Regional District of
Kitimat-Stikine

DRINKING WATER CONSERVATION PLAN 2023

Contents

PLAN SUMMARY

At its simplest, water conservation is the effort of learning to use less water while maintaining quality-of-life standards. There are many reasons to conserve water, and for a community, it makes sense to plan that conservation effort.

The goal of Regional District of Kitimat-Stikine's Water Conservation Plan (WCP) is to set out a framework for the next 10 years that allows a water utility to influence demands. In the short term, benefits may include cost savings due to reducing demands on the infrastructure; in the long term, a WCP will be a useful tool in developing adaptive strategies to mitigate effects of climate change, growing populations, and increasing demand for safe potable water.

Historical water use in the Thornhill community water system (TCWS) was studied, and through analysis of the average day and maximum day demands, it was found that the average day demand has increased by 25% and minimum day demand increased more than 10% in the last 3 years. In addition, average day per capita demands are significantly high and above national averages for water consumption. The current litres per capita per day (L/c/d) for the TCWS is 839.83L/c/ compared to the national average of 411 Litres/person/day in 2019 which includes residential, industrial, commercial, and other uses of water provided by public utilities.

Encouraging a focus on reducing maximum day demands through water conservation practices will alleviate stress on the drinking water infrastructure. The goal of the 2023 Water Conservation Plan is the attainable water conservation target of a 25% reduction in water demand over 10 years. This would result in an average day demand of 600-650 L/c/d.

1. CONSERVATION PLANNING GOALS

Water conservation methods include reducing water consumption, increasing efficiency, and reducing pollution at the household, industrial, and government levels. Improved technology, processes, and policy can all be used to conserve water and avoid issues such as water scarcity. From the RDKS perspective, the following goals serve as a starting point for these discussions:

1. Integrate strategic water planning into long range sustainability planning for the community and the region (i.e., 10 to 50 years)
2. Achieve water savings of 25% or more in the next 10 years.
3. Eliminate the need for new infrastructure requirements related to increased demand resulting from system inefficiencies, behaviours, and attitudes.

2. SYSTEM OVERVIEW

The Thornhill CWS's drinking water system supply consists of four water wells: PW1, PW2, PW4 and the Woodlands System well located on Hemlock Street. PW1 and PW2 are the active supply wells; as of December 2022; PW4 has not been connected to the CWS and has been idle since its completion in October 2009. The Woodlands System well is a lag well used for emergency back-up purposes only. The Regional District also has 2 water licenses on surface sources that can be utilized in an emergency. PW1

and PW2 are both situated within confined aquifers, while PW4 is located within an unconfined aquifer. PW4 is not currently connected to the community system, and RDKS is working on tying this well to the system. The Woodlands System well is located within a deep confined aquifer. It is connected to the system, though is not regularly used and is kept as a back-up well for emergency use only.

