

QLDC Council
16 December 2021

Report for Agenda Item | Rīpoata moto e Rāraki take : 8

Department: Property & Infrastructure

Title | Taitara Adopt Pressure Sewer System Policy

PURPOSE OF THE REPORT | TE TAKE MŌ TE PŪRONGO

The purpose of this report is to present the purpose of the policy, its implications, the options to manage the risks, and a recommended way forward via adoption of the new Pressure Sewer System Policy.

RECOMMENDATION | NGĀ TŪTOHUNGA

That Council:

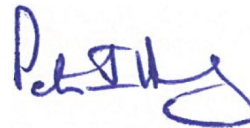
1. **Note** the contents of this report;
2. **Agree** the amendments to the draft version of the proposed Pressure Sewer Policy and update to adopt as final; and
3. **Adopt** the final version of the proposed Pressure Sewer Policy.

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2/12/2021

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CONTEXT | HOROPAKI

- 1 Gravity sewer systems remain the default configuration for Council wastewater conveyance. However, in difficult ground conditions and topography, gravity systems become expensive and less reliable.
- 2 Alternative technologies, such as pressure sewer systems are a more viable alternative over traditional gravity sewers, in these circumstances. Pressure Sewer Systems are a complete wastewater reticulation system including collection tanks (generally located on private property) and associated pumps, grinder pumps, and associated electrical and control equipment that convey wastewater under pressurised piping to a common discharge point (Public Pressure Sewer Network), generally located within the Council road reserve.
- 3 Pressure sewer systems are increasingly common throughout New Zealand, with at least 16 councils formally adopting their use.
- 4 There are already instances of pressure sewer installations within the district. These installations have been small and ad-hoc to date, as opposed to entire subdivisions.
- 5 Council recognises that alternative technologies, such as pressure sewers provide the same level of service, if not better than a gravity system but do so more cost effectively in difficult terrain and sensitive areas.
- 6 As well as cost effective public sanitation in difficult terrain, pressure sewer systems offer wider network the benefits of resilience, demand smoothing and greater capacity utilisation.
- 7 Property and Infrastructure have received a number of requests for use of pressure sewer, and have in other circumstances identified potential areas that may benefit from use of pressure sewer systems.
- 8 Other than a draft policy from 2015, currently there is no adopted policy for pressure sewer system installations. Nor are there Council specific engineering standards or a building consent process to support pressure sewer system use in the district.
- 9 The adoption of the new policy will significantly improve the consistency of applicability, installation and operation of pressure sewer systems in the district without compromising the available benefits of pressure sewer systems.
- 10 The purpose of the policy is to define
 - a. the application of pressure sewer systems in the district.
 - b. the ownership of various components of the system and the responsibilities.
 - c. the requirements for subdivisions and developments which propose to use pressure sewer systems.

- d. the roles and responsibilities of all stakeholders (QLDC, developers, property owners, and householders)

11 It is proposed to adopt the new policy.

ANALYSIS AND ADVICE | TATĀRITANGA ME NGĀ TOHUTOHU

12 Research demonstrates that the available benefits, costs and risks of pressure sewer systems largely hinge on the ownership of the on-property pumping system and the subsequent responsibilities of the owner.

13 In 2019 QLDC engaged technical advice from Stantec to analyse the installation, operation and maintenance options available to Council. Council have also surveyed the market and other Council's since to determine a best approach for our district going forward.

14 A set of critical success factors were established to assess the options against. These are based on the principles of other Council Policy and of the equity and prudence requirements with section 101 of the Local Government Act:

- a. **Distribution of Benefits** - Ensure that the service level risk and financial risk is balanced with equity and fairness for existing and future ratepayers.
- b. **Administrative efficacy** - Ensure the additional resourcing demands to administer the policy are available and commensurate with the risk

15 The ownership model proposed within the policy is to enable applications where all private assets (those located within Private Property) are owned and operated privately. Any proposal for QLDC ownership of assets must demonstrate a case to do so which if QLDC officers endorse can be brought to full Council for a decision.

16 The policy will assist with streamlining applications that meet the minimum criteria of the policy to proceed with pressure sewer systems, whilst still allowing for those that do not meet the policy but can demonstrate a strong case otherwise to proceed. Proposals that are not in accordance with the policy can be brought to Full Council for a decision once endorsed by QLDC officers.

17 Any proposed scheme vesting and acquisition that does not comply with the principles within the policy will still require to be presented to Council for approval.

18 The new policy is appended to this report.

19 **Option 1 Accept** and adopt the new Pressure Sewer System Policy.

Advantages:

20 Increase the administrative efficacy of pressure sewer policy applications.

21 Increase consistency in infrastructure usage and componentry.

22 Technical Benefits:

- a. **Easier installation, less disruption.** Being pumped, there is no need for large and deep trenches and wet wells to maintain flows (as per gravity systems.)
- b. **More resilience and fewer overflows to the environment** – Being distributed, any failures are isolated to the single property AND 24 hours of storage is available on property. Reducing the chance of spills into waterways.
- c. **Demand smoothing** – Options to control pumps to manage capacity in the system. Flows to the treatment plant are smoothed over the day.
- d. **Efficient capacity utilisation** – Infiltration and inflow is largely eliminated, meaning much less energy and capacity is consumed conveying and treating groundwater. (Ideal in lakeside towns.)

