

Meeting of the Hawke's Bay Drinking Water Governance Joint Committee

Date: Wednesday 15 August 2018
Time: 10.00am
Venue: Council Chamber
Hawke's Bay Regional Council
159 Dalton Street
NAPIER

Agenda

ITEM	SUBJECT	PAGE
1.	Welcome/Notices/Apologies	
2.	Conflict of Interest Declarations	
3.	Confirmation of Minutes of the Hawke's Bay Drinking Water Governance Joint Committee meeting held on 10 May 2018	
4.	Confirmation of Māori Representative Appointment	3
5.	Jim Graham, Water New Zealand Environmental Scientist - Drinking Water Safety Presentation	5
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8.	Joint Working Group Work Plan Update	15

HAWKE'S BAY DRINKING WATER GOVERNANCE JOINT COMMITTEE**Wednesday 15 August 2018****Subject: CONFIRMATION OF MAORI REPRESENTATIVE APPOINTMENT****Reason for Report**

1. To formally welcome the appointment of a representative of Ngati Kahungunu Iwi Inc to the Joint Committee.

Background

2. The Terms of Reference for the Joint Committee was written to purposefully enable the appointment of representatives of tangata whenua if and when iwi, treaty settlement entities or other Māori groups made the decision to participate.
3. Arising out of discussions at the Joint Working Group meetings, an invitation was extended to NKII for representation at the Governance Joint Committee, and Ngahiwi Tomoana appointed.

Decision Making Process

4. The Hawke's Bay Drinking Water Governance Joint Committee is required to make every decision in accordance with the requirements of the Local Government Act 2002 (the Act). Staff have assessed the requirements in relation to this item and have concluded:
 - 4.1. The decision does not significantly alter the service provision or affect a strategic asset.
 - 4.2. The use of the special consultative procedure is not prescribed by legislation.
 - 4.3. The decision is not inconsistent with an existing policy or plan.

Recommendations

The Hawke's Bay Drinking Water Governance Joint Committee receives and formally accepts the appointment of Ngahiwi Tomoana to represent Ngati Kahungunu Iwi Inc.

Authored by:

Leeanne Hooper
PRINCIPAL ADVISOR GOVERNANCE
HBRC

Approved by:

Liz Lambert
GROUP MANAGER REGULATION
HBRC

Attachment/s

There are no attachments for this report.

HAWKE'S BAY DRINKING WATER GOVERNANCE JOINT COMMITTEE

Wednesday 15 August 2018

Subject: JIM GRAHAM, WATER NEW ZEALAND ENVIRONMENTAL SCIENTIST - DRINKING WATER SAFETY PRESENTATION

Introduction to presentation

1. Jim Graham is an environmental scientist and Water New Zealand's principal adviser on water quality. Jim has over 20 years' experience in environmental science and environmental health science specialising in recreational and drinking-water quality. Previously, he has worked on the development and implementation of the New Zealand drinking-water strategy including the preparation of drinking-water standards, the legislative framework and leading the \$150M drinking water supplies funding assistance programme.
2. Currently Jim works with water suppliers throughout New Zealand, assisting them in all aspects of providing safe community drinking water supplies. Jim presented to the 3 Waters conference facilitated by LGNZ, WaterNZ and IPWEA (Institute of Public Works Engineering Australasia) earlier this year.
3. The presentation provides some reflections on land use and potential risks to drinking water. This may provide committee members further information as they consider first barrier protection measures, such as drinking water source protection zones.

Recommendation

That the Hawke's Bay Drinking Water Governance Joint Committee receives and notes the ***"Drinking Water Safety"*** presentation by Jim Graham.

Authored by:

Rina Douglas
SENIOR PLANNER
HBRC

Approved by:

Liz Lambert
GROUP MANAGER REGULATION
HBRC

Attachment/s

There are no attachments for this report.