2.1. Water Storage

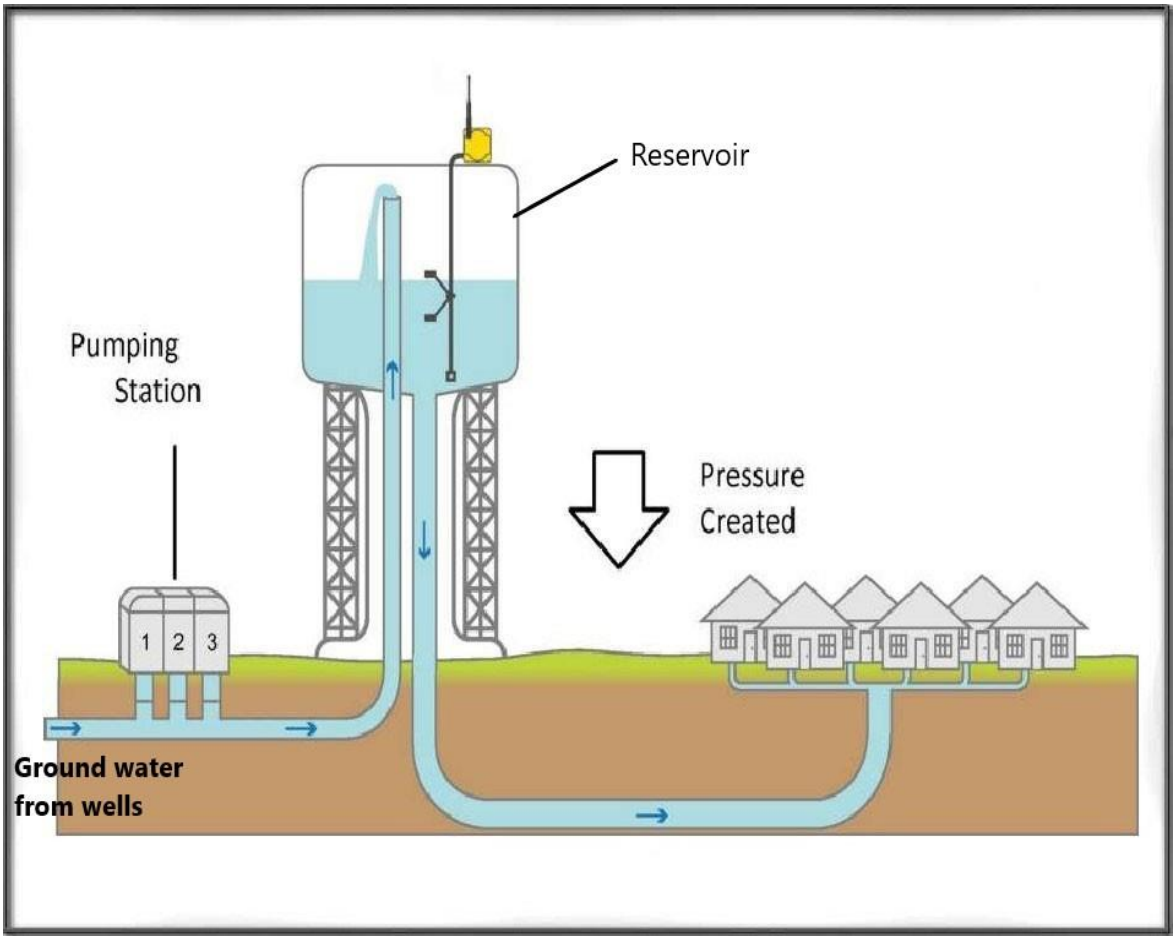
Water is stored within three reservoirs present within the Thornhill CWS. One reservoir is located at the top end of Thornhill Street, the main reservoir at the conner of Old Lakelse Lake Drive & Crescent Street and one on Clark Street near the Thornhill Schools.

2.2. Water Distribution

Water is pumped via installed submersible pumps within the production wells (PW1 and PW2). From the wells, water is conveyed through the distribution system to the three reservoirs for storage purposes. Water does not travel through any treatment facilities prior to entering the distribution system.

2.3. Water Treatment

The water does not undergo any form of treatment as to date it is of good quality, because it is sourced from deep groundwater aquifers. However recent investigations have determined that the aquifer is not confined and under the influence of groundwater.



Model of Thornhill community water distribution system

3. CONSERVATION PLAN BENEFITS

The RDKS has a sustainable year-round source of drinking water. The TWS obtains its potable water from groundwater wells. As our community continues to grow, a greater stress has been applied on the water source and the ability to deliver water through the network infrastructure. Sustainable water usage practices and ethics will need to be applied to preserve our drinking water quality and quantity. Water conservation programs have the ability to defer, reduce, and/or eliminate the need for water supply and/or wastewater facilities upgrades. A reduction in wastewater flows can reduce treatment costs and provide environmental benefits in terms of reduced discharges. Water conservation can extend water supplies and reduce operating costs and energy use. By reducing water use and, therefore, water withdrawals, water quality can be improved, ecosystems maintained, and water resources will be protected. As a result, even water systems with an abundant supply of water can benefit from a conservation plan by using existing resources more efficiently and saving resources over the long term. This can also present a cost savings for the residents.

