

Extraordinary Whangarei District Council Meeting Agenda

Date: Tuesday, 11 February, 2020

Time: 8:30 am

Location: Council Chamber

Forum North, Rust Avenue

Whangarei

Elected Members: Her Worship the Mayor Sheryl Mai

(Chairperson)

Cr Gavin Benney Cr Vince Cocurullo Cr Nicholas Connop

Cr Ken Couper
Cr Tricia Cutforth
Cr Shelley Deeming
Cr Jayne Golightly

Cr Phil Halse
Cr Greg Innes
Cr Greg Martin
Cr Anna Murphy
Cr Carol Peters
Cr Simon Reid

For any queries regarding this meeting please contact the Whangarei District Council on (09) 430-4200.

Pages

- 1. Karakia/Prayer
- 2. Declarations of Interest
- 3. Apologies
- 4. Decision Reports
 - 4.1 Water Restrictions for the Whangarei District

5. Closure of Meeting

Recommendations contained in the agenda are not the decisions of the meeting. Please refer to minutes for resolutions.

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4.1 Water Restrictions for the Whangarei District

Meeting: Extra ordinary Whangarei District Council

Date of meeting: 11 February 2020

Reporting officer: Andrew Venmore (Manager Water Services)

1 Purpose

To update Council on the situation regarding water resources within the Whangarei District and recommend that the Chief Executive be delegated to introduce water restrictions should it be considered necessary.

2 Recommendation

That Whangarei District Council

1. Delegates to the Chief Executive the power to impose and lift water restrictions in accordance with clause 1.3.6.6 of the Water Supply Bylaw 2012.

3 Background

2019 was the driest year since the construction of the Whau Valley Dam in 1969. Only 916mm of rain fell at Whau Valley compared to the annual average of 1,591mm. Similarly, Wilsons Dam experienced only 842mm compared to an average of 1,210mm. This significant rainfall deficit has left many of our water sources much lower than normal heading into summer. This is particularly true of our river and groundwater sources which were not fully recharged over the winter period.

Realising the potential for back to back dry years, Water Services staff have been trying to optimise our river and groundwater sources over the last 8 months to conserve the water in our dams. This has been reasonably successful with levels siting at 78% in Whau Valley Dam and 74% in Wilsons dam as at 28th of January 2020. However, with our rivers now drying out it will be necessary to take more water from the two Dams. Long range forecasts are anticipating below average rainfall over the remainder of the summer, and other Northland Councils have already imposed water restrictions.

The decision to impose restrictions involves a number of considerations and is not taken lightly. Restrictions were last imposed in Whangarei in 2010. Some of the factors that are considered are; dam levels, short range and long range weather forecasts, river levels, current demand and Regional Council consent requirements. Prior to imposing restrictions Council has previously asked the public to voluntarily reduce water consumption. Water Services monitors daily demand and it is only when it is considered that voluntary water savings are no longer sufficient, that restrictions would be imposed.

Restrictions may be imposed on one or more of the Water Supply Areas. Restrictions follow a series of levels as a drought situation worsens.

- Level 1 No Restrictions Use Water Sensibly
- Level 2 No Sprinklers
- Level 3 No Hoses or Sprinklers
- Level 4 Essential Use only

Details of what can and can't be done under each level are provided in Appendix A, of the Water Services Drought Management Plan, attached.

4 Discussion

On 9th January the Northland Regional Council wrote to all large water users in Northland requesting that they;

- Implement all water conservation measures possible
- Implement water rationing/management plans
- Eliminate water wastage/leaks
- Prepare for possible water shortages in the near future.

On 14th January the Whangarei District Council, Drought Management Committee met for the first time. The committee is made up of staff from Water Services, Customer Services and Communications and is tasked with ensuring the public are effectively informed of the water situation and any conservations measures required. The committee agreed to commence a public information initiative and articles have already appeared on Facebook and in the Leader. It was also agreed that, in accordance with the Water Services Drought Management Plan, restrictions may need to be imposed if conditions continue to deteriorate. It is likely that by February treated water will need to be transported to the Mangapai scheme to supplement the stream source there.

