Elbow River Estates Cooperative Ltd
220019434

2026 Reserve Fund Study

Report Finalized: December 10, 2025

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1.0 SUMMARY

1.1 PROPERTY DESCRIPTION

DETAILS	
Property Name	Elbow River Estates Cooperative Ltd
Corporation Number	220019434
Property Address	31157 Elbow River Drive, Calgary, Alberta, T3Z2T9
Details	Water Cooperative
Construction Date	1974
Year End Date	December 31

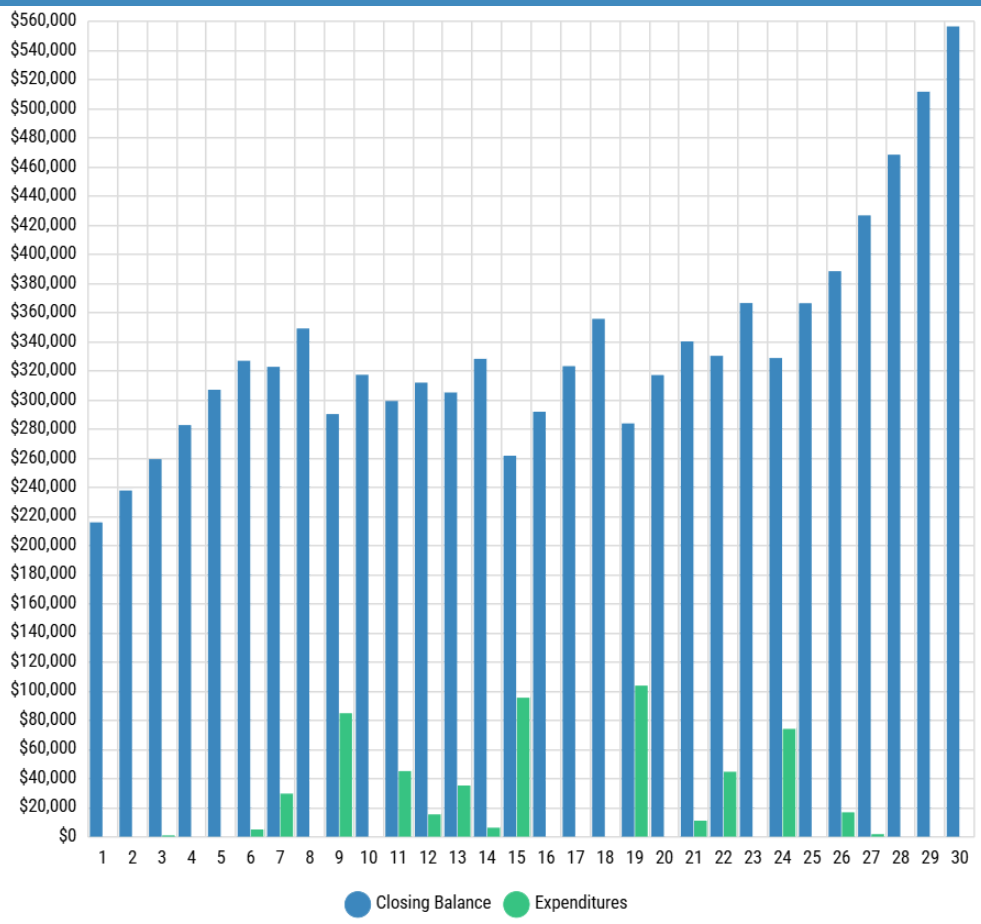
Elbow River Estates Water Cooperative is located in Rocky View County west of Calgary. The Cooperative supplies water to 67 properties in the community. The Water Cooperative started in 1974 and was expanded in 1992. In 2016, the treatment plant (located near highway 8) was full renovated and a UV protection system was installed.

1.2 RESERVE FUND FORECAST

Based on the findings it was determined that the reserve fund is adequately funded and the property is in good condition based upon the average weighted condition of the common property. To ensure proper funding is available to maintain and replace common property, a recommended funding model was generated. The required annual contribution based on this model was determined to be $18,000 starting January 1, 2026. Increases in annual contributions should follow the contribution schedule outlined in the below table. The recommended funding plan results in an expected minimum closing balance of $216,060 which is expected to occur in 2026.

If the Condominium Corporation follows the recommended funding model, Reserve Plus anticipates that the reserve will be well funded for the next 30 years. Any significant unforeseen/covered damage that was not accessible during the site inspection could result in major repairs and would require an alternative funding model.

