



New Glasgow

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TO: Town of New Glasgow Council

SUBMITTED BY: Audrey Buchanan, P.Eng., Assistant Director of Engineering & PW

DATE: 1 September 2026

SUBJECT: Water Utility Transmission Main Policy

ORIGIN

The Town of New Glasgow Water Utility owns and operates Forbes Lake Water Treatment Plant and the water distribution system that serves the Town of New Glasgow, Town of Westville, industry in Treton, and parts of the Municipality of the County of Pictou. A critical portion of the distribution system that transfers treated potable water to all the customers from the Water Treatment Plant is known as the water transmission main. In recent years there have been increasing requests from customers that are primarily located in the Municipality of the County of Pictou to connect to the transmission main. As a response to these requests staff are presenting a new Water Utility Transmission Main Policy for Council to consider addressing these requests in a consistent manner that ensures a sustainable resource.

RECOMMENDATION

The recommendation from the Assistant Director of Engineering & Public Works is that Council adopt the new Water Utility Transmission Main Policy as per the attached document to ensure a fair and consistent approach to service delivery.

BACKGROUND/CONTEXT

The Town of New Glasgow Water Utility owns and operates the Forbes Lake Water Treatment Plant. The Plant transfers treated water through Churchville, Plymouth, and East River Rd. in a 600mm diameter transmission main that feeds the entire water distribution system. The water distribution system is composed of multiple sized pipes, reservoirs and water storage towers that create multiple directions of flow and redundancy for the water distribution network.

The one 600mm diameter transmission main that leaves the Water Treatment Plant is a single large diameter pipe used to service the entire distribution system network. Due to its critical nature and lack of redundancy, newly designed water distribution systems do not usually permit any services a direct connection into the transmission main to prevent possible break or contamination points in this critical part of the system.

DISCUSSION

During the original construction of the Forbes Lake Dam and transmission main to the Town of New Glasgow distribution system several services were tapped off the transmission main for individual properties, businesses, and larger meter customers who feed subdivisions. These services have been limited but there are existing customers on the transmission main that span decades of service since their installation.

Over the past number of years, the increase in development throughout the Town of New Glasgow and Pictou County has increased particularly following Covid 19. The increase in development has led to more requests for potable water particularly in the areas of the County from Plymouth to Churchville. Some of the Municipality of the County of Pictou in Plymouth are serviced by the large meter that services multiple residential customers. However, customers along the East River East Side Rd., Churchville and the Churchville loop do not currently have access to the Town of New Glasgow Water Utility potable water but many of these potential customers do have properties near the transmission main. As a result, the Town receives requests to connect new properties or existing properties with failing wells to the transmission main. For the most part these requests have not been approved because they are individual requests for a single-family home that would increase the risk of exposing the transmission main during construction and add possible failure points in the future. These risks are not easily justified by the minimal amount of customer revenue that one customer could generate for the Utility. With the servicing options becoming limited particularly for customers closer to Forbes Lake in Churchville, staff are recommending that Council adopt the attached Transmission Main Policy that protects the transmission main from multiple small service installations and can be clearly referenced in the event potential customers insist on servicing from the transmission main. It is important to note that any failure or contamination of the transmission main will impact all Town of New Glasgow customers, so its impact is severe.

The policy will clearly detail parameters for new customers restricting future connections to larger customers where water and terms of sale are clearly defined before any service is provided.

This policy also addresses existing customers, provides the terms of their use to only the current service and if the service is discontinued it will be disconnected at the transmission main with no future service being provided to the location from a direct individual service.

In addition, existing customers will be provided with a new testable backflow preventor at their property to be installed and tested at the cost of the Town of New Glasgow Water Utility. The Utility will manage this program and costs under their Maintenance of Transmission Main budget to prevent additional risk to the Utility from a possible contamination of the transmission main. The addition of testable backflow prevention devices on residential properties is a level higher than plumbing code or the Water Utility currently requires but due to the high risk of a transmission main contamination to the Town's water distribution system it is being recommended that the Utility implement this program for the direct Town of New Glasgow transmission main customers. Staff are also recommending that the larger water agreement customer, Municipality of the County of Pictou be required to install a testable

backflow preventor on all their connections into the transmission main (MacLellan's Brook, Plymouth, etc.) as part of the upcoming water agreement negotiations.

FINANCIAL DETAILS AND IMPLICATIONS

The implementation of the Transmission Main Policy will not have any financial impacts on the Utility but will prevent significant costs that could occur if there was a failure at any of the new services or watermain contamination.

Staff anticipate the installation of the new testable backflow device on the existing residential customers as part of this Transmission main policy will be a significant setup cost, approximately \$15,000 per year, for an estimated 2 years or until all customers are addressed. Once all devices are installed the annual testing fee to be completed by the Town of New Glasgow's Environmental Services certified staff will be in the range of \$5,000 per year. These expenses will be incorporated into the Town of New Glasgow Water Utility budget.

RISK SUMMARY

RISKS AND MITIGATION MEASURES

RISKS	PROBABILITY	IMPACT	MITIGATION
The risk of not implementing this policy leaves the Water Utility with no written policy on transmission main taps which can result in additional water breaks / contamination that impacts all Water Utility customers.	High	Major	Implementing this policy provides clear guidance to all Water Utility staff and customers to prevent unnecessary taps and securing the transmission main integrity and preventing contamination.

LEGAL IMPLICATIONS

There could be legal issues if the Water Utility cannot justify their rules and implement them in a fair manner. This policy will ensure a consistent approach to services provided to residents outside of the Town of New Glasgow water service boundary.

