Submission on Action for Healthy Waterways Consultation

Introduction

Waimea Irrigators Limited

Waimea Irrigators Limited (WIL) is a limited liability company that was formed in September 2016 to finance and construct the Waimea Community Dam (the Dam) in partnership with Tasman District Council (TDC).

The Dam, when completed, will be approximately 53 m high, 220 m long and 6 m wide at the crest and will have a total reservoir storage volume of approximately 13 million m$^3$. Construction of the Dam commenced in early 2019 in the upper Lee River, which is a tributary of the Waimea River.

WIL is promoting the Dam as the most efficient and effective way to ensure augmented groundwater is available to its shareholders for irrigation use, in all but the driest of years. The total allocable volume for each of the water management zones where the natural water supply will be augmented by water released from the Dam will all significantly increase once the Dam is built.
WIL has contributed $16.8 million of equity to the construction of the Dam, through the sale of shares in the Company. Shareholders have purchased shares on the understanding that they will be able to access a more reliable source of irrigation water for a wide range of land uses including high-value horticulture crops, viticulture, market gardening, dairy, cut-flowers and stock. Some shareholders have invested heavily in the Dam in anticipation of being able to change land use from lower to higher value activities. WIL must sell more shares over the next 15 years in order to repay investors who contributed an additional (over and above the $16.8 million) $10.4 million in equity towards the construction of the Dam.

The government, through Crown Irrigation Investments Limited and the Ministry for the Environment has also invested heavily in the Dam, through pre-funding to WIL, loans worth $33.5 million to WIL and TDC and a grant of $7 million to TDC.

Economic benefits of the Waimea Community Dam

Cost benefit analysis undertaken by NZIER (Clough & Pambudi, 2017) estimates that the Dam will provide substantial net benefits for the Nelson-Tasman region, by

- Avoiding losses to primary production that would arise in the absence of water supply augmentation by the dam
- Enabling existing irrigated land uses to raise their productivity through a more secure supply
- Encouraging new irrigated land uses and areas to be brought into production.

Restrictions placed on any of the above three points could obviously impact the potential GDP generated by the Dam for the region.

<table>
<thead>
<tr>
<th>Measure</th>
<th>20% allocation out</th>
<th>35% allocation cut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in GDP in first 2 years</td>
<td>$105 million</td>
<td>$132 million</td>
</tr>
<tr>
<td>Increase in GDP for each subsequent year</td>
<td>$77 million</td>
<td>$104 million</td>
</tr>
<tr>
<td>Present value of GDP increases at 8% over 25 years</td>
<td>$838 million</td>
<td>$1,112 million</td>
</tr>
<tr>
<td>Total regional economy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary production sectors</td>
<td>$581 million</td>
<td>$821 million</td>
</tr>
<tr>
<td>Food processing</td>
<td>$58 million</td>
<td>$91 million</td>
</tr>
<tr>
<td>Other sectors</td>
<td>$183 million</td>
<td>$300 million</td>
</tr>
</tbody>
</table>

Source: NZIER

Environmental benefits of the Dam and the impact of intensification

Under previous management regimes there was no or very low minimum flow requirements applying to the Waimea River. Construction of the Dam will allow for a higher minimum flow in the Waimea River of 1,100l/s at Appleby (compared to a minimum flow of 800l/s if the Dam had not proceeded).
This flow will better protect instream ecological, amenity and recreational values, because of lower water temperature and an improvement in water quality.

According to Fenemor et al (2013), any intensification of agriculture on the Waimea Plains that is associated with the release of water from the Dam is unlikely to affect the Waimea River directly because the river generally loses water to groundwater as it flows across the Plains, at least as far downstream as Challies Island, and in dry summers the SH60 bridge at Appleby. Fenemor et al concluded that “water draining from the Waimea Plains is unlikely to make its way into this reach of the Waimea River” and that “that there is a low risk of increasing contaminant concentrations in this reach of the river associated with water augmentation [from the Dam]”.

Fenemor et al note that further downstream in the Waimea River (downstream of the SH60 bridge), the river gains water from the underlying aquifers and therefore contaminants within the groundwater may contribute to elevated concentrations in the river. However, in all but extreme low flows, the groundwater contribution to river flow will be relatively small and therefore unlikely to increase contaminant concentrations dramatically. Most importantly, the flow releases of water from the Dam with low levels of nutrients will reduce summer nutrient concentrations in the Lee-Wairoa-Waimea river reach.

In summary, the Dam is expected to have a positive effect on water quality in the Waimea River even with the intensification of agriculture which is anticipated to occur as a result of improved reliability of water supply. Even so, WIL recognises that every landowner has a duty to manage on farm nutrient losses in a responsible manner.

On the Waimea Plains farmers and growers have already invested heavily in a ‘solution’ to water quality issues in the catchment, by purchasing water shares in WIL to enable the construction of the Dam.

**Discussion of proposals**

Waimea Irrigators Limited’s submission on the Action for Healthy Waterways is limited in scope to comments on section 8.2 restricting further intensification of rural land use and 8.3 improving farm practices through farm planning.

