

## Council

Date 23 August 2016



### WDC -DRINKING WATER SUPPLY RISKS

<b>Department</b>	ENGINEERING
<b>Author</b>	Jamie Cox (Engineering Manager)
<b>Contact Officer</b>	
<b>1. Purpose</b>	<p>1.1 Given the Havelock North water quality crisis and ensuing pandemic, this is an urgent report so Council can quickly review its own risks associated with drinking water supplies.</p> <p>1.2 To offer Council a brief assessment of the risks, liabilities and mitigations associated with a waterborne disease outbreak in Council owned water supplies.</p>
<b>Recommendation</b>	The Engineering Manager RECOMMENDS that Council considers the information and directs accordingly.
<b>2. Background</b>	<p>2 A <i>Campylobacter</i> outbreak linked to Hastings District Council-supplied drinking water has led to approximately 4,000 affected people in Havelock North becoming ill - some with severe symptoms including vomiting, and diarrhoea. -One -fatality suspected to be associated with the outbreak has been recorded. There are concerns about possible future auto-immune health effects for those exposed to the organism. WDC is a drinking water supplier drawing from plants in Frasertown, Tuai and Mahanga beach</p> <p>2.2 All supplies are regularly monitored/tested for compliance with the NZ drinking water standard (NZDWS) -and whilst the Frasertown and Tuai plants are fully compliant, the Mahanga beach drinking water is regularly non-compliant.</p>
<b>3. Current situation</b>	<p>3.1 The Frasertown and Tuai supplies are treated and regularly monitored to ensure compliance with NZDWS. Non-compliance of samples has not occurred since upgrades have ben carried out.</p> <p>3.2 The Mahanga supply -originates from a shallow bore and regularly returns contaminated samples.</p> <p>3.3 The Mahanga supply has a permanent boil water notice regularly advertised to users.</p> <p>3.4 The storage tanks for the Mahanga supply are dosed following detection of sample non-compliance.</p> <p>3.5 Currently, there is no effective barrier to waterborne disease entering the drinking water supply -at Mahanga.</p>

	<p>3.6 The Mahanga water safety plan has been approved on the basis that the supply will be upgraded to reduce the risk of water borne disease.</p> <p>3.7 Council has resolved to carry out a referendum as to whether to continue as a drinking water supplier at Mahanga.</p> <p>3.8 Council has been made aware of the non-compliant samples returned at Mahanga.</p>
<b>4. Liability</b>	<p>4.1 The Frasertown and recently upgraded Tuai plant are consistently performing at a level which demonstrates that they represent minimal risk of transferring a waterborne disease. Given compliance with the NZDWS, they represent a minimal liability for Council and the community.</p> <p>4.2 The Mahanga supply is documented as an at-risk supply and since 2007 Council staff have promoted upgrading the supply to mitigate this risk. The recent Havelock North pandemic associated with the drinking water supply has highlighted this risk.</p> <p>4.3 The Engineering Manager has previously advised Council that it would be unwise to expose Council to potential liability associated with a health spike due to waterborne disease at Mahanga associated with the drinking water supply.</p>
<b>5. Options</b>	<p>5.1 The options identified are:</p> <ol style="list-style-type: none"> <li>a. Status quo.</li> <li>b. Status quo with increased dosing of the Mahanga supply.</li> <li>c. Status quo with increased dosing of the Mahanga supply and proceed immediately with planning for the upgrade of the Mahanga supply (and rescinding the resolution for a referendum for the future of the Mahanga water supply).</li> </ol> <p>5.2 The upgrade of the Mahanga water supply has been discussed in depth since 2007 and a comparable upgrade has been carried out at Tuai. It is anticipated that capital costs per connection for upgrade would be less than \$5,000 per property and operational costs would be similar to Wairoa water charges. Previous financial models have seen capital costs loan-funded and the costs spread over a number of years. It is expected that an accelerated project plan for upgrade would span six months.</p>
<b>7. Corporate Considerations</b>	NA

<b>Compliance with legislation and Council Policy</b>	5.3 Annual Plan – Line item and budget included. 5.4 Long Term Plan 2015-2025 –Line item and budget included. 5.5 District Plan – NA. 5.6 Economic Development Strategy – NA. 5.7 Other Council Policies – NA. 5.8 Relevant legislation – Compliance with Health (Drinking Water) Amendment Act 2007.	
<b>What are the key benefits?</b>	5.9 Risk mitigation for Council and the Mahanga community.	
<b>What is the cost?</b>	5.10 Total Estimate \$300,000 included in LTP.	
<b>Who has been consulted? (please refer to significance and engagement policy)</b>	5.11 Extensive consultation with Mahanga community since 2007. LTP processes have considered community views.	
<b>Significance (please refer to significance and engagement policy)</b>	5.12 Up to 60 properties affected. 5.13 Extensive history of public interest since 2007. 5.14 Funding has been set aside to complete the work.	
<b>Risk Management</b>	The strategic risks are: a. Health and safety of community; and b. Reputation of Council.	
<b>Confirmation of statutory compliance</b>	In accordance with s76 of the Local Government Act 2002, this report is approved as: a. containing sufficient information about the options and their benefits and costs, bearing in mind the significance of the decisions; and, b. is based on adequate knowledge about, and adequate consideration of, the views and preferences of affected and interested parties bearing in mind the significance of the decision.	
<b>Signatories</b>	Author	Approved by