4.1 Policy and planning implications

Under clause 1.3.6.6 of the Water Supply Bylaw 2012 the decision to impose and lift water restrictions must be made by Council:

Clause 1.3.6.6 Emergency

During an emergency Council may restrict or prohibit the use of water for any specified purpose, for any specified period, and for any or all of its customers. Such restrictions shall be publicly notified.

Under clause 32(5) of Schedule 7 of the Local Government Act 2002 Council may delegate the enforcement, inspection, licensing, and administration related to bylaws and other regulatory matters. Council's current Delegations Register includes a delegation to the Chief Executive to exercise a broad range of functions under the Water Supply Bylaw 2012. His general delegation under the Bylaw is as follows:

All of its responsibilities, duties and powers under this bylaw, except -

- (a) the power to set fees
- (b) the power to make a decision for which a Council resolution is required
- (c) the power to hear and decided on any appeal process.

While the explanatory text of the Water Supply Bylaw 2012 contemplates the potential for the Chief Executive to impose restrictions where immediate action is warranted, an express delegation would ensure that he is able to act quickly to put appropriate measures in place as required.

4.2 Risks

Imposing restrictions can have an impact on the community and in particular businesses. Businesses that use a lot of water such as plant nurseries, car washes and water blasting firms can find it difficult to comply. Water Services staff will work with business to find the best way to conserve water without having too big an impact on their operation.

Another large customer is water tanker operators who cart water to properties whose rainwater tanks have run dry. It is not realistic to stop these supplies although it is not normal to supply water to tanker operators from out of the District once restrictions have been imposed. However, if the lack of rain continues and other parts of Northland are really struggling, consideration may need to be given to how we can best support other Councils.

5 Significance and engagement

The decisions or matters of this Agenda do not trigger the significance criteria outlined in Council's Significance and Engagement Policy, and the public will be informed via Agenda publication on the website.

6 Attachment

1. Water Services Drought Management Plan

Water Services Drought Management Plan



Contents

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Drought Management Plan Status

1.Overall Responsibility for the Co-ordination of all Matters in this Plan							
Date	Name	Designation					
November 2009	Andrew Venmore	Water Services Manager					

2.Prepared / Reviewed/ Updated By						
Date	Name	Designation				
November 2015	Andrew Venmore	Water Services Manager				
November 2015	Simon Weston	Infrastructure and Services Manager				
January 2020	Andrew Venmore	Water Services Manager				

Document Management:

This document comes with a number of predefined styles. These should not be tampered with. If a new style is required, than this should be created through 'Format | Styles and Formatting'. When copy pasting information from other documents this should be completed as paste special unformatted text to avoid carrying through different styles or corrupted styles. To avoid a large document use of the predefined styles is recommended.

1 Introduction

Water Services have eight active raw water sources (a ninth, the Wairua River, is likely to come on line around 2026), two of these sources are water storage dams. As most of the other sources are run of river it is these dams that must provide the water for the Whangarei District through times of drought.

This plan is designed to give an indicative action required to maintain the maximum level of service to the community. The availability of the other sources, which rise and fall quicker than the dams, and many other outside influencing factors (long-term rain forecasts, soil moisture levels, water table levels, speed of dam drop), may cause the responses given in this guide to be accelerated or slowed down on the advice of senior Water Services staff.

This plan also outlines the actions to be taken once supplies get to levels where restrictions need to be imposed. The management of the drought response sits with the Drought Management Committee. The committee will make recommendations as to the appropriate level of response and the responsibility for approving the recommendations lies with the Chief Executive.

2 Background

Whangarei District has four water supply areas; The Whangarei Water Supply area, The Bream Bay Water Supply area, The Maungakaramea Water Supply area and the Mangapai Water Supply area. Each water supply area has its own raw water sources and consequently the risk of water shortages within each area varies. Details about each of the water supply areas can be found in the Water Services Activity Management Plan

3 Drought Planning

This drought management plan involves both the management of the water sources by Water Services and the implementation of water conservation and demand management initiatives with water users. Drought planning and implementation will be undertaken by the Drought Management Committee. The Drought Management Committee consists of the staff shown in the table below.

Member	Responsibility
Water Services Manager	Chair
Distribution Engineer	Network management
Operations Engineer	Water source and treatment plant management
Distribution Technician	Consumption monitoring and customer liaison
Senior Communications Advisor	Communications plan and implementation
Infrastructure Customer Services Co-ordinator	Customer liaison and problem resolution

Other staff and contractors may be invited to meetings as required.