Potable water availability is still currently abundant all year round in Thornhill. However, with the total consumption increasing around 25% in the last 3 years has put pressure on the Rdks to reduce these demands on the system in order to avoid huge financial investment costs where possible. Despite Rdks having a reliable source of water, there are still benefits that can be realized by implementing a water conservation plan. These benefits include:

- Reduced operation and maintenance (O&M) cost for the water supply systems.
- Reduced demand on the aquifer.
- Reduced flows to the wastewater treatment lagoon.
- Reduced or delayed capital expansion costs for the water system and the wastewater system.
- Reduced rate of demand increase.

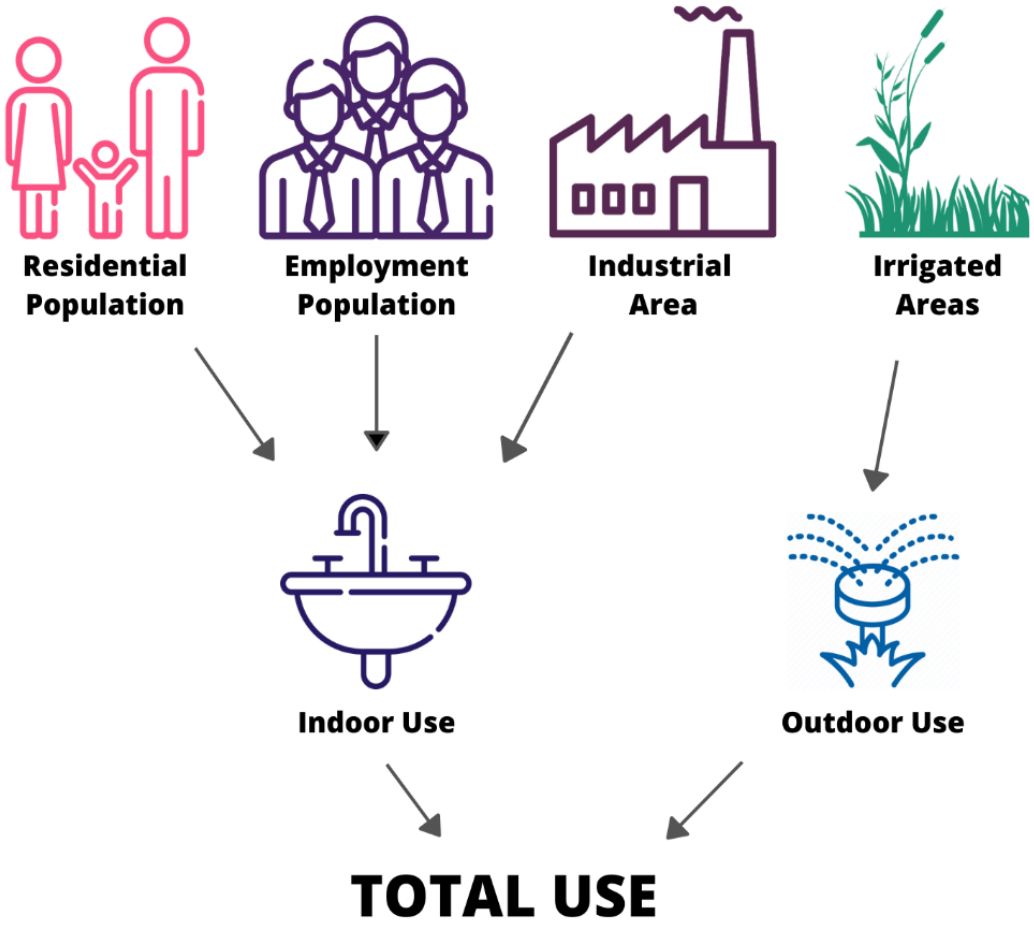
4. WATER DEMAND FORECAST

Item	2020	2021	2022	5-year forecast
Total Annual water Demand	960,009.80 m3	1,070,128.72 m3	1,264,473.2 m3	1,643,815.16 m3 (30% increase from 2022)
Number of connections	1585	1621	1621	1,783 (10% increase)
Population	4192	4125	4125	4,537 (10% increase)
Maximum Day demand		4808.33 m3	4848.26 m3	6,200 m3 (30% increase)
Minimum Day demand		2396.38 m3	2609.11 m3	3,400 m3 (30% increase)
Average Day demand	2630.16 m3	2931.85 m3	3464.31 m3	4,500 m3 (30% increase)

Liters/ Capita/ Day	627.4 L/c/d	710.7 L/c/d	839.83 L/c/d	992.53 L/c/d

As future production requirements are evaluated, there are limitations in making these projections. While actual demand is difficult to predict, potential future demands can be established by evaluating select demographic factors. This information then informs projections of total water use. Water production requirements in the service area were estimated by first developing projections for the four characteristics predictive of demand.

