincerely,
KALEDEN IRRIGATION DISTRICT

Michael B. Gane
Board Chair
MBG/bs

RDOS Area "I" Community Grant-In-Aid Program
Completion Report For

KALEDEN CROSS-CONNECTION CONTROL PROGRAM – PUBLIC AWARENESS PROJECT

1. Project Abstract

In order to reduce the possibility of cross-connection contamination of the community water supply, the Kaleden Irrigation District (KID) requested the assistance of RDOS with the costs involved in the bulk acquisition of screw-on retrofit vacuum breakers and the production of "doorhanger" information packages, which would be distributed to residences within KID's service area. The total estimated direct costs of this project were $2,900.00, for which KID requested a 2021 Area "I" Community Grant-In-Aid. KID provided in-kind project management support and production and distribution of packages, which was estimated at $2,000.00.

2. Project/Program Description

KID serves over 1,200 residents via over 630 water connections (556 domestic and approximately 80 irrigation). As outlined in the Kaleden Irrigation District's January 2020 column in Skaha Matters (see excerpt below), contamination of the community water supply can occur when contaminated water is sucked back into the system due to taps without a vacuum breaker. While current Building Codes require vacuum breakers on all outside taps, many homes in Kaleden were built prior to the Code changing in the late 1980s. All exterior taps on residences (and outbuildings) that do not have frost-free hose bibbs with built-in vacuum breakers need screw-on retrofit vacuum breakers to avoid backflow contamination that could affect others in the community. In order to reduce the risks of cross-contamination of Kaleden's water supply, KID raised public awareness of the issue by providing residents with educational material on the matter, and offered two free screw-on vacuum breaker per residence upon request.

KID's March 2021 column in Skaha Matters outlined the concerns and announced the availability of two free units for each residence on a 'first come – first served" basis. All ratepayers also received an information package along with their 2021 Toll Bill in June.

To date, 135 vacuum breakers have been distributed, considerably fewer than originally expected. A large part of this shortfall in uptake is attributed to COVID protocols, preventing the 2021 Summer Student from doing door-to-door introductions A reminder as to the availability of "freebie" units was included in KID's October 2021 column, and there will be further reminders in future columns and billings, as well during staff interactions with residents.

3. Expenditure of Funds

The following details the disposition of the Community Grant funds received by KID:

Cost Item	Estimated Cost	Actual Cost	Comments
Screw-on retrofit vacuum breakers	$2,197.00 (for 300)	$2,632.00 (for 500)	Original quote from Andrew Sheret was $7.32 ea; KID Supervisor was able to obtain lower price of $5.26 each Wolseley Canada incl. tx
Clear plastic handle 9x12 bags for info pkgs (600)	$62.48 (for 1000)	$62.49 (for 1000)	Staples price for case of 1000 incl tx
Information sheets (8.5 x11 photocopies)	$62.89 (for 500) B/W	$354.81 (for 500) COLOR	Staples telephone quote, incl tx; we were able to get color copies as we eliminated the door hanger cost below & obtained additional units.
"Doorhanger" brochures	$ 582.99 (for 600)	$00.00 (for 0)	Aurora Print Solutions quote; we eliminated the door hangers and utilized the $ to obtain additional units and colored copies of above.
TOTAL COST	**$2,905.36**	**$3,049.30**	*The project worked out well cost wise.*

*Note that the retail purchase price of individual units is currently $9-12 plus tax

The KID staff and Board of Trustees would like to thank RDOS and especially Area "I" Director Monteith for their assistance in completing this important project, and hope that we will be able to collaborate with you on future projects of mutual benefit.

EXCERPT - The following text taken from the Kaleden Irrigation District's January 2020 column in Skaha Matters provides more information on the risks of cross-connection/backflow contamination:

"Preventing Backflow.... Water supply lines usually maintain enough pressure to prevent water from flowing back into the pipe. But if line pressure drops, contaminated water can be sucked back into the system. Pressure drops will occur due to major events such as firefighting, watermain breaks and hydrant flushing. But this also can happen when you draw water from elsewhere in the home (eg, toilets, clothes washer, showers). Taps without a vacuum breaker can allow water to backflow if the pressure on the supply side decreases. Common causes of contamination include leaving hoses submerged in livestock troughs or in ponded water in pastures or corrals, and in laundry tubs or sprayers. A simple way to avoid backflow is to ensure hose ends are always kept above the water surface. Current Building Codes require vacuum breakers on all outside taps. If you already have frost-free hose bibbs with built-in vacuum breakers, you are good. If you don't have that style, then you need screw-on retrofit vacuum breakers, which cost $9-12 at hardware or plumbing supply stores."