HAWKE'S BAY DRINKING WATER GOVERNANCE JOINT COMMITTEE

Wednesday 15 August 2018

Subject: ARSENIC IN GROUNDWATER – PROTOCOL FOR RESPONSE

Reason for Report

1. At the April meeting of the Joint Committee it was agreed that a protocol for responding to events involving arsenic contamination in groundwater used for self-supply drinking water would be developed to ensure coordination across agencies and consistency of messaging.
2. A sub-group of staff from HBDHB, HBRC, HDC, NCC and NKII have developed the attached draft protocol for consideration by the Joint Committee.

Discussion

3. There have been three incidents of high arsenic levels in drinking water supplies in the past two years that have been reported through to Council. In every case it has been determined that the source of the contamination is naturally occurring arsenic and ongoing advice has been given on that basis.
4. However there was some confusion among agencies over messaging about the health risk for people continuing to consume the water. The development of this protocol is designed to provide clarity around agreed actions and messaging.
5. The protocol is still formally in a draft stage because information is still being collated around treatment options and the use of water with high levels of arsenic for certain activities. These will be inserted in to the protocol upon receipt.
6. In the meantime feedback is sought from the Committee on the protocol. The Committee's views are also sought on whether this could be the template for a broader communications strategy.

Recommendations

That the Hawke's Bay Drinking Water Governance Joint Committee:

1. Receives and notes the "Arsenic in Groundwater – Protocol for Response" staff report.
2. Approves the adoption of the protocol, subject to any amendments agreed at the meeting and subject to the addition of any agreed outstanding information.

Authored and Approved by:

Liz Lambert
GROUP MANAGER REGULATION
HBRC

Attachment/s

- [!\[\]\(91353dea0600335a09362f69ea4eac2b_img.jpg\) 1](#) Draft Inter-agency Protocol for Management of Arsenic in Groundwater

INTER-AGENCY PROTOCOL FOR MANAGEMENT OF ARSENIC IN GROUNDWATER

August 2018

AGENCIES:

Hawke's Bay District Health Board (HBDHB)
Hawke's Bay Regional Council (HBRC)
Napier City Council (NCC)

Hastings District Council (HDC)
Central Hawke's Bay District Council (CHBDC)
Wairoa District Council (WDC)

BACKGROUND:

The *Drinking-Water Standards for New Zealand 2005, (revised 2008)*, Wellington, Ministry of Health, prescribes the maximum allowable concentrations of potentially harmful contaminants that may be present in drinking water and are of significance to human health.

Under the DWSNZ the maximum acceptable value (MAV) for arsenic is 0.01 mg/l (ten micrograms per litre). In the past two years HBRC has responded to three separate incidents where arsenic has been detected in small community or self-supply drinking water. In all cases HBRC has been supported by the HBDHB and the relevant territorial authority to meet with affected residents and provide advice to them.

As a result of the increased awareness and testing by homeowners, and by HBRC of its own monitoring bores, we expect that there will be further notifications to us of exceedances of MAV for arsenic in groundwater.

PURPOSE:

The purpose of this protocol is to have agreed key processes and messages in place for the consistent management of contamination by arsenic of self-supply drinking water within the Hawke's Bay region.

This protocol does not cover municipal drinking water supplies for which the relevant territorial authority will already have processes in place for contamination under required Water Safety Plans.

OBLIGATIONS:

In respect of self-supply drinking water the agencies have the following obligations:

Hawke's Bay District Health Board undertakes health risk assessments and provision of advice for self-supplies.

- Health and aesthetic concerns
- Compliance with the Drinking Water Standards for NZ and the Health Act
- Advice on water quality testing
- Interpretation of testing results
- Advice on water treatment options
- Communication with health care providers
- Notification to other agencies when test result confirms MAV has been exceeded.

Hawke's Bay Regional Council manages groundwater quantity and groundwater quality

- Approval for siting of wells
- Approval for construction of wells
- Groundwater quality management
- Groundwater quantity management
- Historical land use and potential contaminated land issues
- Notification to other agencies when test result confirms MAV has been exceeded.