Disadvantages:

23 Technical Dis-benefits:

- a. **Pump units located within private property.** The assets providing conveyance and storage function are located within private property (as per septic tanks). Power supply, operation and maintenance relies on landowners / private property.
- b. **Installing in brownfields carries perceived higher costs** – Pressure Sewer System up-front and ongoing costs are more expensive if compared to Council’s typical gravity sewer. Many households are also switching from septic tanks after several years of no cost OR have recently installed a tank.

24 Option 2 Decline the new Pressure Sewer System Policy.

Advantages:

- 25 Council will retain total control and oversight of each proposed vesting and scheme acquisition proposal.
- 26 Avoid technical disbenefits of pressure sewer systems.

Disadvantages:

- 27 Time, staffing and Council resource will continue to be used preparing and reviewing documents for proposals to vest and acquire schemes.
 - 28 Inconsistencies resulting in risk of defending and justifying approach.
 - 29 Could make the technical benefits of pressure sewer inaccessible for some developments. Could result in areas that require pressure sewer being undevelopable by use of gravity systems.
- 30 This report recommends **Option 1** for addressing the matter because of the efficiency it will achieve when undertaking acquisitions and vesting that comply with the proposed policy.

CONSULTATION PROCESS | HĀTEPE MATAPAKI:

> SIGNIFICANCE AND ENGAGEMENT | TE WHAKAMAHI I KĀ WHAKAARO HIRAKA

- 31 This matter is of low significance, as determined by reference to the Council's Significance and Engagement Policy because the decision has no detrimental impact to existing ratepayers.
- 32 Consultation was undertaken via Let's Talk and the feedback received has been provided to Councillors.
- 33 Feedback was received from various representatives of private schemes, local community associations and individuals. These comments informed amendments adopted into the revision of the proposed policy for adoption.
- 34 Most the feedback received was technical in nature to be addressed in the pressure sewer design standards and technical specifications which will be consulted on as part of the Code of Practice Stage 3 amendments programme.
- 35 Public Health South advised the following:

"We are pleased to see that QLDC is taking a proactive approach to provide guidance for the provision of wastewater services to residential properties and trade premises serviced by pressure sewerage systems. Pressure sewers can offer benefits over traditional gravity sewers in particular circumstances. We have no major concerns regarding the impact on public health from the use of these systems, if they are maintained and serviced appropriately."

- 36 Taumata Arowai – Aotearoa's dedicated regulator of the three waters responded advising they have no comment on the proposed policy.

RISK AND MITIGATIONS | NGĀ RARU TŪPONO ME NGĀ WHAKAMAURUTANGA

- 37 The main risks with pressure sewer systems are the costs of installations, maintenance, operating costs including power and telemetry communications, and renewals. These risks are mitigated in the recommended ownership model where ownership of private assets remain with private owners. The adoption of the proposed policy will support the Council by allowing us to transfer the risk.
- 38 The policy does not preclude Council taking ownership of on-property units where there is significant and tangible benefits in doing so. This may for example be to allow control of pumping in order to optimise flows in the network.

FINANCIAL IMPLICATIONS | NGĀ RITENGA Ā-PŪTEA

- 39 The proposal will result in limited financial implications to QLDC as the policy requires all cost to be paid by the applicant.

- 40 The costs of operations and maintenance for private systems are borne by the private owners. The longevity and costs of renewals will be a function of the use and care of their onsite systems, similar to many home appliances.
- 41 Shared assets between owners will similarly funded by those that use them, as they will only be permitted with a body corporate established in accordance with the unit titles act.
- 42 Any QLDC investment in main trunk infrastructure in the pressure sewer schemes will be funded via LTP funded capital project.
- 43 For administration of the policy, resource consent and building consent application costs will cover the application administration.
- 44 Costs of capacity in downstream infrastructure will still be recovered via DCs and rates.

LOCAL GOVERNMENT ACT 2002 PURPOSE PROVISIONS | TE WHAKATURETURE 2002 O TE KĀWANATAKA Ā-KĀIKA

- 45 Section 10 of the Local Government Act 2002 states the purpose of local government is (a) to enable democratic local decision-making and action by, and on behalf of, communities; and (b) to promote the social, economic, environmental, and cultural well-being of communities in the present and for the future. The recommendation permits the use of alternative infrastructure technology for applications where traditional technologies may not be viable due to site constraints while ensuring consistency, equity and fairness are upheld through policy and practices developed under inclusive consultation. As such, the recommendation in this report is appropriate and within the ambit of Section 10 of the Act.
- 46 The recommended option:
 - Can be implemented through current funding under the Ten Year Plan and Annual Plan;
 - Is consistent with the Council's plans and policies; and
 - Would not alter significantly the intended level of service provision for any significant activity undertaken by or on behalf of the Council, or transfer the ownership or control of a strategic asset to or from the Council.

ATTACHMENTS | NGĀ TĀPIRIHANGA

A	Pressure Sewer Policy (Proposed)
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Note that this is a 'clean' version of the policy and a 'track changes' version is available upon request.