FORECAST



CONTRIBUTION SCHEDULE

1	$18,000	⟷ 0.000%
2	$18,450	↑ 2.500%
3	$18,911	↑ 2.500%
4	$19,384	↑ 2.500%
5	$19,869	↑ 2.500%
6	$20,365	↑ 2.500%
7	$20,874	↑ 2.500%
8	$21,396	↑ 2.500%
9	$21,931	↑ 2.500%
10	$22,480	↑ 2.500%
11	$23,042	↑ 2.500%
12	$23,618	↑ 2.500%
13	$24,208	↑ 2.500%
14	$24,813	↑ 2.500%
15	$25,434	↑ 2.500%
16	$26,069	↑ 2.500%
17	$26,721	↑ 2.500%
18	$27,389	↑ 2.500%
19	$28,074	↑ 2.500%
20	$28,776	↑ 2.500%
21	$29,495	↑ 2.500%
22	$30,232	↑ 2.500%
23	$30,988	↑ 2.500%
24	$31,763	↑ 2.500%
25	$32,557	↑ 2.500%
26	$33,371	↑ 2.500%
27	$34,205	↑ 2.500%
28	$35,060	↑ 2.500%
29	$35,937	↑ 2.500%

The following report is one option among many to fund a reserve for the property that will allow for adequate maintenance and replacement of common property.

The reserve projections are determined by ensuring the balance of the reserve fund does not run a deficit.

The findings of the report are submitted by,

Taylor Smith, P.Eng

Founder & CTO

Reserve Plus

2.0 INTRODUCTION

2.1 BACKGROUND INFORMATION

The Board of Directors for Elbow River Estates Cooperative Ltd has authorized Reserve Plus to complete a Reserve Fund Study on behalf of the owners. The construction started on the property 1974 and the buildings are assumed to be 52 years old. The basic age of the components was determined to be in the order of 52 years with necessary adjustments made.

The Reserve Study is to be used as a budgeting tool which helps identify the current state of the reserve fund by physically inspecting all applicable assets that fall under the scope of the cooperative reserve. The dollar amounts associated with these assets are projections based off of the data available to Reserve Plus and are set to provide a realistic timeline and budget for when reserve components need to be replaced or repaired.

During the review of the property, the condition of each component was visually analyzed and the remaining life of the component was determined. The associated replacement and/or maintenance cost of each component was then determined. To help in this process, the following documents were made available,

- 1989 Water System Addition Blueprints
- 2016 Disinfection Project
- 2017 Backwash Remedial
- 2018 Backwash Filter Replacment
- Coop Treatment Facilities

2.2 QUALIFICATIONS

Taylor Smith, P.Eng

Founder & CTO

Credentials

- UofC Mechanical Engineering Degree 2011
- APEGA Registered Member

Experience

- Author/Co-Author 300+ Reserve Fund Studies
- 12 Year Reserve Fund Planning
- 15 Years Industrial Auditing

Taylor's qualifications as a reserve fund planner are based on education and experience in the field of reserve fund planning. In 2011, Taylor received a Bachelor of Science in Mechanical Engineering from the University of Calgary.

3.0 STANDARD LIMITING CONDITIONS

The timelines that have been used are based on manufacturer and supplier estimated lifetimes. Visual inspection of current condition along with the current age of the various components has been used to predict the remaining life of each component. Different levels and quality of ongoing maintenance will decrease or extend these estimated timelines. The site map along with actual measurement was used to obtain the quantities of material that would be required. In the event that measurement was not practical, a calculated estimate was used. The cost to replace or maintain is an industry estimate. Based on service and manufacturer costs, expenses may be greater or less than quoted.

It is important to note that during the site visit only visual analysis was conducted and there were no invasive or destructive tests performed. The reserve study assumes that all components will be properly maintained during the scope of the study and does not guarantee the life expectancies and cost estimates of each component. As well, data provided in this study will become less reliable with time. It is an Alberta legal requirement that a new study including a visual inspection and financial update be completed at intervals no longer than 5 years.

It should be noted that Regulation 168/2000 specifies that a capital repair is not to be considered an improvement as long it was accounted for in the most recent study done by the corporation. Section 38 (2) of the Act specifies that in the case of any other capital improvement the use of reserve fund money must be authorized by special resolution of owners. As an example, funding shown would normally be to replace a fence with the same material and footprint. An improved material or larger footprint would have to be accounted for at the time of the study that was in effect or any extra cost should be paid from a source other than the reserve. If reserve money was to be used for an improvement not shown in the study, it is specified that it must be surplus to the needs shown in the study and authorized by special resolution of owners.

4.0 BUILDING COMPONENTS

Each component owned by the corporation that falls under the responsibility of the reserve fund is evaluated during the study. The following section of the reserve fund study outlines the health of each component using a poor, average, good rating system. The rating system typically works as follows,

Good - Typically, any component that has a current life between 0% and 30% of the indicated expected life may be considered 'Good' and shows as green in the current condition. These components should show limited signs of wear and deterioration and should not present any visual risk of potential failure.
Average - Typically, any component that has a current life between 30% and 70% of the indicated expected life may be considered 'Average' and shows as yellow in the current condition. These components should show signs of wear and deterioration and present a low to moderate visual risk of potential failure.
Poor - Typically, any component that has a current life between 70% and 100% of the indicated expected life may be considered 'Poor' and shows as red in the current condition. These components should show moderate signs of wear and deterioration and should present a obvious visual risk of potential failure

Where applicable additional notes in regards to the health of the component or recommendations to help prolong the life of the component are included.

