

# Church Ranches Homeowners Association

## Water Committee Feb 19, 2019



## Church Ranches Homeowners – Water Committee

- Introduction – Water team
  - George Coutts
  - Perry Schuldhaus
  - Kim Truter
  - Jerry Demchuk
  - CRHA Board
- Purpose/mandate
  - Re-establish positive working relationships with both RVWC and the BPCC.
  - Put new agreements in place with RVWC and BPCC
    - Water supply agreement RVWC/CRHA
    - RVWC/CRHA water system maintenance agreement
    - CRHA Hydrant maintenance agreement
    - Water supply agreement CRHA/BPCC



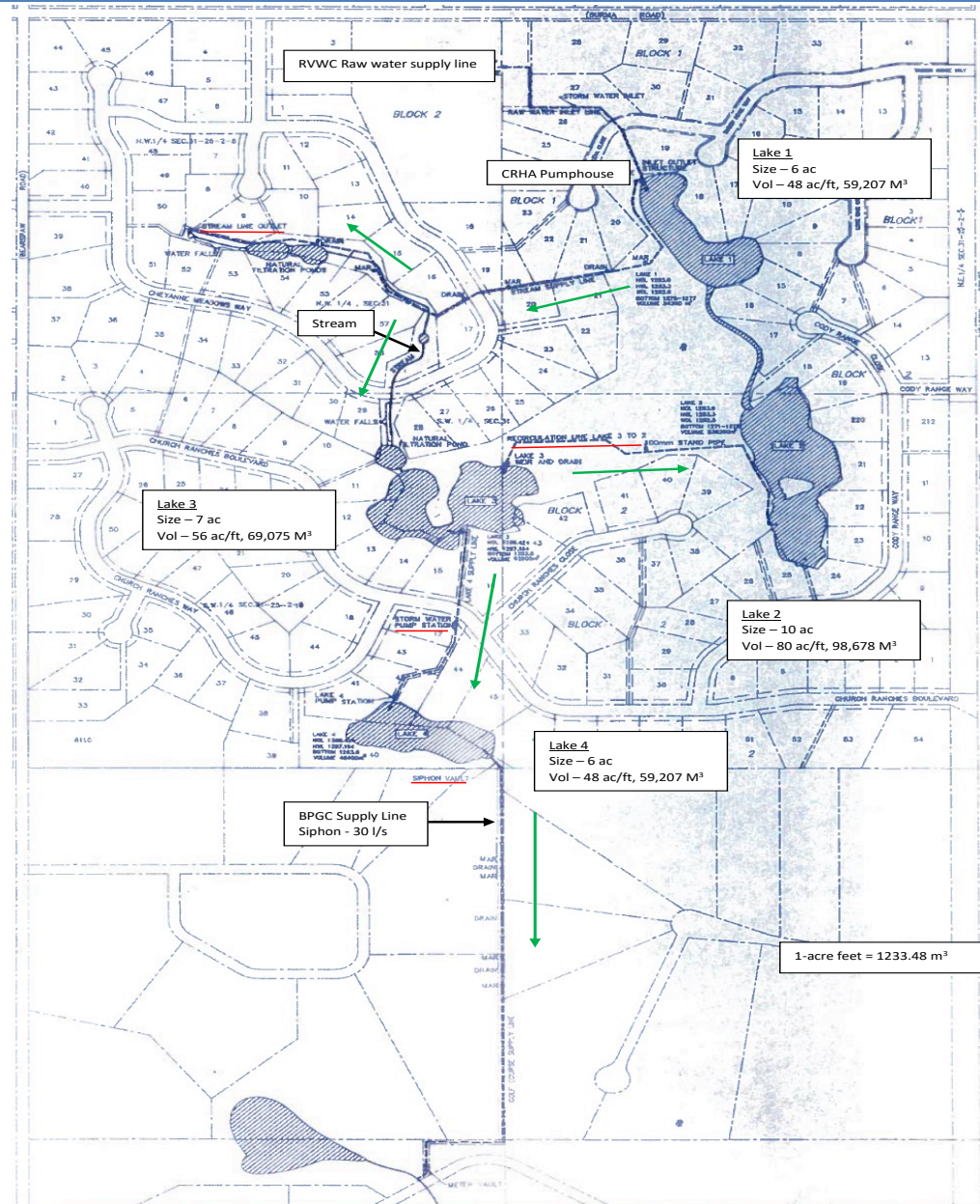
## Church Ranches Homeowners – Existing Water System