- Residential Population to predict residential indoor use.
- Employment Population to predict commercial and institutional indoor use.
- Industrial Area to predict industrial uses; and
- Irrigated Area to predict outdoor use for all water user classifications.
- (Residential, commercial, agricultural, institutional, and industrial).



5. WATER SUPPLY FORECAST

5.1. Existing Sources

The existing water supply comes from 2 different wells, PW#1 and PW#2.

Item	Flow rate	Maximum in a Day
Pump #1	31L/s	2,678.4 m3
Pump #2	50 L/s	4,320.0 m3
Pump #4	Not in use	Not in use

5.2. Future Sources

PW #4 has not been connected to the CWS and had been idle since its completion in October 2009. RDKS is currently working on connecting PW #4 to the Thornhill community water distribution system.

6. WATER SYSTEM RISK

When planning for water supply, it is important to prepare for uncertainty by identifying and addressing risk and vulnerability to water supplies and the vulnerabilities within the system infrastructure. These uncertainties take the form of extreme weather conditions, system interruptions or failures, or other events. Careful analysis and planning can mitigate or ameliorate negative outcomes. Some of the identified risks associated with the TCWS are.

6.1. Single point Failure leads to Supply interruptions in the system (Operational):

Any Operational failure (mechanical, Electrical, etc) that can affect the water system and lead to the inability to meet the demand of the community. Some examples in the TCWS for this are:

- Potential failure to either of PH#1 or PH#2 due to either mechanical, electrical or any other means will cause an inability to pump water to the TCWS which is a challenge for RDKS to meet customer demand. PH#1 alone cannot produce enough water to meet the average demand of the community. PH#2 has more pumping capacity but can't meet the maximum demand of the community alone.
- A single point failure to certain sections of the Distribution system which are not looped and having AC pipes of more than 40 years of old can leads to supply interruptions to the community.

6.2. Maximum supply capacity:

Analysing the historical data shows the system supply capability almost reached 90 percent of the maximum supply capacity. The forecasted supply of water for the next 5 year could be beyond the current supply capability of the system excluding the scenario of commissioning the PW#4 as planned.

6.3. Climate Change impacts demand (Drought, Hot summer days):

There are several conceivable events that might affect future supplies in such a way that would cause future performance to be different than the historical record might suggest. These events can range from temporary supply interruptions (with causes such as sudden equipment failure, earthquake, or wildfire) to long term changes to supply performance (with causes such as climate change).

Unexpected drought or hot summer days will put pressure on the current system to meet the demand. For example, 2023 maximum daily demand almost reached the 90 percent mark of the maximum daily demand achievable by the system.

A letter from Ministry of Forests regarding to **"Low water Advisory & Water conservation Request-Skeena Region"** is provided in **Appendix A.**

6.4 Source Contamination:

The aquifers for the water supply wells are situated in an existing residential subdivision with individual on-site wastewater treatment systems (individual septic tanks and distribution fields). Some of the systems are old and malfunctioning can present an increased risk to the aquifer. Such an event can lead to a long-term service interruption from the current source in the form of boil water advisories or necessitate remediation actions that could be costly.

6.5. Increasing population:

Population is one of the major factors affecting the demand for the community. There are visible signs of population increase and planned developments in the Thornhill community through potential infill of existing residential zoned lots.

6.6. Aged infrastructure:

The TCWS infrastructure is more than 40 years of old. Some sections of the water system are showing evidence of infrastructure damage and leakage. This increases the potential risk to the distribution system with the additional pressures on the system in both demand and supply capabilities.