4.1 Water | Distribution System

DESCRIPTION

There are buried water lines that deliver potable water from the main supply system to individual service connections throughout the community. This network is of PVC piping and includes associated fittings, service saddles, and connection hardware. Also included in this component are the curb stop valves located at each property line. The design life of the distribution piping is typically rated for 50-75 years, however, in many cases the piping will exceed this rated life. A maintenance budget has been set to allow for sectional replacement of the underground piping and curb stop valves when required.

SERVICE TYPE	NEXT SERVICE YEAR	COST
Maintenance	2032	$25,000

COMMENTS

- PVC piping typically deteriorates from acidic soils, UV exposure during storage, chemical exposure, or poor installation. Failures from soil conditions, UV exposure, and installation issues would generally occur early in the system's life and are therefore not considered current risks. Chemical deterioration is unlikely, as it would typically result from road salt infiltration or chemical spills, which are not expected.

4.2 Water Wells | Piping

DESCRIPTION

There are (2) water wells that feed the water treatment system. The wells are located on the 10th hole of the golf course and were originally designed with steel liners that have recently been replaced with PVC liners. The main well feeds a 6" pipe and the auxiliary well feeds a 3" pipe. The PVC piping is expected to last the life of the system. A maintenance budget has been set to allow for replacement of sections if required.

SERVICE TYPE	NEXT SERVICE YEAR	COST
Maintenance	2044	$50,000

CONDITION

- Sections of the underground piping have been replaced as they were damaged while the Golf Course was digging near them.
- The PVC piping will not experience degradation due to UV exposure and should last 50-70 years.

4.3 Water Wells | Supply Pumps

DESCRIPTION

Each water well has a submersion pump that takes water from the well and feeds it into the treatment plant. The last replacement date of the water well pumps is unknown. A budget has been set to allow for the replacement of these pumps.

CONDITION | REMAINING LIFE | 2 EA

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2036	$9,000

CONDITION

- The pumps could not be accessed during the site inspection, but there are currently no known issues or concerns with the performance of the pumps.

4.4 Pump House | Building Envelope

DESCRIPTION

There is a pump house located on the golf course that houses a chlorination system, electrical panels and shutoffs and PVC piping. The pump house is constructed out of cinder block and has a cedar shake roof and (1) door. A replacement cost has been set to allow for replacements and repairs to be made to the pump house.

CONDITION | REMAINING LIFE | 1 EA PUMP HOUSE

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2036	$4,000

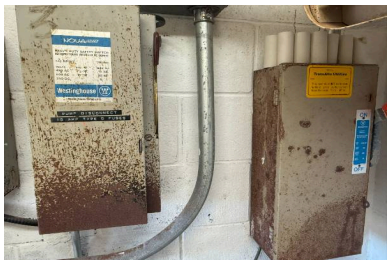
CONDITION

- The cinder block is painted and appears to be in average condition. New applications of paint will be required as the paint weathers.
- The cedar shakes appear to be in average condition with limited signs of deterioration.

4.5 Pump House | Electrical System

DESCRIPTION

The pump house has several heavy duty power switches which control the lites/plugs, heating (baseboard and overhead), pumps and power system. The electrical switches were assumed to be in working condition and installed per the local bylaws and codes at the time the building was constructed. The electrical system and most components should last the life of the property, however, upgrades maybe required when new equipment (i.e. pumps) are installed.



CONDITION REMAINING LIFE

SERVICE TYPE	NEXT SERVICE YEAR	COST
Maintenance	2036	$11,000

CONDITION

- The heavy-duty electrical switches exhibit visible corrosion on their housings. It is likely similar corrosion is occurring on the internal components that may cause failure of the electrical switches.

4.6 Pump House | Heater Baseboard

DESCRIPTION

There is a 4ft long baseboard heater installed in the pump house. The heater consists of a metal enclosure housing a heating elements, which are made of electric resistance coils. A replacement budget has been allocated for the replacement of the baseboard heater.

CONDITION REMAINING LIFE 1 EA BASEBOARD HEATER

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2036	$1,000

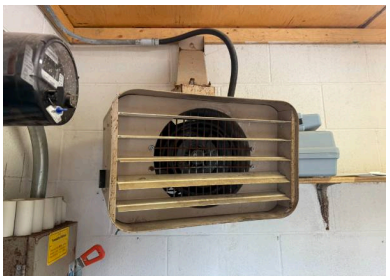
CONDITION

- The heater was assumed to be in working condition during the site inspection. Corrosion on the housing was noted.