# CRHA Water System

- 196 homes
- 3 public lakes, 1 private lake.

## Goals

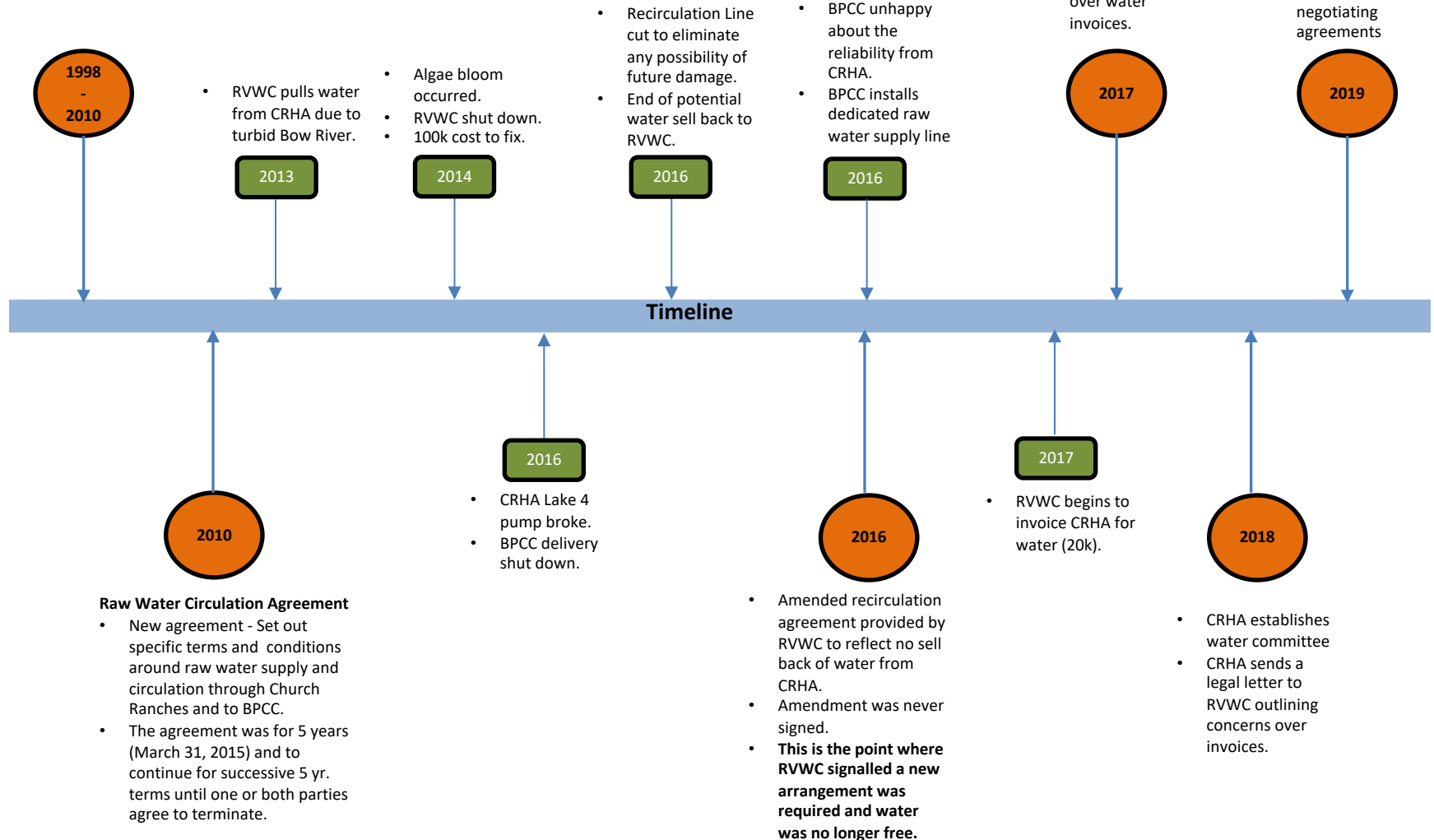
- To maintain the quality and integrity of our lakes.
- Be a consistent supplier of water to the BPCC.
- Be able to recover water costs from yard irrigation and BPCC.