7. WATER SYSTEM RISK RECOMMENDATIONS

Based on the analysis summarized above, some of the following actions are recommended for inclusion in the **water conservation plan**

Protect and Manage Water Supply: The Regional district will require to consider implementing some measures to identify the potential threat for the water source and implement some action plans. This includes:

- Developing a Source Protection Plan.
- Implementing a Septic System Management Plan to monitor the condition of septic tanks in the community and ensuring that they are operating properly.
- Providing additional water source to the system from a different Aquifer.
- Continue to monitor supplies and demands into the future and refine project timelines accordingly.

Monitor Effects of Climate Change: Climate change impacts analysis should continue to remain a component of long-term water resource planning. Though immediate changes in climate or weather variability can be addressed differently, increasing frequency or duration of these variables will affect day-to-day water demand. As such, it is important to consider the impacts of climate change not only on supply, but also demand.

Review and Re-evaluate Conservation Goals: Regular review of conservation goals and outcomes will help to reduce risk, increase resiliency, and improve the ability to respond to changes in demand and supply.

8. WATER CONSERVATION PLAN:

The goal of water conservation planning is to achieve more efficient water-use by residential, industrial, commercial, agricultural, and institutional consumers in the Thornhill community water system service area. The impetus for moving toward water conservation is both economic and environmental. Economic concerns include a desire to alleviate capacity constraints, defer infrastructure renewal and replacement costs, and reduce operational costs. Environmental considerations involve minimizing the impact of extracting water from the natural environment (Aquifer).

Water management practices and tools must be applied for the Regional District of Kitimat-Stikine to adhere to water conservation targets, delay and minimize infrastructure upgrades, reduce operational and maintenance costs, and maintain a safe and reliable supply of drinking water for the community. Water conservation programs are beneficial to a system that are unmetered, as leaks or other forms of water loss can be substantial and remain unaccounted for. Reducing water demand will also help to

- Ensure the future reliability of drinking water supplies.
- Protect water resources and be responsible environmental stewards; and,
- Use water resources efficiently.

The following strategies will be implemented under the Regional District of Kitimat-Stikine Water Conservation Program to meet water conservation targets:

1. Water-Use Restrictions
2. Water Metering – Encourage Additional Participation
3. Water Loss Management Program – Leak Detection
4. Public Education and Outreach Program
5. Bylaw updates

8.1. WATER USE RESTRICTIONS:

Currently the Regional District regulates water restrictions and rates through Bylaw No:582, Bylaw No:764 and Bylaw No: 772. The Bylaws are in effect year-round and limits the days and hours during which residents may use irrigate a lawn or domestic garden.

A homeowner or occupier of a Parcel of Land or Premises must not irrigate or cause to be irrigated a Lawn or Domestic Garden between 8:00 a.m. and 7:00 p.m. Hand watering of domestic gardens using a handheld garden hose with a working spring-loaded shut-off nozzle, or a handheld container is allowed at any time.

In addition to the restrictions, as required during periods of drought or other water shortage situation, the Board may bring into effect Stage I or Stage II temporary water use restrictions set out in Schedule "C" of this Bylaw.

In addition, a person must not waste water by:

(i) allowing water to run onto a driveway, highway, or other surface.

(ii) allowing water to run onto an adjacent property.

(iii) continually running water in an attempt to prevent the freezing of a Customer Supply Line; or

(iv) by failing to repair a leak.

Presently, the Regional District does not impose any fines for violators. Enforcement of mandatory water restrictions is fundamental to their success. Water restrictions target maximum day demand but are only effective if they are adhered to by the community. This requires community buy-in and strict enforcement. Maintaining the current regime of water restrictions is inexpensive but does not yield the outcome sought.

Suggestions:

Impose Water Restriction Violation Fines

Currently the Regional District doesn't impose any fines for water restriction violations. To address maximum day demand and minimize stress on the pumping infrastructure, the Water Conservation Plan is suggesting a three-stage water restriction violation matrix that includes higher fines that coincide with staged watering restrictions. The three fine rates are for the three different stages, normal stage, Stage 1, Stage 2.

Enforce Water Restrictions:

To target maximum day demand and achieve reliable reductions in water demands, it is compulsory that the water-use restrictions be enforced by the Regional District. Resources must be dedicated to this initiative to make it effective.

By imposing mandatory sprinkling restrictions during working hours, between 8:00am and 7:00pm, enforcement will be more attainable.