4.7 Pump House | Heater Electric

DESCRIPTION

The treatment plant has an overhead electric heater in the basement of the facility. The design life of an electric heater is 30-40 years with minimal maintenance. A replacement budget has been set aside for when the heater fails.



CONDITION | REMAINING LIFE | 1 EA HEATER

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2065	$2,500

CONDITION

- The heater looks original to the property and during the site inspection it was discussed that the heater should be replaced in the near future.

COMMENTS

- A new heater has been purchased and will be installed. No budget has been set for the upcoming year as this will be paid for in 2025.

4.8 Pump House | Pre Chlorination

DESCRIPTION

The water that is pumped out of the wells is first treated by a preliminary chlorination unit. This process also helps protect pipes, and storage tanks from fouling and corrosion. The chlorination unit has (2) peristaltic pumps that feed chlorine into the system. These pumps have a design life of approximately 15-20 years. Ongoing maintenance of the system will be required during the design life of the pumps.

CONDITION | REMAINING LIFE | 2 EA PUMPS

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2034	$3,000

CONDITION

- The pumps were determined to be replaced in October 2018. No issues with the pumps were observed or reported.

4.9 Treatment Plant | Fence

DESCRIPTION

The property has a chain link fence located around the perimeter of the treatment plant property. The typical lifespan of a chain link fence is 30 years and is virtually maintenance free. A budget has been set aside for when the fence needs to be replaced.

CONDITION	REMAINING LIFE	325 LF CHAIN LINK

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2038	$21,125

CONDITION

- No signs of significant damage were found on the fence. The fence posts were providing adequate structural stability to support the fence.

4.10 Treatment Plant | Hardie Board

DESCRIPTION

The exterior of the building is finished with Hardie Board siding and (3) doors. The design life of the building envelope should be 40 years with maintenance expected such as repainting or repair of minor surface damage. Hardie plank is a moisture and rot resistant product constructed of a fiber cement compound. A replacement budget has been set for when the envelope begins to fail.

CONDITION	REMAINING LIFE	1,025 SF HARDIE BOARD / DOORS

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2066	$41,000

CONDITION

- The paint on the door to the generator was found to be peeling.
- One section of the Hardie Board near ground level is damaged.

RECOMMENDATIONS

- The doors should be painted periodically to prolong the life of the doors.

4.11 Treatment Plant | Metal Stairs

DESCRIPTION

The property has a metal stair that provide access to the UV treatment building . The typical lifespan of a metal stair is 40 years and maintenance can be required to ensure adequate weatherproofing. A maintenance budget has been applied to allow for the material to be resealed routinely in order to increase its' lifespan. A replacement budget has been set to allow for a new staircase to be installed required.

CONDITION | REMAINING LIFE | 1 EA METAL

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2056	$3,500
Maintenance	2028	$1,000

CONDITION

- Some rust was present on the stair treads and near the base of the railings.

RECOMMENDATIONS

- The surface rust should be removed and a new paint application should be made.

4.12 Treatment Plant | Roofing System

DESCRIPTION

The roof of the structure is completed with a rubber tile system and 125 linear feet of eavestrough and downspouts. The design life of composite shingles is normally 35-40 years with potential for repairs. Replacement of the roof is not recommended until the material is considered incompetent. A replacement budget has been set to allow for necessary repairs or replacement as required.

CONDITION | REMAINING LIFE | 575 SF COMPOSITE

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2051	$8,900

CONDITION

- Adequate joint lapping was noted which is an indication of proper installation. No areas of concern were noted during the inspection.
- A section of the downspouts has fallen off the side of the treatment plant. The downspout should be reinstalled.

RECOMMENDATIONS

- The roof is the most important component of any given structure and should be prioritized. Any defects or damages identified should be repaired as soon as possible to prevent further damage to the roof and interior structure of the building.

4.13 Treatment Plant | Concrete

DESCRIPTION

The property features concrete sidewalk along the west side of the treatment plant. The lifespan of concrete can be conservatively estimated at 50 years, but can last longer. Maintenance may be required when cracking or deterioration becomes present. A budget has been set to allow for the replacement of the sidewalk.

CONDITION | REMAINING LIFE | 400 SF CONCRETE

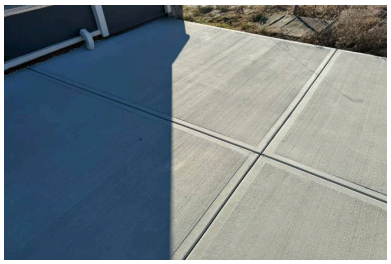
SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2061	$10,000

CONDITION

- The concrete was found in serviceable condition as only minor cracks and/or spalling was found on the service of the concrete.