Drought planning will be done by Water Supply Area

4 Whangarei Water Supply Area

Whangarei Water Supply area consists of four raw water sources, Whau Valley Dam, Waipao Stream (Poroti), Maunu Springs and the Hatea River. During an extended dry period the amount of water available from Waipao Stream and the Hatea River will reduce and takes may have to cease completely. During such events the amount of water available from Maunu Springs will be less than 4,000m3 per day and so the bulk of the water will need to come from the Whau Valley Dam. Consequently it is the amount of water available from the dam that governs the demand management and water conservation requirements. The development of the Wairua River as a new water source from 2026 will overcome the reliance on the Whau Valley dam and will considerably increase the resilience of this Water Supply area.

4.1 Demand Management of Whau Valley Dam

The Whau Valley Dam holds 1,871,286 m3 of water at 100% full and feeds the Whau Valley Water Treatment plant through a 525mm cast iron main. As the level in the dam drops various actions will be implemented to reduce demand and conserve water. The level at which these actions occur is shown in Figure 3. The levels are indicative only and actual actions may occur sooner or later at the recommendation of the Drought Management Committee.

3

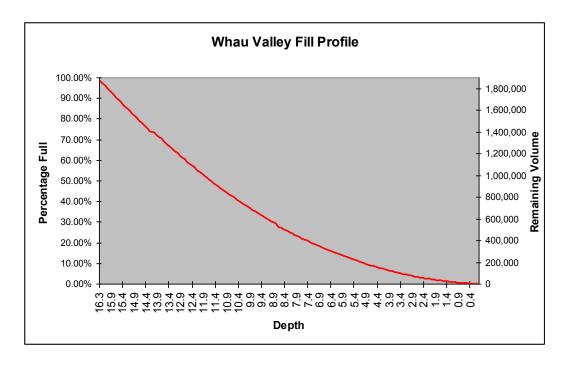


Figure 1 Whau Valley Dam Fill Profile



Figure 2 Aerial Photograph of the Whau Valley Dam

4.2 Whau Valley Dam Level — Drought Plan

	January	February	March	April	May	June	July	August	September	October	November	December
95-100%									а	а		
90-95%								а			а	а
85-90%	average						а					
80-85%		а	а	а		а					m	
75-80%					а							m
70-75%												
65-70%	minimum											
60-65%										m		
55-60%												
50-55%		m										
45-50%									m			
40-45%			m					m				
35-40%				m								
30-35%												
25-30%					m							
20-25%							m					
15-20%						m						
10-15%												
5-10%												
0-5%												

Step 1 – Business As Usual
Step 2 – Internal Preparation.
Step 3 – Public Awareness
Step 4 – Voluntary Measures
Step 5 –Water Restrictions
Step 6 – Limited Water Supply
Step 7 – Manual Water Supply

Figure 3 Whau Valley Dam Level Response Guide

5 Bream Bay Water Supply Area

The Bream Bay Water Supply area consists of three raw water sources, Wilsons Dam, Flygers Stream (Ruakaka) and the Ahuroa River. During an extended dry period the amount of water available from Flygers Stream and the Ahuroa River will reduce and takes may have to cease completely. During such events the bulk of the water will need to come from the Wilsons Dam. Consequently it is the amount of water available from the dam that governs the demand management and water conservation requirements. The Wilsons Dam was constructed in 2003 and was designed for growth over the next 50 years consequently it is not envisaged that even a prolonged drought will impact too severely on the Bream Bay Water Supply Area.

5.1 Demand Management of Wilsons Dam

The Wilsons Dam holds 2,491,730 m3 of water at 100% full and feeds the Ruakaka Water Treatment plant through the Tauroa pumps and 375mm PE main. As the level in the dam drops various actions will be implemented to reduce demand and conserve water. The level at which these actions occur is shown in Figure 6. The levels are indicative only and actual actions may occur sooner or later at the recommendation of the Drought Management Committee.