# Church Ranches Homeowners – History

## Original agreement

- RVWC to obtain an easement for the water coop within Church Ranches Land (\$1).
- Required RVWC provide raw water to maintain lake levels.



# Church Ranches Homeowners – Current Situation and Key Considerations

## Rockyview Water Coop



- Previous agreement expired on March 31, 2015.
- Discussions on a new agreement have been ongoing since 2016.
- RVWC no longer wants to be in the middle of a three-way arrangement.
- RVWC is happy to continue to be a good neighbor and supply raw water to CRHA, but this water will be the same cost as other users on the system (BPCC).

## Church Ranches Lake System



- CRHA wants to maintain the quality of the lake water within the community.
- Summer 2018, lake water quality deteriorated and “swimmers itch” was present in the lakes.
- CRHA understands that raw water to maintain lakes and for lawn irrigation is no longer free.
- Irrigation and evaporation need to be accounted for going forward.

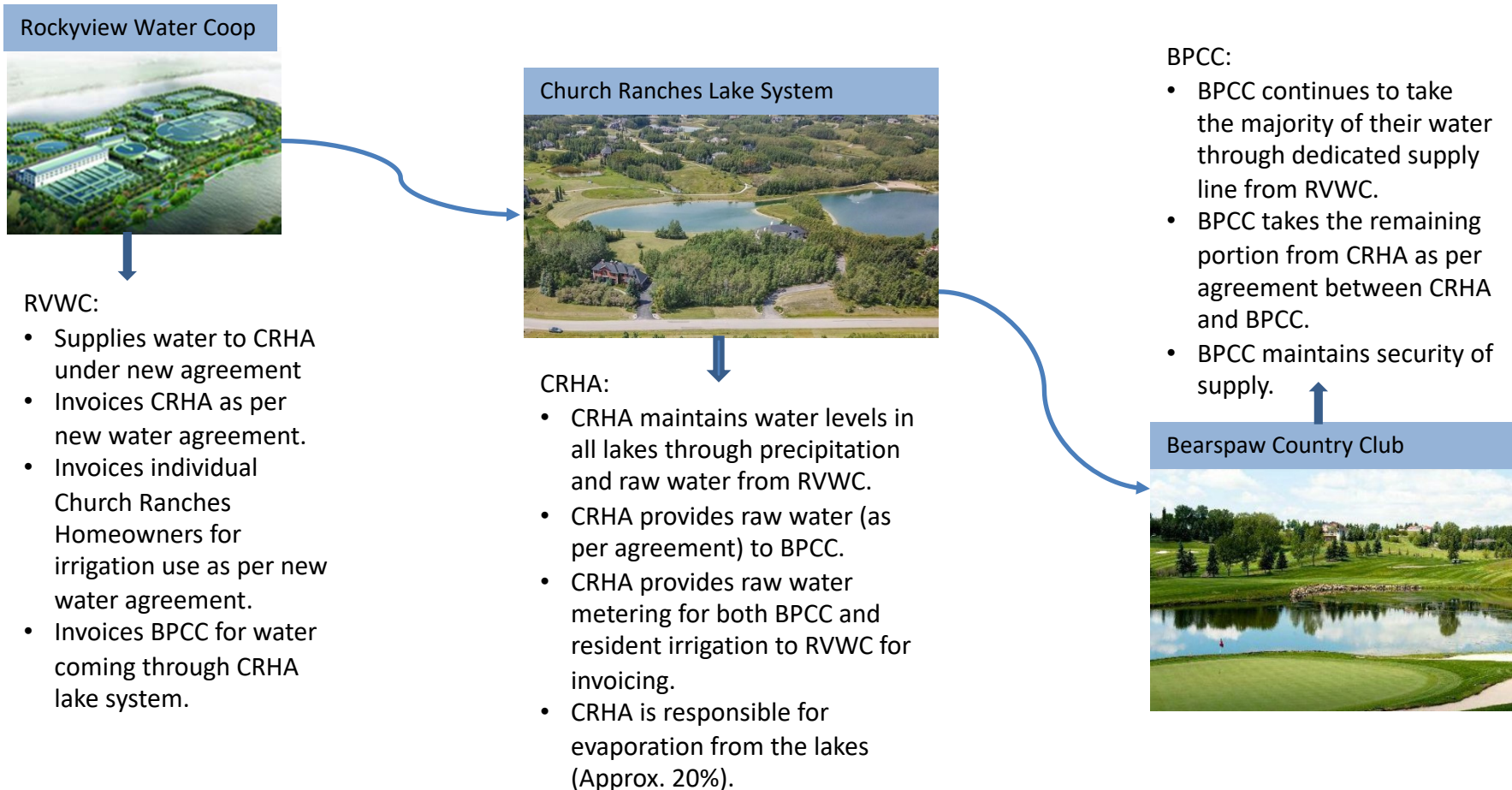
- BPCC takes the majority of their raw water from their dedicated service line.
- BPCC has indicated that they would be willing to take a percentage from CRHA, but reliability is an issue.