RECOMMENDATIONS

- Monitor the concrete, and once the damage is severe or becomes a safety issue like a tripping hazard, the concrete should be replaced.



4.14 Treatment Plant | Electrical System

DESCRIPTION

The treatment plant has several heavy duty power switches which control the lites/plugs, heating (baseboard and overhead), pumps and other electrical system. The electrical switches were assumed to be in working condition and installed per the local bylaws and codes at the time the building was constructed. The electrical system and most components should last the life of the property, however, upgrades maybe required when new equipment (i.e. pumps) are installed.

CONDITION | REMAINING LIFE

SERVICE TYPE	NEXT SERVICE YEAR	COST
Maintenance	2044	$15,000

CONDITION

- The electrical equipment appeared to be in average condition with several updates that would have been completed in 2016.

4.15 Treatment Plant | Exhaust Fans

DESCRIPTION

The UV room has an exhaust fans. The typical design life of an exhaust fan is 30-35 years, and required very little maintenance. These units should be replaced as soon as possible once failure occurs to prevent build-up of dangerous gasses. A replacement budget has been set for when the units are expected to fail.

CONDITION | REMAINING LIFE | 1 EA EXHAUST FAN

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2046	$2,250

CONDITION

- The exhaust fan should be maintained regularly to ensure that it is in serviceable condition.

4.16 Treatment Plant | Generator

DESCRIPTION

There is a Chrysler H225 55kW generator located in the treatment plant. The lifespan of a diesel generator is expected to last 20 years. A replacement budget has been applied for the eventual failure of the generator.

CONDITION | REMAINING LIFE | 1 EA GENERATOR

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2040	$65,000

CONDITION

- It is assumed that the generator is tested per the local bylaws. Replacement of the generator is not required until it fails the required test and repairs cannot be made.

4.17 Treatment Plant | Heater Baseboard

DESCRIPTION

There is a 4ft long baseboard heater installed in the treatment building. The heater consists of a metal enclosure housing a heating elements, which are made of electric resistance coils. A replacement budget has been allocated for the replacement of the baseboard heater.

CONDITION | REMAINING LIFE | 1 EA BASEBOARD HEATER

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2047	$1,000

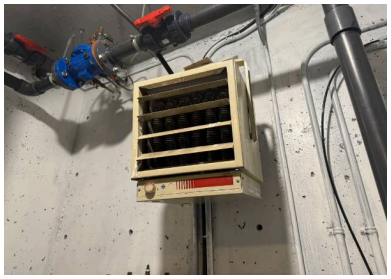
CONDITION

- The heater was assumed to be in working condition during the site inspection.

4.18 Treatment Plant | Heater Electric

DESCRIPTION

The treatment plant has an overhead electric heater in the basement of the facility. The design life of an electric heater is 30-40 years with minimal maintenance. A replacement budget has been set aside for when the heater fails.



CONDITION | REMAINING LIFE | 1 EA ELECTRIC HEATER

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2036	$2,500

4.19 Treatment Plant | Heater Gas

DESCRIPTION

The treatment plant has an overhead gas heater in the UV room of the facility. The design life of an electric heater is 30-40 years with minimal maintenance. A replacement budget has been set aside for when the heater fails.

CONDITION | REMAINING LIFE

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2056	$3,000

CONDITION

- The heater was observed to be working during the site inspection. No issues were observed or reported.

4.20 Treatment Plant | Pumps Booster

DESCRIPTION

There are (2) 5.5HP booster pumps found in the treatment plant. The lifespan of the inline pumps is 15-20 years, but replacement is not required until it fails. A budget has been set to allow for the replacement of the pumps.

CONDITION | REMAINING LIFE | 2 EA WEG

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2036	$8,000

4.21 Treatment Plant | PumpsDistribution

DESCRIPTION

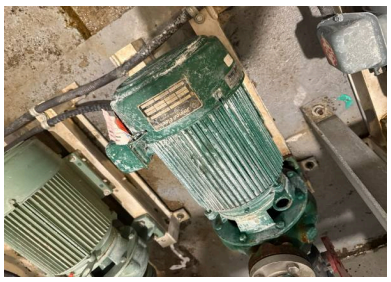
There are (3) 7.5HP distribution pumps that supply the water from the treatment plant to the properties around the water coop. The lifespan of a distribution pump is 20-25 years, but replacement is not required until it fails. A budget has been set to allow for the replacement of the pumps.

CONDITION | REMAINING LIFE | 3 EA PUMPS

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2037	$13,500

CONDITION

- During the site inspection it was determined that the manufacturing date of the pumps were (1) 2012 and (2) 2016.



4.22 Treatment Plant | Pumps Filter

DESCRIPTION

There are (2) 3.0HP filter pumps found in the treatment plant. The lifespan of the inline filter pumps is 15-20 years, but replacement is not required until it fails. A budget has been set to allow for the replacement of the pumps.