Wilsons Dam

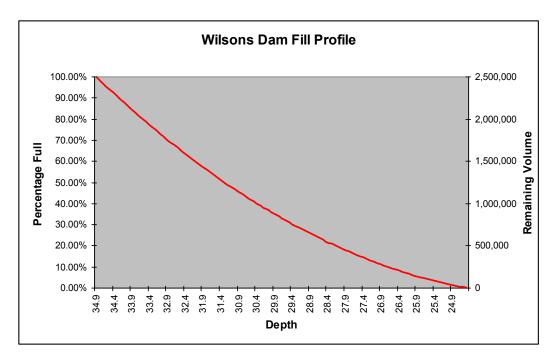


Figure 4 Wilsons Dam Fill Profile



Figure 5 Aerial Photograph of Wilsons Dam

5.2 Wilsons Dam Level - Drought Plan

	January	February	March	April	May	June	July	August	September	October	November	December
95-100%							а	а	а	а	а	
90-95%	average	а	а	а	а	а						а
85-90%												
80-85%	minimum		m							m	m	
75-80%		m		m					m			m
70-75%					m		m	m				
65-70%						m						
60-65%												
55-60%												
50-55%												
45-50%												
40-45%												
35-40%												
30-35%												
25-30%												
20-25%												
15-20%												
10-15%												
5-10%												
0-5%												

Step 1 – Business As Usual						
Step 2 – Internal Preparation.						
Step 3 – Public Awareness						
Step 4 – Voluntary Measures						
Step 5 –Water Restrictions						
Step 6 – Limited Water Supply						
Step 7 – Manual Water Supply						

Figure 6 Wilsons Dam Level Response Guide

6 Maungakaramea Water Supply Area

The Maungakaramea Water Supply Area serves only the township of Maungakaramea. The raw water is sourced from two bores on Stonehaven Drive. The bores take water from the groundwater feeding the Waiotama River. The township of Maungakaramea consists of 93 predominately residential connections and no major users. Since the bores we constructed in the 1970's Maungakaramea has not run out of water. It is therefore not anticipated that issues will arise with this supply. However, should water levels in the aquifer drop to a point that water cannot be taken it would be relatively easy to supply water via water tankers sourced from Bream Bay water supply area. At this point restrictions would be implemented.

7 Mangapai Water Supply Area

Mangapai is our smallest water supply area with only 36 connections. The raw water is sourced from the Tauraroa Stream. The stream also supplies water for livestock both up and downstream of our take point. This stream is small and subject to low flows during dry spells and it is not uncommon for WDC to have to cease taking water during the summer. Due to the small number of connections it is practical to deliver water to the treatment plant by water tanker. As the water is usually sourced from Whangarei water supply area it has been the practice in the past to align any water saving initiatives with those for Whangarei. Consequently restrictions have only been imposed when Whangarei has had restrictions. It should be considered whether restrictions should be implemented separately for Mangapai.

8 Drought Response Steps

Whangarei District Council always promotes the sensible use of water, recognising it is a resource to be carefully managed. As with all resources there is more flexibility in how it is utilised when there is more of the resource available, conversely when the resource is constrained a careful management system is required to ensure there is enough for everyone. The drought response steps are a rough guide to the actions required depending on the severity of the drought. It is considered that the 7 step approach is useful for internal management of a drought. However, for the public an easier, simpler approach is required. The public message is discussed in chapter 9.

For internal drought management the implementation of any particular step or measure will be dependent on the circumstances at the time. The decision to move between steps will be made by the drought management committee. Where restrictions are recommended the approval of the Chief Execuative is needed.

8.1 Step 1 – Business as usual

Public:

- There are no restrictions in place
- Minimise losses and efficient use of water encouraged

Industry (incl. WDC):

- There are no restrictions in place
- Minimise losses and efficient use of water encouraged
- Any water intensive planned activity should be carried out at this time

Water Services

 Water draw from any available source, to allow the most economical running of the water network

8.2 Step 2 – Preparation

Public:

- There are no restrictions in place
- Minimise losses and efficient use of water encouraged

Industry (incl. WDC):

- There are no restrictions in place
- Minimise losses and efficient use of water encouraged

Water Services

 Water draw from any supplemental sources to preserve Dam levels, this should be balanced to ensure minimal impact at any one source

8.3 Step 3 – Public Awareness

Public:

- There are no restrictions in place
- Minimise losses and efficient use of water encouraged
- Begin media coverage of water efficiencies, rainfall and dam levels
- Encourage water conservation

Industry (incl. WDC):