District/City Councils provide municipal drinking water supplies and assess private water supply proposals for self-supplies under the New Zealand Building Code/Building Act 2004

- Compliance with Building Act for dwellings/buildings to have potable water supply
- Review private bore water test results supplied in support of building consent applications
- Provide Land Information Memoranda under LGOIMA (1987), including where the land is supplied by water by the land owner any information the council has about the supply
- Approval of alternative supply options
- Historical land use and potential contaminated land issues
- Notification to other agencies when test result confirms MAV has been exceeded.

ACTIONS:

In the case of arsenic contamination it has been determined that there is more than one series of messages to be delivered, depending on the level of arsenic recorded and its impact on human health. This is because while the drinking water standard identifies a maximum acceptable value for long-term health risks, there will be instances where the measured level of arsenic is way in exceedance of that and may present immediate or short-term risks to health.

In recognition of these alternative scenarios two scenarios for messaging have been developed. Both have much in common – bringing together all the relevant agencies, a risk assessment of the triggering findings, investigations into the extent of contamination and potential source, and follow up processes.

A decision on whether a reading represents a long-term or more immediate risk to human health, and the course of action to therefore be followed, will be made by the Drinking Water Assessor and the Medical Officer of Health.

Arsenic level exceeding 0.01mg/l

The MAV level in the DWSNZ of 0.01 mg/l represents an increased risk of cancer after 70 years of consumption of water with that level of arsenic in it. The messaging for property owners where the MAV is just exceeded is:

Immediate:

- *It is still safe to drink the water for now*
- *It is safe to use the water for showering, bathing and washing clothes.*
- *The water is safe for animal consumption*
- *The water is safe for watering gardens*

Short term:

- *Options for on-site treatment to be considered by land owner (Brett Chapman doing work on this)*

