



Report 10.519  
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Committee Regional Sustainability Committee  
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## **Application for change to conditions of resource consent for water abstraction at Kaitoke weir**

### **1. Purpose**

To seek the Committee's approval to submit an application for a short-term change to the conditions of the resource consent for water abstraction at Kaitoke weir.

### **2. Significance of the decision**

The matters for decision in this report **do not** trigger the significance policy of the Council or otherwise trigger section 76(3)(b) of the Local Government Act 2002.

### **3. Background**

Greater Wellington Regional Council takes water from the Hutt River at Kaitoke Weir for the bulk water supply to the Hutt Valley, Porirua and Wellington. The resource consent for this water take limits the maximum instantaneous and daily volume abstracted, and requires that the low flow of the Hutt River below the weir is a minimum of 600 litres/second.

#### **3.1 Assessment of environmental effects**

Starting in 2005, a robust and detailed assessment of the environmental effects of a potential change in the low flow condition to 400 litres/second has been carried out. This includes thorough and extensive independent scientific studies on the Hutt River and the potential effects that the reduction in the minimum flow may have. The reports have been peer reviewed by the Nelson-based Cawthron Institute. The result of these scientific studies demonstrates that the reduction in low flow will have no more than minor adverse effects on the environment of the Hutt River. Attachment 1 provides a summary of the assessment of potential adverse effects.

### **3.2 Upgrade of Stuart Macaskill Lakes**

Greater Wellington is to undertake the seismic strengthening of the Stuart Macaskill Lakes at Te Marua and increase their storage capacity. This upgrade work will require each lake in turn to be taken out of service for up to 12 months commencing with Lake 2 in late 2011. Installing the internal lining of the lake requires generally dry conditions; therefore the work will need to be carried out over successive summers.

Due to the timing of the work, any delay in construction, such as due to weather, may not allow Lake 1 to be put back in service for the summer of 2013/2014, meaning that water storage for three summers may be affected.

Taking a lake out of service will approximately halve the available water storage capacity, and therefore impact on the ability of the bulk water supply system to provide adequate water, particularly in a dry summer.

Greater Wellington has assessed that with a lake out of service, and without a reduction of the residual low flow at Kaitoke, water consumption savings of around 6% would be required by each city during an average summer with average water consumption. This level of saving is manageable with modest conservation. However in a dry summer, water consumption savings up to 13.5% would be needed, which would require much more onerous restrictions – such as restricting most domestic outdoor water use.

## **4. Comment**

### **4.1 Avoiding a potential summer water shortage**

Modelling indicates that, with a lake out of service, the risk of a water shortage, even in a dry summer, can largely be avoided with a reduction in the minimum low flow in the Hutt River at Kaitoke weir from 600 litres/second to 400 litres/second. This minimum low flow reduction would provide up to 17 million litres/day (an additional 10% approximately) to supplement the bulk water supply during periods when sufficient water would previously have been unavailable from the Hutt River. The water shortage would be avoided with no change to the maximum and daily limits on the quantity of water taken.

Greater Wellington has analysed the river flows over the last 30 years and identified that in an average year, the additional take would only have been required for approximately 18 days. However, in a particularly dry summer, such as we had in 2007/08, the extra water would have been necessary on most days during January, February and March.

### **4.2 Feedback from the 4 city customers**

Our customers have expressed concern over the extent of savings in water consumption that will be required in a dry summer during the Stuart Macaskill Lakes upgrade if supply is not supplemented. Submissions to the 2010/11 Annual Plan were made by the Chief Executive Upper Hutt City Council and Mayor Ogden, Hutt City Council expressing concern over the level of water demand restrictions that may be necessary during the upgrade. The submitters

suggested that an application for a short-term consent change should be considered.

Feedback from our customers has been sought on this issue. Wellington, Porirua and Upper Hutt City Councils each support the proposal for a short-term consent change for the duration of the lakes upgrade work. Hutt City Council has reserved its position.

#### **4.3 Consultation**

Greater Wellington has carried out ongoing consultation over four years with the Department of Conservation, NZ Fish and Game, and our internal Environmental Management Group. The statutory position of Taranaki Whanui ki te Upoko o Te Ika's association with the bed of the Hutt River has been recognised by actively consulting with iwi. Their conditional support has been gained for this short-term reduction in low flow.

#### **4.4 Proposed monitoring of the Hutt River**

The Hutt River is a valuable resource for water supply purposes and has high intrinsic natural values and recreational uses. Greater Wellington commissioned a study of the low flow impact on macro-invertebrates in the Hutt River to provide a baseline indicator of river ecological health. Unfortunately the very low flows needed did not occur over the 2009/2010 summer period and the results obtained were inconclusive.

Greater Wellington proposes to undertake further monitoring and reporting of the river water quality and ecological health during the term of the consent change. A draft low flow management plan has also been developed to help protect the Hutt River environment. The draft plan uses river flow levels to trigger demand management, supply management and more intensive monitoring.

#### **4.5 Risks**

Although the supporting documentation for the consent application is considered to be extensive and robust, the application will be heard by commissioners on behalf of Greater Wellington.

There is a risk that the application could be declined or modified to the extent that it does not provide adequate water in a dry summer. If granted, the consent change may be appealed and subsequently declined or modified.

Without the consent, it will be more difficult to operate the water supply system in a very dry summer when the lake upgrade work is being undertaken.

### **5. Communication**

A media release providing the background to support the consent application may be appropriate if the recommendations are accepted.

## 6. Recommendations

*That the Committee:*

1. **Receives** the report.
2. **Notes** the content of the report.
3. **Notes** that an application to change the resource consent conditions will reduce the minimum low flow in the Hutt River at Kaitoke weir from 600 litres/second to 400 litres per second.
4. **Notes** that Greater Wellington will undertake further monitoring and reporting of the river water quality and ecological health during the term of the consent change.
5. **Approves** the submission of an application for a change to the conditions of the resource consent to abstract water at Kaitoke weir to cover the period of upgrade of the Stuart Macaskill Lakes from late 2011 to 2014.

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### **Attachment 1 to Report 10.519**

Proposed Short-term Consent Change at Kaitoke Weir