- There are no restrictions in place
- Minimise losses and efficient use of water encouraged
- Seek advice from Water Services Manager before any water intensive work is undertaken
- Fire Service and Rural Fire requested to stop practising and testing from live hydrants

Water Services

- All sources fully utilised to preserve Dam levels
- Extra leakage and water loss studies undertaken
- Daily updates of Dam level prediction model
- Proactive water loss programme begin
- Maintenance contractor to prioritise jobs in which water is being lost
- Move dam level information to front page of WDC website
- Illegal connections sweep

8.4 Step 4 – Voluntary Measures

Public:

- Alert level 1 No restrictions in place
- Water use reduction promoted in media
- Publish rain and dam levels and water treatment plant production figures daily
- "Unusually intensive" water activities discouraged (swimming pool fills, large wetting down operations)
- Radio adverts detailing measures
- Appropriate signage

Industry (incl. WDC):

- Meetings arranged between Water Services and largest consumers
- Industry strongly encouraged to look at effective water use
- Suggested measures letter sent to all non-domestic customers
- Leaks to be fixed or Water Services will fix and charge or install limiters
- All 50mm metered standpipes withdrawn from use
- No standpipes or bulk filling point fills for non-potable use
- No water intensive work is undertaken

Water Services

- Carry out public information exercises detailing how water can be used efficiently
- Encourage checking of water meters for leaks
- Maintenance contractor to prioritise jobs in which water is being lost
- Illegal connections sweep
- Consider how water conservation message can be better promoted
- Agenda to Council to set date for restrictions to be imposed

8.5 Step 5 – Restrictions

Public:

- Restrictions in place, either levels 2 or 3
- As per restriction guidelines at appendix A
- Leaks to be fixed or Water Services will fix and charge or install limiters
- Radio and newspaper articles
- Media campaign
- Appropriate signage

Industry (incl. WDC):

- Level 1 or 2 restrictions in place,
- As per restriction guidelines at appendix A.
- Letter drop to all large customers detailing restrictions
- All businesses to actively reduce water use, any wastage may lead to sanctions

Water Services

• Likely limited water available from other sources, majority of water will be drawn from Dams

- Full time leak detection and demand management staff
- Withdraw all standpipes and limit use of bulk delivery points
- Flow restrictions or prosecution of non-compliant properties
- Fast track any demand management work
- Consider works to improve water availability

8.6 Step 6 – Limited Water Supply

Public:

- Move to level 4 restrictions
- · As per restrictions guidelines at appendix A
- Pressure reductions where possible
- Areas may be switched off for periods of time
- School and community group visits

Industry (incl. WDC):

- Move to level 4 restrictions
- Pressure reductions where possible
- Areas may be switched off for periods of time
- High users may have limitations placed on their supply

Water Services

- Reticulation managed to ensure maximum service available is given to all customers from the resources available
- Communication as to the long-term outlook and measures being taken and those being considered
- Fast track any raw water availability work
- Consider Civil Defence and Lifeline implications

8.7 Step 7 – Manual Water Supply

Public:

- The most effective use of the water available to WDC will be given to the public to ensure basic health and hygiene levels can be maintained throughout the community.
- Water may need to be delivered by tanker

Industry (incl. WDC):

- Where available water will be supplied to industry, however priority will be given to domestic water needs
- Water supply to industry maybe closed off

Water Services

- Consider water from other regions by tanker
- Manage water tankers, periodic supply shutdowns, re-active pressure management, tankered deliveries, standpipe supplies, drinking water supplies, dialysis patients.
- Consider Civil Defence declaration

9 Communications Plan

A detailed communications plan will be developed by the communications team and will evolve as the drought continues. As most droughts experienced by WDC are Northland wide events it is hoped that communications regarding the drought and the messages to the public can be co-ordinated across Northland. To this end a simple four level approach is proposed.

9.1 Four level public communications alert

The proposed for levels are shown in the table below. Note, the colour coding does not align with the internal Dam level step approach.

Level	Message	Associated Dam level
1	Use water sensibly	Step 4
2	No sprinklers	Step 5
3	No sprinklers or hoses	Step 5
4	Essential use only	Step 6

9.2 Restriction Guidelines

To assist with the implementation of restrictions a guideline document has been drawn up. This document is at Appendix A. The guidelines are not exhaustive but provide a rough guide what activities are restricted at each level of the restrictions. For large water users and businesses, it is anticipated that Water Services will contact them directly to implement individual water conservation plans. Consumption of these customers will be closely monitored.