8.2. WATER METERING:

Water metering has been identified as one of the most effective tools for increasing awareness of water conservation and inefficient water usage. When households pay for the amount of water used rather than a flat rate, there is incentive to decrease water consumption to decrease their utility bill. In a community like Thornhill, where the general perception of quality water resources is plentiful and not a concern, there is less incentive to reduce lawn sprinkling times or identifying leaks. When combined with public education and volumetric pricing, water meters can produce dramatic reductions in water consumption. Water meters assist with increasing awareness of household water consumption and allow users to detect leaks when they see water consumption reflected in their utility bill.

The implementation of universal water metering for all residential properties in Thornhill is not being recommended as a part of the 2023 Water Conservation Plan; due to the high cost associated with purchasing and installing the water meters for each residence in the Thornhill. The reduced water usage offsets associated with universal water metering cannot justify the high implementation costs at this time. In this Water Conservation Plan, the introduction of voluntary residential water metering is recommending for implementation. Installation of water meters for all new construction will be mandatory.

8.2.1. Volunteer water meter program

The volunteer water meter program will be recommending by offering water meters to property owners. As a part of this program, the cost of the meter is covered by the RDKS. The volunteer property owner is responsible for the installation of the water meter by a certified plumber. Public education and promotion of the benefits associated with the volunteer water meter program will be increased and directed to users that will benefit from the programs. This is an experimental program that will provide a greater public

awareness through social medias, Rdks website, notices, etc. Rdks will evaluate the outcome of this program each year.

Suggestion:

Give subsidy to the customers and make an impression on the customer that this is beneficial for them and the community.

8.2.2. Replacing faulty water meters:

Some of the customers meters are not working properly and the Regional District of Kitimat-Stikine is charging them based on their past consumption. Notices will be sent to customers for replacing their faulty meters with the standard meter preferred by the regional district.

Suggestion:

If the customer is not ready to replace the meter, Rdks recommends to amend the Bylaw and not only charge the customer based on the past consumption, but there also needs an increase in the bill by certain percentage or a penalty.

8.2.3. Private hydrant consumption:

Some private companies and residents outside the existing service area are using the TWS hydrant as a water source to some of the projects and filling cisterns. Rdks needs to evaluate this and increase the rate charging for consumption. Action like this to discourage the private hydrant usage in the future because of the comparatively high price for the water and ensures that residential user outside the system pay a fair price.

Suggestion:

Implement Stage wise water consumption rates.

8.2.4. Calibrate flow meters:

As water meters age they can become less accurate and produce incorrect water consumption data. To ensure accuracy of water production volumes and network distribution, Flow meters will be calibrated at all pump stations, Booster stations, Reservoirs.

8.3. WATER LOSS MANAGEMENT

The water in the distribution system can be classified into two categories: authorized consumption or water loss. Authorized consumption can be either metered or unmetered water use that may or may not be billed. Water loss can be either the apparent losses due to meter inaccuracies or unauthorized consumption, or real losses due to water leaks/breaks.

Every water system loses water through leaks and breaks and maintenance activities. Even newly constructed water lines are allowed a certain minimum leakage rate depending on system pressure, pipe size, number of joints, type of pipe and number of water services. Most water systems experience breaks or leaks in watermains, service lines, hydrants, tanks, valves, and appurtenances that occur due to a variety of causes. The problems associated with ageing facilities and deteriorating system components are part of the growing infrastructure problem faced by most utilities.

In all water distribution systems, a significant amount of water and money can be wasted through leakage. Large volumes of water can escape a distribution system, and whatever surrounds that system may ultimately find its way into it. Negative pressure in water pipelines can draw pathogens into the system through leakage areas.

Water loss carries a significant price tag, both economic and environmental. It is not cost effective to have a product that does not reach its consumer. Nor is it a good use of resources to treat a raw product only to have it lost in the distribution system. Proper accounting of water used and lost, with corrective measures, will help reduce the costs associated with potable water and lead to a more sustainable product.

