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QUEENSTOWN LAKES DISTRICT COUNCIL

www.qldc.govt.nz

16 December 2021

[redacted]

Sent via email to [redacted]

Dear [redacted]

REQUEST FOR OFFICIAL INFORMATION – RELEASE OF INFORMATION

Thank you for your request for information dated 8 December 2021. You requested the following information:

1) Bore size of the waster line: Concern was expressed that the bore size of the line would be sufficiently big to accommodate Hawea Flat properties- should that be necessary in the future. I believe the response was that this had to be weighed up against cost of bigger pipe and the need to contain costs. Conversely were it too small and had to be replaced that would be a much greater cost.
In this context we should keep in mind that previous predictions for population growth have been significantly astray and the consequences are in no small contributed to non-compliance issue with the existing plant. We look forward to learning more about bore size choice

2) Preferred option: Could you provide [redacted] with the analysis which involved the assessment of each of the options against various criteria and thus lead to choice of the preferred option?

QLDC response

"Bore size of the waster line: concern was expressed that the bore size of the line would be sufficiently big to accommodate Hawea Flat properties- should that be necessary in the future. I believe the response was that this had to be weighed up against cost of bigger pipe and the need to contain costs. Conversely were it too small and had to be replaced that would be a much greater cost.
In this context we should keep in mind that previous predictions for popn growth have been significantly astray and the consequences are in no small contributed to non-compliance issue with the existing plant. We look forward to learning more about bore size choice"

The diameter of the proposed wastewater pipeline will be confirmed as design progresses. For the purposes of our cost and carbon estimates to date, we have assumed a DN280 poly ethylene pipe for the majority of the alignment, except for the river crossings where we have assumed a DN200 steel pipe. The demand scenario on which concept design will be based includes the potential future connection of Hāwea Flat.

"Could you provide [redacted] with the analysis which involved the assessment of each of the options against various criteria and thus lead to choice of the preferred option"

Short-listed options were scored independently by QLDC subject matter experts and our appointed design team. A small representative group collectively moderated these scores. The options are:

- Option 1: new local Wastewater Treatment Plant (WWTP) and irrigation (new site)
- Option 2: expand existing WWTP and provide rapid infiltration (existing site)
- Option 3a: pipe to Project Pure following the most direct alignment
- Option 3b: pipe to Project Pure via Albert Town
- Option 4: retain the status quo (assumes interim upgrades complete) – fatally flawed and carried forward as a baseline comparator only.

The following criteria were used:

- Net present value of whole-of-life costs: Present value of total cash costs of the investment over a 30y period, calculated using the public sector discount rates.
- Resilience to natural disaster: The relative speed at which acceptable service levels can be resumed following a disaster event.
- Environmental wellbeing: The net effect of the option on the physical environment, giving particular regard to how well the option:
    - Aligns to relevant environmental strategy and policy
    - Minimises expected emissions through design, technology choice, ongoing operations, and/or end of life disposal
    - Regenerates (or provides for the regeneration of) the local natural environment
    - Readily enables beneficial reuse of waste streams
- Achievability: How difficult and complex the option will be to implement no later than June 2026, based on the most likely (P50) project programme.
- Likelihood of consenting: How difficult and complex the option will be to secure necessary environmental and planning authorisations.
- Future-proofing/options enabling: How well the option could respond to changes in projected demand and quality standards for minimum 30 year period.
- Social wellbeing/enhancing lifestyles:
    - How well the option delivers improvements to visual and social (e.g. active travel, recreation amenity).
    - How well the options mitigate effects on the human environment (i.e. noise, traffic, hazardous substances, odour, construction, acoustic, vibration, and human health effects)
    - How well the opportunity protects the area's culture and heritage

SCORES	WOL	RES	ENV	ACH	CON	FUT	SOC
Option 1	1.0	3.5	3.2	1.4	2.8	4.3	3.3
Option 2	1.0	2.5	2.4	2.8	3.4	2.4	2.6
Option 3a	1.0	3.2	3.7	2.0	2.5	3.2	4.1
Option 3b	2.0	2.8	3.7	3.9	4.1	3.4	3.4
Option 4	5.0	2.5	1.5	4.9	1.8	1.2	1.0

Moderated scores were weighted according to pre-agreed base weights. We also tested for sensitivity under two scenarios.

CRITERIA		BASE	TEST 1	TEST 2
WOL	Net present value of whole-of-life costs	24%	Equalises scores for **WOL (to 3)** & **CON (to 1)** for all options. Option 4 not adjusted.	18%
RES	Resilience to natural disaster	12%		9%
ENV	Environmental wellbeing	12%		**17% (+)**
ACH	Achievability	16%		**24% (+)**
CON	Likelihood of consenting	16%		12%
FUT	Future-proofing / options enabling	10%		7%
SOC	Social wellbeing / enhancing lifestyles	9%		**13% (+)**

Weighted results are provided below.

SCORES	BASE CASE	TEST 1	TEST 2
Option 1	2.45	2.45	2.44
Option 2	2.31	2.31	2.39
Option 3a	2.48	2.48	2.62
Option 3b	3.21	2.63	3.34
Option 4	3.01	3.01	2.98

It is important to note that Option 4 (maintaining the planned interim upgrades only) was fatally flawed and carried forward to provide a baseline comparator only. This does not mean it is a good option, rather it reflects the relative value of investing in the other options.

We trust this response satisfactorily answers your request.

Kind regards,

Phil Jones
Senior Information Advisor