CONSULTATION AND COMMUNICATIONS

None anticipated at this time.

ENVIRONMENTAL AND SUSTAINABILITY CONSIDERATIONS

This program is critical to the sustainability of the Forbes Lake treated water resource, preventing possible contamination sources in the transmission main, and minimizing the number of failure points along this critical asset that are created by new individual services versus larger bulk customers.

OPTIONS ANALYSIS / ALTERNATIVES

Options considered include:

1. Council to adopt the new Water Utility Transmission Main Policy as per the attached document to ensure a fair and consistent approach to service delivery.
2. Continue to address water customers on an individual basis as requests are received. This is not the preferred option because it will potentially increase the acquisition of high-risk customers and with no clear policy could lead to a significant increase in customers because the Water Utility may not be able to provide service.

LIST OF APPENDICES

- Transmission Main Policy

RECOMMENDATION ALIGNED TO:

Town of New Glasgow Priorities and Plans

NG Integrated Development Plan		NG Safety Program	X
NG Asset Management Plan	X	Forbes Lake Watershed Plan	X
Council Approved Budget Priorities		Downtown NG 20 Year Plan	
NG Flourish Brand Standards		NG Corporate Climate Action Plan	
NG Community Climate Action Plan		NG Farmers Market Strategic Plan	
UNESCO Inclusive Communities Plan		NG Age-Friendly Plan	
NG Active Living Plan		NG Active Transportation Plan	
NGRP Strategic Plan		Regional Hub Strategy	
NG Blue Route Plan (Bikeways)			

Pictou County Regional Priorities and Plans

PCWCBAI Strategic Plan		PCSSA Plan	
DEANS Event Strategy		DEANS Strategic Plan	
PC REN Strategic Plan		Creative Pictou County Plan	
PC Population Health Strategy		PC Community Health Centre Plan	

AUTHORS OF SUBMISSION

Report Prepared by: Audrey Buchanan, P.Eng.

Report Approved by: _____
(Report to be approved by the Director of Corporate Services if there is a financial implication)

Report Approved by:  _____
Chief Administrative Officer

Water Utility Transmission Main Policy

Date: September 2026

The Town of New Glasgow Water Utility Transmission Main Policy provides clear direction on requests for new potable water service or distribution system connections into the existing potable water transmission main. The potable water transmission main is the single transmission main that exits the Forbes Lake Water Treatment and continues in a northerly direction to the Town limits.

Implementation Date: Town Council approval on September 16, 2026

1.0 Purpose

To establish a clear and consistent procedure for any water service requests to connect into the transmission main. The transmission main is the single waterline that delivers treated potable water to the Town of New Glasgow from Forbes Lake which by definition is intended to be a direct link to the Town of New Glasgow's water distribution network. As part of the preservation of this main the Town of New Glasgow has tried to minimize any connections to this main from Forbes Lake Treatment Plant to the Town of New Glasgow limits to prevent potential failure or contamination points in this critical infrastructure. This policy outlines the expectations for future water service requests off the transmission main.

2.0 Definitions

- **Transmission Main** – The transmission main conveys vast quantities of water from a source, such as a treatment plant to distribution centers or storage tanks. The Town of New Glasgow Water Utility transmission main extends from the Forbes Lake Water Treatment plant to the Town of New Glasgow Town limits.
- **Water Distribution System** – Pipes that distribute potable water through a network of piping. The water distribution piping starts delivering water from the transmission main and includes a complex network of piping that delivers water to all water customers and other storage facilities throughout the water system.

3.0 Scope

The following policy details water service options available when a water service is required that involves a direct connection into the transmission main:

3.1 New Connections

- New water service laterals will not be permitted a direct connection to the Town of New Glasgow potable water transmission main.
- Any services extended off an existing direct connection to the transmission main must seek approval from the Town of New Glasgow Water Utility prior to granting the new

Water Utility Transmission Main Policy

Date: September 2026

service.

- In exceptional circumstances the Town of New Glasgow Water Utility with the full approval of Town Council may grant a direct connection to the potable water transmission main if the requesting party can justify there are no alternative water sources available and it is in the best interests of the Water Utility to permit the connection.

3.2 Existing Connections

- Existing transmission main connections will continue to be serviced until such time as the connection is no longer required or is deemed a dangerous connection. The Town of New Glasgow Water Utility will terminate this account, and the connection will be valved, capped and where possible plugged or disconnected at the transmission main.
- Existing transmission main connections (either Town of New Glasgow or Municipality of the County of Pictou customers) that have a direct connection to the transmission main will be required to have a testable backflow prevention installed and maintained. Maintenance at a minimum will require annual backflow testing, records to be forwarded to the Town of New Glasgow and necessary repairs made to device as required to always maintain an operational device. The Town of New Glasgow will pay the costs of installation, annual testing, and repairs for existing Town of New Glasgow direct transmission main customers only.

Any existing direct transmission main customers that receive existing water service through a water agreement with the Town of New Glasgow (eq. Municipality of the County of Pictou) will be required to install and maintain new backflow prevention devices at the point of water distribution (water meter) as part of their water services agreement. All installation, maintenance and testing of these devices will be the responsibility of the customer with results forwarded to the Town of New Glasgow.

4.0 Authority

- The authority to issue any new water service is regulated by the Town of New Glasgow Water Utility under the direction of the Nova Scotia Regulatory Appeals Board.