## Bearspaw Country Club



# Church Ranches Homeowners – What we are trying to accomplish

Re-establish the flow through system and provide the needed water to maintain lake quality, irrigation opportunities and appropriate cost recovery for CRHA under a new agreement structure.





## **Church Ranches Homeowners – Cost Assumptions**

### **The following assumptions were considered in the Cost Analysis:**

- CRHA will be responsible to manage the water balance to ensure effective cost recovery going forward.
- CRHA has based the cost model on running 35,000 m<sup>3</sup> of raw water annually through the lake system.
- Raw water from the RVWC in 2019 costs \$1/m<sup>3</sup>.
- CRHA assumes 20% of the raw water provided by the RVWC will be lost to system leakage/evaporation. This includes the volume required for homeowner irrigation.

### **Homeowners Irrigation**

- CRHA assumes out of the 30 residences located on lakes, 15 are using lake water for irrigation.
- Irrigation usage ranges from 300-500m<sup>3</sup>/yr\ ( Ave. 400 m<sup>3</sup>/yr).

### **Bearspaw Country Club**

- CHRA is limited in how much water can be delivered to BPCC by the 3" supply line between lakes 3 and 4 to a maximum of 8.9l/s or 4953 m<sup>3</sup>/week.
- BPCC \s main concern is reliability of supply.
- CRHA is negotiating to supply the BPCC with between 1500 - 1900 m<sup>3</sup>/week for a delivery period of 123 days (May-September).
- This would account for 24 – 30% of BPCC weekly water requirements.