Arsenic level greater than 0.5mg/l

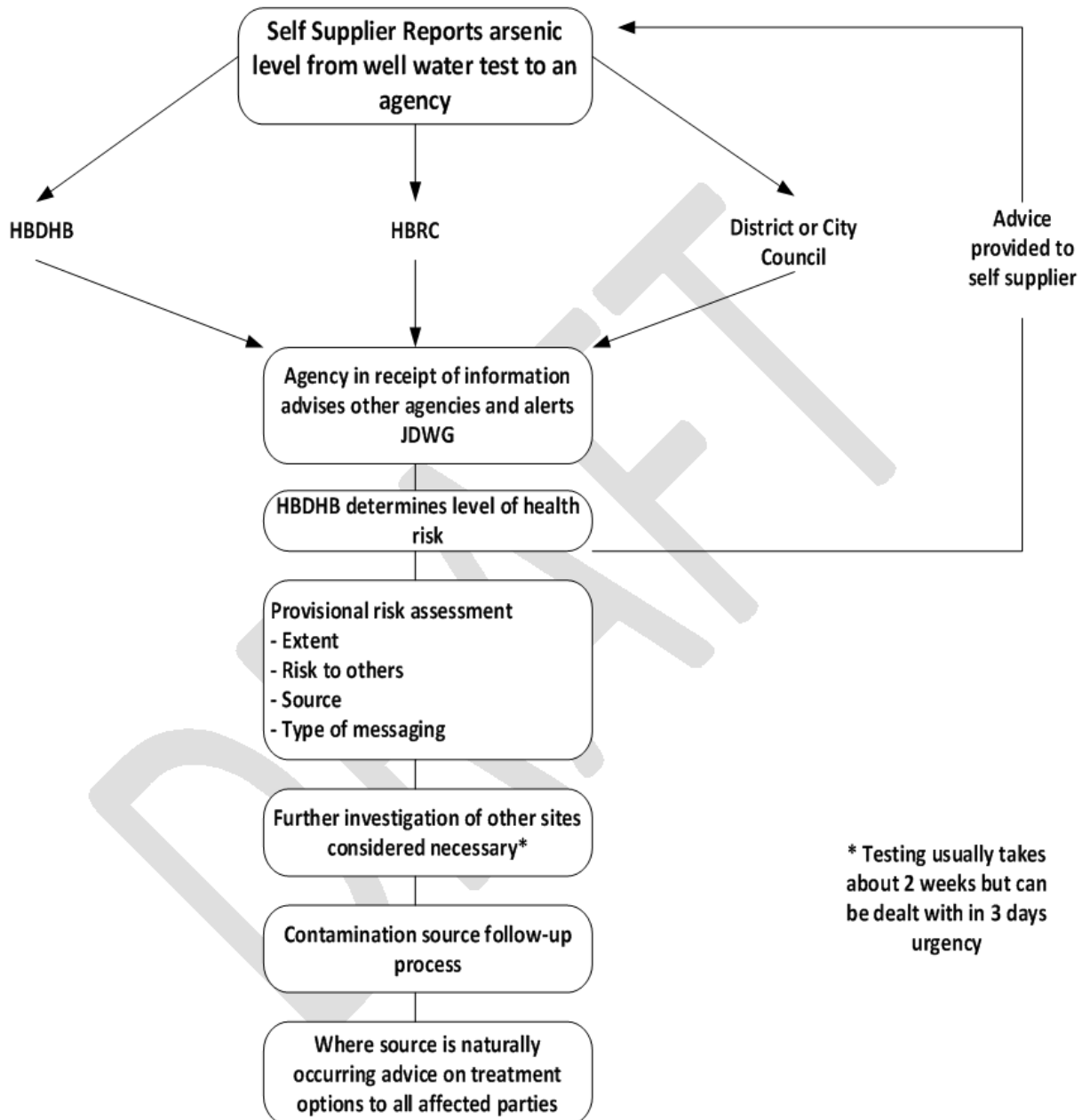
Where the arsenic measurement is in the vicinity of 0.5 mg/l or greater this represents a theoretical risk of a health effect within ten days. In this instance the messaging is as follows:

Immediate:

- *Cease consumption of drinking water immediately*
- *Showering, bathing, laundry?*
- *Animals?*
- *Gardens?*

Short term:

- Options for treatment or new sources to be actioned, including potential for alternative sources.



GENERAL PUBLIC INFORMATION

Updating of information on agency websites:

HBDHB: Health risks/ effects; what to test drinking water for and how often; treatment options

HBRC: Well maintenance; what to test drinking water for and how often.

Territorial council: Information on treatment options; what to test drinking water for and how often.

Inter-Agency Protocol for Management of Arsenic in Groundwater
August 2018

HAWKE'S BAY DRINKING WATER GOVERNANCE JOINT COMMITTEE

Wednesday 15 August 2018

Subject: UPDATE ON HBRC TANK PLAN CHANGE POTENTIAL DRINKING WATER SAFETY PROVISIONS

Reason for Report

1. To update the Joint Committee on the recommendations made to the TANK collaborative stakeholder group on 27 July 2018.

Background

2. A collaboration developing a draft plan change for the TANK catchments (Tutaekuri, Ahuriri, Ngaruroro, Karamu) has been operating since 2012. The TANK stakeholder group will recommend a set of provisions including objectives, policies and rules for a plan change to the Regional Plan Committee at its next meeting. The draft plan will set freshwater quality and quantity objectives and address aspects such as stormwater, wetland management, sediment and nutrient loss, water augmentation and matauranga Māori.
3. Although the TANK Group has considered measures to protect surface water quality the group had not explicitly focused on measures to protect drinking water sources. This presented challenges due to tight timeframes for completion of the draft plan change.
4. Additionally, the second report of the Havelock North Drinking Water Inquiry dated December 2017 raised the issue of drinking water safety in the context of water quality. The Inquiry panel went on to observe that the TANK plan change would add to the understanding of drinking water source protection issues.