9.3 Imposing Restrictions

In accordance with the WDC Water Supply Bylaw 2012 the imposing of restrictions can only be done by Council. Clause 1.3.6 states;

"The customer shall comply with any water use restrictions which may be approved by Council to manage high seasonal or other demands."

It is anticipated that prior to in the need for restrictions and agenda item would be presented to Council recommending that the authority to impose and lift restrictions be delegated to the CE.

Appendix A

Water Restriction Guidelines

Water Use	Supply Route	Level 2	Level 3	Level
	Residential Saving Measures		I	L
Garden Watering	Sprinklers	×	×	x
_	Irrigation Systems	×	×	×
	Hand Held Hose	✓	×	x
	Bucket	✓	✓	×
Vehicle Washing	Hand Held Hose	✓	×	×
_	Water Blaster	✓	×	×
	Bucket	✓	✓	x
Swimming Pools	Filling from Mains Supply	✓	×	x
Č	Filling via Water Tanker from alternate supply area	✓	✓	✓
Building and paved	Hand held hose	✓	×	x
area cleaning	Water blaster	✓	×	x
	Bucket	✓	✓	x
Water Tanks	Registered Water Carrier	✓	×	×
	Registered Water Carrier from Unrestricted supply	✓	✓	✓
Flushing Boat	With hose for no more than 2 minutes	✓	×	×
Engines	In bucket and recycle water	✓	✓	×
	Commercial and Industrial Saving Measu	ıres	•	•
Gardens, Lawns	Sprinklers	×	×	x
and private fields	Irrigation Systems	x	×	x
	Hand held hose	✓	×	x
	Bucket	✓	✓	x
Market Garden,	Efficient plant water as required	✓	×	x
Plant Nursery	With written approval (limitations will apply)	✓	✓	✓
Public Swimming Pools	Filling from mains	✓	✓	×
Car washes and	Mains pressure water systems with no recycling	✓	×	×
Commercial	High pressure water systems	✓	✓	x
Vehicle Washing	Recycled water systems (with written approval)	✓	✓	✓
Public Fountains	Filling from mains	x	×	x
Fire Fighting	Emergency use only	✓	✓	✓
Cleaning Water	Hand Held hose	✓	×	×
<u> </u>	Water blaster or bucket	✓	✓	×
Construction water	Water Tanker or Metered standpipes	×	×	×
Municipal Sports	Established fields fed from mains	×	×	×
Fields	Critical fields with approved watering plans	✓	✓	x

Note: Industrial users will be requested to review their water demand and reduce usage as much as possible during periods of drought. The use of recycled water is not restricted; however, the use of make up water must be minimized.

RESOLUTION TO EXCLUDE THE PUBLIC

That the public be excluded from the following parts of proceedings of this meeting.

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under Section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

The making available of information would be likely to unreasonably prejudice the 1. commercial position of persons who are the subject of the information. {Section 7(2)(c)} To enable the council (the committee) to carry on without prejudice or disadvantage 2, commercial negotiations. {(Section 7(2)(i)}. 3. To protect the privacy of natural persons. {Section 7(2)(a)}. 4. Publicity prior to successful prosecution of the individuals named would be contrary to the laws of natural justice and may constitute contempt of court. {Section 48(1)(b)}. To protect information which is the subject to an obligation of confidence, the publication of 5. such information would be likely to prejudice the supply of information from the same source and it is in the public interest that such information should continue to be supplied. {Section7(2)(c)(i)}. 6. In order to maintain legal professional privilege. {Section 2(g)}. 7. To enable the council to carry on without prejudice or disadvantage, negotiations {Section 7(2)(i).

Resolution to allow members of the public to remain

If the council/committee wishes members of the public to remain during discussion of confidential items the following additional recommendation will need to be passed:
Move/Second
"Thatbe permitted to remain at this meeting, after the public has been excluded, because of his/her/their knowledge of Item .
This knowledge, which will be of assistance in relation to the matter to be discussed, is relevant to that matter because

Note:

Every resolution to exclude the public shall be put at a time when the meeting is open to the public.