CONDITION | REMAINING LIFE | 2 EA WEG

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2036	$6,000

4.23 Treatment Plant | Pumps Sump

DESCRIPTION

There are (2) sump pumps in the water treatment plant. The pumps will require replacement as the fail and are designed to last 10-15 years. A budget has been set to allow for the replacement of the sump pumps.

CONDITION | REMAINING LIFE | 2 EA GRUNDFOS 3PH 60HZ 480V

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2031	$4,400

4.24 Treatment Plant | Backwash Field

DESCRIPTION

The water treatment plant includes a backwash field. The backwash infrastructure is designed for long-term use, typically with a design life of 40–50 years when properly maintained. A replacement budget has been established allow for replacement of the current field

CONDITION | REMAINING LIFE

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2056	$38,000

CONDITION

- The backwash field was redesigned in 2016.

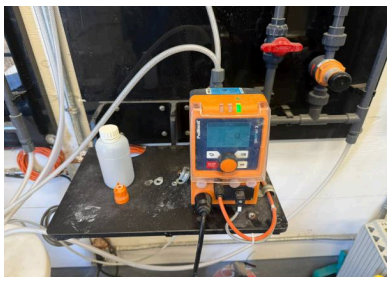
4.25 Treatment Plant | Chlorination

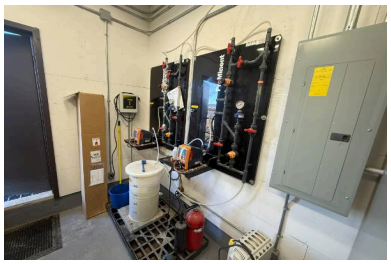
DESCRIPTION

There is a secondary cholorination cycle that is located in the UV room. The chlorination unit has (2) peristaltic pumps that feed chlorine into the system. These pumps have a design life of approximately 15-20 years. Ongoing maintenance of the system will be required during the design life of the pumps.

CONDITION | REMAINING LIFE | 2 EA PUMPS

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2034	$3,000





4.26 Treatment Plant | Greensand Filters

DESCRIPTION

The facility is equipped with (9) greensand filter tanks used for the removal of iron, manganese, and hydrogen sulfide from the water supply. The filter tank has a typical design life of 20–30 years, while the greensand media requires replacement approximately every 10–15 years. A replacement budget has been established to address both the media and tank as they reach the end of their useful life.

CONDITION | REMAINING LIFE | 9 EA GREENSAND FILTER

SERVICE TYPE	NEXT SERVICE YEAR	COST
Replacement	2034	$27,000
Maintenance	2034	$35,000

CONDITION

- Per the documentation provided the media was most recently replaced in 2018.

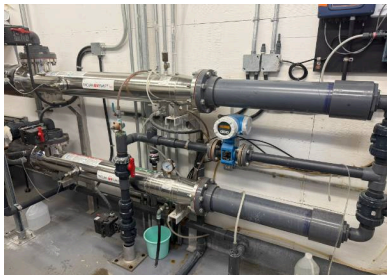
4.27 Treatment Plant | UV System

DESCRIPTION

The water system includes a TrojanUVSwift ultraviolet-disinfection unit used for potable water treatment. The VU system should last the life of the system and the main maintenance item includes replacement of the lamp (which is considered a operating expense). No budget has been set for the future replacement of the system.

CONDITION

REMAINING LIFE



4.28 Treatment Plant | Water Storage

DESCRIPTION

The treatment plant consists of (5) reservoirs which include (1) 22.7 cubic meters of raw water storage and (4) treated water reservoirs that total 326.9 cubic meters. The reservoirs are original to the property and there are no known issues with the reservoirs. Replacement of the reservoirs is not expected, however, a maintenance budget has been set to allow for cleaning of the reservoirs.

CONDITION

REMAINING LIFE

5 EA
RESERVOIRS

SERVICE TYPE	NEXT SERVICE YEAR	COST
Maintenance	2059	$20,000

CONDITION

- In 2016 the reservoirs were completed cleaned out and the placement of the piping was changed to increase the movement of the water in the tanks.

5.0 Reserve Fund Forecast

5.1 Components

Below is a summary of all the components that were included in Section 4. Each components determined service age, expected service life, service year and current cost to replace or maintain is listed.