Development of policy and rules

5. At the February TANK meeting, the TANK group agreed that the JWG should be regarded as a TANK working group to be tasked with developing draft policies and rules for consideration. This recognises that the Havelock North Drinking Water Inquiry has dominated discussion around drinking water and has become the platform for the most comprehensive assessment of issues relating to drinking water.
6. Given the tight timeframes, the JWG decided to contract this work out to a suitably qualified individual/entity at its March meeting. After considering several potential candidates the decision was made to appoint Good Earth Matters on the basis of their existing knowledge of the RMA, drinking water issues and the Hawke's Bay context. Good Earth matters undertook the following:
 - 6.1. Assessment of the current regulatory framework, to consider gaps and opportunities. This includes a National Stocktake of drinking water policy.
 - 6.2. Consideration of the use of Groundwater Capture Zones and Source Protection Zones.
 - 6.3. Stocktake of risk activities within the TANK catchment.
 - 6.4. Development of a framework and options for objectives, policies and rules to protect drinking water source.
7. Good Earth Matters has worked alongside the JWG and the TANK project team to refine proposals for TANK.

Summary of recommendations given to TANK

8. At the 27 July TANK meeting, the JWG presented the following recommendations to the TANK group.
 - 8.1. A new objective be included to provide an explicit statement in the Regional Plan that recognises and provides for source protection zones
 - 8.2. A new policy to support the above objective and policy and provide guidance as to how the objective was to be implemented.
 - 8.3. Several changes to rules:
 - 8.3.1. For activities that already require a resource consent, adding matters of control/ discretion that enable the risk of drinking water sources to be considered, where those activities are located in mapped source protection zones
 - 8.3.2. Introducing consenting for activities located over source protection zones
 - 8.3.3. Amendments to some existing Permitted Activity rules so that they meet the requirement of the National Environmental Standard for Sources of Human Drinking Water.
 - 8.3.4. Production Land use in a source protection zone area to be a permitted activity as proposed by TANK, but Farm Environment Plans will need to include consultation with the water supply authority and identify measures to manage risks to drinking water sources.
9. The TANK group supported the recommendations subject to some technical refinement between the JWG, the TANK project team and GEM. This work will take place in the coming weeks, and will be discussed at the next JWG meeting of 24 August.

Decision Making Process

10. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision making provisions do not apply.

Recommendations

That the Hawke's Bay Drinking Water Governance Joint Committee:

1. receives and notes the "Update on HBRC TANK Plan Change Potential Drinking Water Safety Provisions" staff report.
2. notes that the HBRC staff TANK project team and the Joint Working Group will continue to work together to incorporate the drinking water safety provisions into the draft plan change.

Authored by:

Rina Douglas
SENIOR PLANNER
HBRC

Approved by:

Liz Lambert
GROUP MANAGER REGULATION
HBRC

Attachment/s

There are no attachments for this report.

HAWKE'S BAY DRINKING WATER GOVERNANCE JOINT COMMITTEE

Wednesday 15 August 2018

Subject: JOINT WORKING GROUP WORK PLAN UPDATE

Item 8

Reason for Report

1. To provide an update to the Joint Committee on the Joint Working Group's (JWG) work plan.

Background

2. The JWG monitors progress on its work through a Work Plan. The JWG has been systematically working this plan over the last 12-18 months. Therefore, some of the original actions arising from the Panel of Inquiry's directions have been completed, and what remains is being continually monitored and updated.
3. At the last Joint Committee meeting (10 May 2018) the Committee directed the JWG to prioritise the actions. This has been done and the action plan updated accordingly.
4. Of importance to note is the TANK plan change, which has been the leading priority for the JWG. At the TANK meeting of 27 July the JWG presented recommendations to the TANK group regarding the inclusion of drinking water policies and rules (discussed in separate agenda item). The TANK group broadly accepted the recommendations subject to some technical refinement. In the coming weeks the TANK project team, the JWG and Good Earth Matters will work to finalise this.