**Section 8.2**

WIL is interested in section 8.2 of the document because its ability to repay its investors is predicated on the sale of more water shares. The sale of more water shares is heavily dependent on farmers being able to change land use, and in some cases, this will mean intensification from low to high value land uses (e.g. bare land to horticulture crops). Policy changes that place onerous restrictions on changes in land use potentially put WIL’s ability to sell more shares, and repay loans to the Crown, at risk.

We note that the intention (page 64) is “to ensure that if there is any intensification, the net benefit to our people, our environment and our economy is positive”. Whilst there is nothing wrong with that statement per se, there is no detail as to how ‘net benefit’ will be measured, and by whom. Given the emphasis on Te Mana o Te Wai, and the complete absence of any reference to economic and social values in the document, the document appears to weight ‘net benefit’ towards environmental concerns with little or no consideration given to other values.

It is also noted that by 2025 regional councils will be required to prevent intensification “beyond what is sustainable for our land and water”. Again, there is no detail as to how regional councils will
determine what is sustainable and what is not. In order to ensure they are complying with the provisions of the NPS-FM, and in the absence of being able to define, measure and monitor what is ‘sustainable’, councils are likely to take a conservative approach and lock farmers in to current land uses. This scenario could present a clear risk to our regional and national economy if farmers have no ability to adapt to changing market conditions and climate change, and could affect our ability to produce the amount of food required for a growing population.

While WIL supports on-farm practices to mitigate and manage nutrient losses, the restriction that is most concerning relates to increases in the area of land in irrigated pastoral, arable or horticultural production, above 10 hectares. For these properties, a resource consent will be required and will be granted only if the new activity does not increase nitrogen, phosphorus, sediment or microbial pathogen discharges above the property’s 2013-2018 baseline. WIL understands that baseline data at a property level for nitrogen, phosphorus, sediment and microbe is not held by TDC. It is difficult to see how any council would be able to draft consent conditions that would be able to be monitored and enforced for property level discharges to groundwater and surface water in the complete absence of baseline data. WIL believes that the one size fits all approach outlined in the proposal document does not take into account the differing levels of risk associated with contaminant discharge, local pedological and hydrological conditions and solutions to improving water quality that are already in place.

WIL is less concerned about changes in land use to dairy and dairy support, as dairy is a minor land use on the Waimea Plains currently and the area in dairy is not expected to increase significantly, if at all, in the future.

Some of WIL’s major shareholders are commercial vegetable growers – both outdoors and glasshouse. WIL supports Option 2 – that growers must operate above good management practice and must address freshwater matters in their farm plan.

KWM’s recommendation for a 10-year moratorium on further intensification of land use and further consumptive water takes is not supported by WIL and, if adopted would seriously undermine WIL’s ability to repay Crown loans and sell more water shares. WIL agrees with RSWS that more detail is required for the rationale for using increase in irrigation area as a threshold for regulation. An actual example in this area is conversion from pastoral grazing land to hops, if a block was over 10 hectares why would a resource consent be necessary and what would it regulate? WIL notes FLGs opinion that changes in land use and intensification can result in large increases of contaminants discharge to freshwater. However, WIL’s opinion is that changes to land use, and intensification, does not always result in large, or even significant discharges to freshwater, and that land use change and intensification does not necessarily need to be restricted everywhere, in all cases.

Section 8.3
The proposal is that all farmers will have a farm plan with a freshwater module. WIL’s concern with this proposal centres around the definition of a ‘farm’ – which is not provided. On the Waimea Plains many land owners with water permits have very small blocks, under ten hectares. Further, some of the land uses on the Plains have low contaminant outputs. WIL is concerned that all landowners, despite the size of their property or their actual land use, will be captured by the requirement to supply an annual farm environment plan (FEP), irrespective of risk. This seems an unnecessary and costly burden on some landowners. Further, councils are not resourced to undertake the compliance necessary for the return and monitoring of hundreds of annual FEPs in their region. WIL seriously questions the value of a blanket requirement to submit an annual FEP for all properties and how such a requirement will improve catchment freshwater quality.
Recommended changes

- WIL recommends that ‘net benefit’ be defined with an equal weighting to the four well-beings of environmental, economic, social and cultural values.
- WIL supports the requirement to apply for a resource consent for increases in irrigated area only in sensitive catchments, where irrigation occurs over unconfined aquifers, or where there are high ecological and biodiversity values.
- WIL recommends that the restrictions on land use change and intensification that is pegged to a property level contaminant ‘baseline’ be removed, as this information is not available and this proposal is unworkable.
- WIL does not support a moratorium on further intensification of land use and further consumptive water takes.
- WIL would like to see the ‘Action for healthy waterways’ document and the NPS-FM recognise that increases in irrigation and intensification will not necessarily lead to significant increases in contaminant loading in all situations.
- WIL would like to see greater recognition in the ‘Action for healthy waterways’ document and the NPS-FM of existing schemes that have been designed to improve freshwater quality, and consider it is crucial that changes to the legislation do not undermine those schemes.
- WIL does not support the requirement for all landowners who irrigate to submit an annual FEP. The requirement to submit a FEP to a council could be based on property size and land use, and other risk factors such as whether the irrigation occurs over an unconfined aquifer.

References