There are three general components to a Water Loss Control Program:

- Water audits
- Leak detection
- Infrastructure Replacement

8.3.1. Water audit:

A water audit is a process to measure consumption and losses in a system. A water audit enables the Regional District to determine the water supplied, consumed, and lost in the distribution system. It also allows the Regional District to quantify the cost of that lost water. This also helps to find out the per capita consumption for a day and compared with the past data.

Pressure Zone Water Meters

The installation of water meters to all single-family residential properties in Thornhill is not currently feasible. Without universal water metering it is difficult to accurately determine the breakdown of water use by sector, such as residential, commercial, and industrial usage as well as system water loss. To compensate for this data gap, water meters will be installed in different pressure zones of the distribution system to obtain regional baseline water consumption data throughout the Thornhill community water system. This data can be compared with theoretical flows and will further assist with determining how much treated water is lost from the system.

Regional Flow Analysis

Performing a system water audit is difficult without the use of water meters to determine water consumption. Therefore, a base level of information about the system will be required to carry out a water audit which will be achieved by analysing and evaluating the data obtained through the installation of water meters in each pressure zone throughout the TCWS. The data will be used to perform a regional flow rate analysis in each pressure zone to determine which areas of the distribution system may be losing water to leakage.

8.3.2. Leak Detection and Repair Program:

In combination with a system water audit, a leak detection and repair program are implemented to reduce the volume of non-revenue water related to system losses. Initial steps are to review leak, break, and maintenance data to identify areas of historical pipe problems.
Historically the Regional District currently did not have a leak detection program and is mostly reliant on service requests to identify and repair leaks. The Works and service department purchased a Leak detection equipment and will be implementing a program to proactively identify leaks in the system as part of a preventative maintenance program.

8.3.3. Infrastructure Replacement:

- Probability of leaks is increasing each year because of the aged infrastructures. Some of the infrastructure is not performing to the life expectancy. All assets life expectancy needs to be reassessed and needs to consider the replacement process. This process is included in the *Asset management program* of the Regional District.

8.4. PUBLIC EDUCATIONAL AND OUTREACH PROGRAMS

The Regional District of Kitimat-Stikine Water Conservation Program will utilize its Works & service staff to educate the public about the importance of water conservation by

- Promoting and attending community events, such as Earth Day and Drinking Water Week, River Boat days, Farmers market days, to distribute brochures and educational pamphlets on water conservation,
- Distributing information on Water Conservation to the users.
- Using the existing Rdks website to promote water conservation programs online.
- Distribution of Guide to Wise Water Use, Wise Water Door Hangers.
- Free Water Use Audit – The free water use audit will be promoted and shared on the regional district website for residents to calculate their daily water consumption.

8.5. BYLAW UPDATES:

RDKS must consider updating existing bylaws and implementing new bylaws:

- Hydrant usage by private: Stage wise billing based on consumption.
- Faulty meter replacements: imposing fines or percentage increase in billing for customers with faulty meters.
- Re-evaluating billing rates and mechanisms.

9. KEY PERFORMANCE INDICATORS(KPI) FOR THE PROGRAM

Annual meetings will be held with key RDKS staff members to review the KPIs and new supply and demand scenarios. Annual reports will be posted on the website and feedback invited. Some of the KPIs include:

- **Consumption:**

Monthly consumption of each zone in the distribution system needs to be recorded and analyse with the past records of same month. This process is beneficial to find out the leak in the system.

- **Operating cost:**

Analysing the operating cost with total water consumption will give a picture of how economical the program is on a financial point of view. It will also give information about the cost per cubic meter and compare with past data.

- **Total pump hours:**

Total pump hour is an indication of how much pressure the consumption rate is putting on the pumps to operate. It also gives an idea of any leak in the system. Pump needs to work more if there is any significant leak in the system.

- **Number of leaks:**

The effectiveness of leak detection program can be analysed by the amount of leak discovered in the system and compare the result with the water consumption data.

- **Number of new meters:**

Number of new meters to the distribution system is an indication of how effectively the community is accepting the volunteer meter program.

10. CONCLUSION:

Based on the current scenario and the forecast of water consumption for future, implementing a water conservation Plan is essential for Thornhill Community Water System. The water conservation plan needs to be reviewed periodically to reflect population growth, climate change, new technologies and changes in water system infrastructure.