	REPLACEMENT SERVICE				MAINTENANCE SERVICE			
	ASSUMED AGE	EXPECTED LIFE	NEXT SERVICE YEAR	CURRENT COST	ASSUMED AGE	EXPECTED LIFE	NEXT SERVICE YEAR	CURRENT COST
Water | Distribution System					9	15	2032	$25,000
Water Wells | Piping					7	25	2044	$50,000
Water Wells | Supply Pumps	28	25	2036	$9,000				
Pump House | Building Envelope	52	40	2036	$4,000				
Pump House | Electrical System					10	20	2036	$11,000
Pump House | Heater Baseboard	52	30	2036	$1,000				
Pump House | Heater Electric	1	40	2065	$2,500				
Pump House | Pre Chlorination	7	15	2034	$3,000				
Treatment Plant | Fence	51	30	2038	$21,125				
Treatment Plant | Hardie Board	10	50	2066	$41,000				
Treatment Plant | Metal Stairs	10	40	2056	$3,500	10	12	2028	$1,000
Treatment Plant | Roofing System	10	35	2051	$8,900				
Treatment Plant | Concrete	10	45	2061	$10,000				
Treatment Plant | Electrical System					7	25	2044	$15,000
Treatment Plant | Exhaust Fans	10	30	2046	$2,250				
Treatment Plant | Generator	52	50	2040	$65,000				
Treatment Plant | Heater Baseboard	9	30	2047	$1,000				
Treatment Plant | Heater Electric	52	40	2036	$2,500				
Treatment Plant | Heater Gas	10	40	2056	$3,000				
Treatment Plant | Pumps Booster	10	20	2036	$8,000				
Treatment Plant | PumpsDistribution	14	25	2037	$13,500				
Treatment Plant | Pumps Filter	10	20	2036	$6,000				
Treatment Plant | Pumps Sump	10	15	2031	$4,400				
Treatment Plant | Backwash Field	10	40	2056	$38,000				
Treatment Plant | Chlorination	7	15	2034	$3,000				
Treatment Plant | Greensand Filters	52	25	2034	$27,000	7	15	2034	$35,000
Treatment Plant | UV System								
Treatment Plant | Water Storage					7	40	2059	$20,000

5.2 DEFINITIONS

The 30 year cash flow projection documents the estimated contributions and expenditures for the reserve fund over the next 30 years. This section outlines the yearly expenditures, opening balances, yearly contributions, and the return on savings.

EXPENDITURES

The year expenditures are the total of all the reserve fund expenditures for a given year. It is assumed that the expenditures outlined by the reserve study are made at the beginning of each year.

OPENING BALANCE

The opening balance is the cash resources available to the cooperative at the beginning of each year.

CONTRIBUTION

The year contribution is the amount of money that is being contributed to the reserve fund.

RETURN ON SAVINGS

The return on savings is the amount of money the available cash resources will accumulate in interest assuming an interest rate of 1.50%

INFLATION RATE

The inflation rate used to calculate future cost of reserve fund component replacement costs is 2.50%

CLOSING BALANCE

The closing balance is the amount of available cash resources at the end of the fiscal year.

5.3 FORECAST

	Year 1 (Jan-2026)	Year 2 (Jan-2027)	Year 3 (Jan-2028)	Year 4 (Jan-2029)	Year 5 (Jan-2030)	Year 6 (Jan-2031)	Year 7 (Jan-2032)	Year 8 (Jan-2033)	Year 9 (Jan-2034)	Year 10 (Jan-2035)
Water | Distribution System	$0	$0	$0	$0	$0	$0	$29,717	$0	$0	$0
Water Wells | Piping	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Water Wells | Supply Pumps	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump House | Building Envelope	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump House | Electrical System	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump House | Heater Baseboard	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump House | Heater Electric	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump House | Pre Chlorination	$0	$0	$0	$0	$0	$0	$0	$0	$3,747	$0
Treatment Plant | Fence	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Hardie Board	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Metal Stairs	$0	$0	$1,077	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Roofing System	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Concrete	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Electrical System	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Exhaust Fans	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Generator	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Heater Baseboard	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Heater Electric	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Heater Gas	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Pumps Booster	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | PumpsDistribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Pumps Filter	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Pumps Sump	$0	$0	$0	$0	$0	$5,103	$0	$0	$0	$0
Treatment Plant | Backwash Field	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Chlorination	$0	$0	$0	$0	$0	$0	$0	$0	$3,747	$0
Treatment Plant | Greensand Filters	$0	$0	$0	$0	$0	$0	$0	$0	$77,430	$0
Treatment Plant | UV System	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Water Storage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Expenditures	$0	$0	$1,077	$0	$0	$5,103	$29,717	$0	$84,923	$0
Opening Balance	$195,000	$216,060	$237,889	$259,418	$282,838	$307,099	$327,044	$322,818	$349,217	$290,354
Contributions	$18,000	$18,450	$18,911	$19,384	$19,869	$20,365	$20,874	$21,396	$21,931	$22,480
Return on Savings	$3,060	$3,379	$3,694	$4,037	$4,392	$4,683	$4,616	$5,003	$4,129	$4,524
Closing Balance	$216,060	$237,889	$259,418	$282,838	$307,099	$327,044	$322,818	$349,217	$290,354	$317,358
Special Assessments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