Decision Making Process

5. Staff have assessed the requirements of the Local Government Act 2002 in relation to this item and have concluded that, as this report is for information only, the decision making provisions do not apply.

Recommendations

That the Hawke's Bay Drinking Water Governance Joint Committee receives and notes the "Joint Working Group Work Plan Update" staff report and associated action plan.

Authored by:

Rina Douglas
SENIOR PLANNER
HBRC

Approved by:

Liz Lambert
GROUP MANAGER REGULATION
HBRC

Attachment/s

- [!\[\]\(3243e4bd1d2d616135fda61475cfff1e_img.jpg\) 1](#) Joint Working Group Work Plan

Action Plan and White Paper combined March 2018					
Rec #	Who/When	Recommendation	Background	Current status	Priority
Secure protection zones	All and TANK project members	Derived from White Paper	Good Earth Matters were engaged by JWG to develop objectives, policies, and rules for the TANK plan change. This included an assessment of the potential use of Source/secure protection zones in the TANK area. Regular meetings held between JWG, GEM and TANK project team to refine the proposals. Recommendations to TANK on behalf of JWG were presented at the 1 August meeting.	TANK agreed to the recommendations, subject to some technical refinement. TANK project team, GEM and JWG will work to finalise these as soon as practicable.	High: Due to the tight deadlines of the TANK team, this has been the top priority for the JWG. JWG, GEM and TANK project team working quickly to resolve outstanding issues. Will be progressed at the next JWG meeting on 24 August.
Communications: Development of common terminology, sharing of information on a no-blame basis, consistency of outward facing messages between JWG members	All	Derived from White Paper	Development of Comms plan between all JWG parties to outline how messages and information are shared consistently, the development of 'a hierarchy of emergencies' that will assess the level of response, timeframes for agencies to respond and how information will be shared.	Development ongoing. The Arsenic Protocol is being considered as a prototype for such a Plan. Webcasting of Joint Committee meetings is also being introduced which will allow for greater public visibility of matters discussed.	High: Work ongoing. TANK deadlines have overtaken the final delivery. Will be progressed at the next JWG meeting on 24 August.
Federated approach to data sharing and gaps analysis about what data is missing	All	Derived from White Paper	JWG members are of view that data sharing has improved amongst members significantly. It's important to understand how often people need certain types of data.	No further progress on defining requirements for information sharing system. Current focus has been on working to TANK timeframes for finalisation of policies and rules, including source water protection provisions, will assist in progressing this task	High: TANK workstream will assist in progressing gaps around source protection, but need to establish timeframe for exploring a data sharing system. i.e shared IT portal. Will be discussed at the next JWG meeting on 24 August.
A e) (15/12/16)	HDC	Direction from Nathan Gedyes	JWG investigate whether the Havelock North reticulation and distribution systems are fragile or vulnerable and whether they need maintenance, repair work, or improvements, in order to deliver safe drinking water to consumers. To include 'backflow protection' Water Safety Plans for all supplies to be updated and should include reticulation risk and should be monitored for implementation by DWA. Reports to be shared with JWG.	Ongoing.	Medium. Each Water Supplier to provide a high level summary of any risks and mitigation improvements at each JWG meeting.