APPENDIX A

LOW WATER ADVISORY & WATER CONSERVATION REQUEST- SKEENA REGION

BRITISH COLUMBIA
Ministry of Forests

July 18, 2023

RE: LOW WATER ADVISORY & WATER CONSERVATION REQUEST – SKEENA REGION

Dear Water Licence Holder:

Many streams in the Skeena region are currently experiencing record low streamflow conditions. Reduced flows are the result of several factors including dry conditions through the fall of 2022, early and rapid melt of the winter snowpack, elevated temperatures, and lower than average seasonal precipitation.

The purpose of this letter is to notify authorized water users of the likelihood of persistent drought conditions within the Skeena region throughout the coming months. This letter also provides access to information and requests that water users take steps to voluntarily reduce their water consumption.

Whether you draw water from a surface or a groundwater source, your conservation efforts can positively affect streamflow conditions. We are asking for your help in reducing water use by taking proactive measures to conserve water. Your actions help minimize the risk of harm to fish and aquatic habitats and help avoid the requirement of future water use restrictions.

Provincial staff are monitoring streamflow conditions, working to curtail unauthorized water use, and may consider pursuing regulatory action under the *Water Sustainability Act* if conditions continue to deteriorate.

Drought levels in the Skeena region currently range between level 2 and level 5. Please see the following page for additional information.

Thank you in advance for your willingness to support regional drought response initiatives by implementing conservation efforts and staying informed of conditions as they develop.

Sincerely,

Bobby Love
Water Manager
Skeena Region

Ministry of Forests
Mailing Address: Bag 5000-3726 Alfred Avenue Smithers BC V0J 2N0
Location: 3726 Alfred Avenue Smithers BC V0J 2N0
Phone: (250) 847-7260
Fax: (250) 847-7556
Web: https://www2.gov.bc.ca/gov/content/environment/air-land-water/water

Drought Classification

British Columbia uses a six-level scale to explain the severity of drought conditions and to outline appropriate levels of response:

Level	Impacts	General Response Measures
0	There is sufficient water to meet socioeconomic and ecosystem needs	Preparedness
1	Adverse impacts to socio-economic or ecosystem values are **rare**	Conservation
2	Adverse impacts to socio-economic or ecosystem values are **unlikely**	Conservation Local water restrictions where appropriate
3	Adverse impacts to socio-economic or ecosystem values are **possible**	Conservation Local water restrictions likely
4	Adverse impacts to socio-economic or ecosystem values are **likely**	Conservation Local water restrictions likely Regulatory action possible
5	Adverse impacts to socio-economic or ecosystem values are **almost certain**	Conservation Local water restrictions Regulatory action likely Possible emergency response

Help Conserve Water!

Water conservation is everyone's responsibility, especially during drought. You can help protect our natural resources and save money by conserving water. The following table has tips on how to conserve water.

At home:	In industry:	On the farm:
➢ Limit outdoor watering ➢ Do not water during the heat of the day or when windy ➢ Consider planting drought-tolerant vegetation ➢ Take shorter showers ➢ Install water-efficient showerheads, taps and toilets	➢ Reduce non-essential water use ➢ Recycle water in industrial operations ➢ Use water-efficient methods and equipment ➢ Store water when it is available for use during drought periods	➢ Install water efficient systems (troughs, nose pumps, automatic waterers) ➢ Where possible, improve water delivery system efficiencies and check for leaks ➢ Do not irrigate during the heat of the day or when windy

Please see the following websites for additional information:

Drought portal (maps and tables of current drought conditions):
https://governmentofbc.maps.arcgis.com/apps/MapSeries/index.html?appid=838d533d8062411c820eef50b08f7ebc

Drought information: https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/drought-flooding-dikes-dams/drought-information

River Forecast Centre: https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/drought-flooding-dikes- dams/river-forecast-centre

2023 Quick Guide To Drought Resources: https://www2.gov.bc.ca/assets/gov/farming-natural-resources- and-industry/agriculture-and-seafood/agricultural-land-and-environment/water/drought/2023_quick_guide_to_drought_resources.pdf

Identifying and reporting natural resource violations: https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/natural-resource-law-enforcement/natural-resource-officers/identifying-reporting-violations