	Year 11 (Jan-2036)	Year 12 (Jan-2037)	Year 13 (Jan-2038)	Year 14 (Jan-2039)	Year 15 (Jan-2040)	Year 16 (Jan-2041)	Year 17 (Jan-2042)	Year 18 (Jan-2043)	Year 19 (Jan-2044)	Year 20 (Jan-2045)
Water | Distribution System	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Water Wells | Piping	$0	$0	$0	$0	$0	$0	$0	$0	$79,933	$0
Water Wells | Supply Pumps	$11,809	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump House | Building Envelope	$5,248	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump House | Electrical System	$14,433	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump House | Heater Baseboard	$1,312	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump House | Heater Electric	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump House | Pre Chlorination	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Fence	$0	$0	$29,121	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Hardie Board	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Metal Stairs	$0	$0	$0	$0	$1,448	$0	$0	$0	$0	$0
Treatment Plant | Roofing System	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Concrete	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Electrical System	$0	$0	$0	$0	$0	$0	$0	$0	$23,980	$0
Treatment Plant | Exhaust Fans	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Generator	$0	$0	$0	$0	$94,139	$0	$0	$0	$0	$0
Treatment Plant | Heater Baseboard	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Heater Electric	$3,280	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Heater Gas	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Pumps Booster	$5,248	$5,380	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | PumpsDistribution	$0	$6,052	$6,203	$6,358	$0	$0	$0	$0	$0	$0
Treatment Plant | Pumps Filter	$3,936	$4,035	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Pumps Sump	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Backwash Field	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Chlorination	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Greensand Filters	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | UV System	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Water Storage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Expenditures	$45,267	$15,466	$35,324	$6,358	$95,588	$0	$0	$0	$103,912	$0
Opening Balance	$317,358	$299,386	$311,974	$305,189	$328,312	$261,839	$292,032	$323,334	$355,779	$283,929
Contributions	$23,042	$23,618	$24,208	$24,813	$25,434	$26,069	$26,721	$27,389	$28,074	$28,776
Return on Savings	$4,254	$4,436	$4,331	$4,669	$3,682	$4,123	$4,581	$5,055	$3,989	$4,475
Closing Balance	$299,386	$311,974	$305,189	$328,312	$261,839	$292,032	$323,334	$355,779	$283,929	$317,179
Special Assessments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

	Year 21 (Jan-2046)	Year 22 (Jan-2047)	Year 23 (Jan-2048)	Year 24 (Jan-2049)	Year 25 (Jan-2050)	Year 26 (Jan-2051)	Year 27 (Jan-2052)	Year 28 (Jan-2053)	Year 29 (Jan-2054)	Year 30 (Jan-2055)
Water | Distribution System	$0	$43,039	$0	$0	$0	$0	$0	$0	$0	$0
Water Wells | Piping	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Water Wells | Supply Pumps	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump House | Building Envelope	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump House | Electrical System	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump House | Heater Baseboard	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump House | Heater Electric	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump House | Pre Chlorination	$0	$0	$0	$5,426	$0	$0	$0	$0	$0	$0
Treatment Plant | Fence	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Hardie Board	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Metal Stairs	$0	$0	$0	$0	$0	$0	$1,948	$0	$0	$0
Treatment Plant | Roofing System	$0	$0	$0	$0	$0	$16,913	$0	$0	$0	$0
Treatment Plant | Concrete	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Electrical System	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Exhaust Fans	$3,779	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Generator	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Heater Baseboard	$0	$1,722	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Heater Electric	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Heater Gas	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Pumps Booster	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | PumpsDistribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Pumps Filter	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Pumps Sump	$7,390	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Backwash Field	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Chlorination	$0	$0	$0	$5,426	$0	$0	$0	$0	$0	$0
Treatment Plant | Greensand Filters	$0	$0	$0	$63,305	$0	$0	$0	$0	$0	$0
Treatment Plant | UV System	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Treatment Plant | Water Storage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Expenditures	$11,169	$44,761	$0	$74,158	$0	$16,913	$1,948	$0	$0	$0
Opening Balance	$317,179	$340,316	$330,448	$366,625	$328,856	$366,590	$388,544	$426,857	$468,583	$511,818
Contributions	$29,495	$30,232	$30,988	$31,763	$32,557	$33,371	$34,205	$35,060	$35,937	$36,835
Return on Savings	$4,811	$4,660	$5,189	$4,625	$5,177	$5,495	$6,055	$6,666	$7,298	$7,954
Closing Balance	$340,316	$330,448	$366,625	$328,856	$366,590	$388,544	$426,857	$468,583	$511,818	$556,607
Special Assessments	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0