Item 8

Attachment 1

Action Plan and White Paper combined March 2018					
Rec #	Who/When	Recommendation	Background	Current status	Priority
c) (i- vii)	HDC	<p>The monitoring and testing of the Havelock North and Hastings drinking water supplies be subject to the following regime:</p> <p>HDC will provide a report for the period on all these results C & D</p> <p>2 litre raw water samples be taken daily from each bore contributing to the supply of HN drinking water that HDC deems secure or provisionally secure until a full calendar year's worth of data has been collected. These samples are not necessary from bores that are deemed to be non secure. for example, they are not necessary at brookvale bore 3.</p> <p>total coliform and E.coli testing is required on all samples, using either Colilert 18 or such other effective and speedy test that the DWA approves</p> <p>enumerated tests for all reticulation samples and presence/absence testing for the 2-litre samples from the bores</p> <p>testing from the reticulation sites be continued at the level currently in place</p> <p>daily testing of FAC levels take place at the ends, and in the dead ends that are most at risk, of the reticulation with a pH level of less than 8 and with a required FAC level of at least 0.2mg/L, or an adjusted level if the pH level is greater than 8</p> <p>testing for disinfection by-products take place as directed by the DWA</p> <p>in any event, the test set out in (i) should be carried out on three consecutive days after an abnormal wet weather event (this event and any details of such increased testing to be defined and prescribed without delay by the JWVG following receipt of the advice being provided by Tonkin and Taylor)</p>	Testing regime as directed by the Inquiry Panel.		Medium. Hastings DC to report back to the group when required if there are anomalies if there are any exceptions to the norm.
Water Aging	HBRC		HBRC commissioned GNS report on water aging, which has been completed.	GNS report tabled at JWVG meeting on 27 April. No date yet set for the dedicated meeting of the JWVG to discuss the report.	Medium: date for sharing of the GNS report and discussion to be confirmed at JWVG meeting of 24 August
Self-supplies	HBRC		Gaps in the context of self-supplies discussed. At present we have well store data and property files, but not every well is captured. There are also linkages with how the Building Act operates	Questionnaire to be developed which asks: • What information we currently have/haven't got available to pin-point self-supplies? • How often is this information required? i.e. once a year?	Medium: Hastings DC investigating and will report back to the JWVG with what this work might look like at the August 24th meeting.
Development of risk management approach through Water Safety Plans	All	Move to a more common approach between TLAs			Medium: these WSPs are being actively developed

Action Plan and White Paper combined March 2018					
Rec #	Who/When	Recommendation	Background	Current status	Priority
<i>Models to understand transportation of contaminants</i>	HBRG		It was noted that although the TANK model does have a component for contaminants, it has been built at a regional scale and not for bore specific recommendations. It is a base model for all to use. At present, it is not certain if we have the capacity to model pathogens across the entire aquifer. Important to recognise that rainwater is the mechanism of transportation, and the question becomes one of assessing what types of activities there are on the ground that potentially influence groundwater.		Medium: JWG to agree on a time on a time for Jeff Smith, Principal Groundwater Scientist Hydrology to report back to the JWG as to the feasibility of the TANK model to understand the transportation of contaminants.
<i>Capturing data as it relates to episodic events</i>	All		It was noted that all parties have increased their baseline monitoring. State of the Environment reporting has a specific purpose and is not designed to capture short, term episodic events. Extraordinary events include volcanic eruptions as well as rain induced or pumping induced events. Furthermore, Napier and Hastings are now chlorinating water, however, it is still important to understand behaviours and trends. Questions around whether or not we have all the necessary information, and/or if we do if this being used 'well' enough.	Later in the year the JWG will run a scenario that will model the impact of ash cover from an eruption. We can then gauge what data we currently have available (or haven't) and what we still need for episodic events.	Low: to occur later in the year once higher priority actions have been settled. Scenario to potentially incorporate CDEM members.
<i>Ways to work with MOH and ESR to develop info systems to better link health information and environmental management</i>	DHB		WINZ needs to 'talk' to Episerve. This was raised as part of the Inquiry. More functionality is needed. The JWG also has a lobbying function, and this needs to be raised again with MOH and ESR.	DHB to draft a letter to MOH and ESR for the Chair of the Group to sign raising these points.	Low: to occur later in the year once higher priority actions have been settled. This is an action