## Church Ranches Homeowners – Annual Costs Associated with New Agreements

ITEM	Volume	Cost	CRHA Recoverable Cost
Annual water budget	35,000 m3/yr	\$35,000/yr	
Homeowners Irrigation (15 homes @ 400m3/yr, including 20% evaporation)	8200 m3/yr	\$8200/yr	\$8200/yr
Annual System Evaporation loss (based on 35,000 m3/yr raw water flow)	5800 m3/yr	\$5800/yr	Not recoverable
Water available to BPCC ( annually) based on 12 weeks of delivery (May – August) @ 1500-1900m3/week.	18,000-22,800 m3/yr	\$18,000 – \$22,800/yr	\$18,000 - \$22,800/yr
Annual System Maintenance (60 hrs @75\$/hr) performed by RVWC	NA	\$4500/yr	Not recoverable

- CRHA non recoverable costs = approx. \$10,300 annually
- Annual Cost per CRHA Homeowner – approx. \$53 annually
- Annual cost for Homeowners to Irrigate - approx. \$480/annually
- Water available to BPCC is still be negotiated



## Church Ranches Lake System Benefits Summary

	TODAY	FUTURE	BENEFIT?
CRHA	<ul style="list-style-type: none"> <li>❑ Concern with lake water quality</li> <li>❑ Risk of reduced recreational pleasure</li> <li>❑ Potential property value deterioration</li> <li>❑ Water loss – evaporation &amp; irrigation</li> <li>❑ No compensation for water usage</li> <li>❑ Lost revenue opportunity in high precipitation years for surplus water</li> </ul>	<ul style="list-style-type: none"> <li>❑ Water quality managed</li> <li>❑ Recreational benefits maintained</li> <li>❑ Property values supported</li> <li>❑ Ability to purchase water to replace evaporation &amp; irrigation</li> <li>❑ Ability to capture revenue from irrigation users and surplus water to offset costs</li> </ul>	<ul style="list-style-type: none"> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> </ul>
RVWC	<ul style="list-style-type: none"> <li>❑ Lack of clear accountability in arrangements – maintenance, coordination and water supply</li> <li>❑ Does not want to be in the middle of a 3 way arrangement</li> </ul>	<ul style="list-style-type: none"> <li>❑ Clear accountability for maintenance arrangements and water supply</li> <li>❑ Clear accountability for meter reading coordination and billing arrangements with CRHA</li> <li>❑ Eliminate 3 way arrangement</li> <li>❑ Potentially reduces demands on treatment plant when residences replace potable irrigation water with raw water</li> </ul>	<ul style="list-style-type: none"> <li>✓</li> <li>✓</li> <li>✓</li> <li>✓</li> </ul>
BPCC	<ul style="list-style-type: none"> <li>❑ Current supply of water does not utilize new water features and aerate ponds on north end of course</li> <li>❑ Water from CRHA is not seen as a reliable source</li> <li>❑ No redundancy of water supply for irrigation purposes</li> </ul>	<ul style="list-style-type: none"> <li>❑ Sourcing water from CRHA lakes enhances user experience with improved water features and pond aeration</li> <li>❑ Established management practices ensure security of supply</li> <li>❑ Redundant water supply at same cost of current source</li> </ul>	<ul style="list-style-type: none"> <li>✓</li> <li>✓</li> </ul>
Lakeside Home Owners	<ul style="list-style-type: none"> <li>❑ No current provisions to pay for irrigation water being drawn from lakes</li> <li>❑ Source of raw water for irrigation at risk of being removed</li> </ul>	<ul style="list-style-type: none"> <li>❑ Arrangement in place to allow homeowners to purchase raw irrigation water</li> <li>❑ Economical and environmental benefit</li> </ul>	<ul style="list-style-type: none"> <li>✓</li> <li>✓</li> </ul>

## Church Ranches Homeowners – Going Forward

### Going Forward:

- CRHA Water Committee will continue to work with RVWC to put new agreements in place, based on the principles outlined above.
- CRHA Water Committee will continue to work with BPCC to put a new agreement in place.

***In 2019, Church Ranches should have re-established the flow of Raw Water through the lake system, to maintain the high quality recreational resource that the Community expects.***

