

water

• for the

waimea basin

Newsletter 4 • July 2006

Waimea Water Augmentation Committee (WWAC)

Message from the Chairman

Don't be fooled by the current cold and wet wintry conditions. Water management may be far from the minds of most at present, however, only a few months ago the situation was quite different. The dry weather task force was meeting weekly to assess the delicate nature of water flows and several rationing steps had been implemented. It is also to be noted that we have had rationing in three out of the last four years. This further highlights the imperative need for reliable and secure water supply for irrigation, recreation, environmental issues, and urban supply for all of the community. There is little doubt that before long we will be in a similar situation again. WWAC are charged with taking a long-term view to solving future water shortages.

We are now into the last year of our feasibility project and progress is very pleasing. Further detailed work is being undertaken on dam sizing and technical matters relating to the two possible sites. (Upper Lee and Left branch Wairoa). The committee now has a better appreciation of possible water requirements, likely drawdown and sizing of the reservoir.

Back in May WWAC together with the other water augmentation committees and Council hosted the Minister of Agriculture Rt. Hon Jim Anderton. The Minister spent several hours discussing water management on a local and national level and later spent time looking at intensive water use on the Waimea Plains. The Minister was interested to learn of the innovative methods of water management and community involvement in water management in this district.

WWAC has recently submitted to Tasman District Councils LTCCP seeking future support for water augmentation projects and highlighting the importance of water to this district.

Finally, the committee is keen to keep the greater community informed of progress. Contact details of the committee are printed on the back of this newsletter.

Murray King



The Upper Lee Valley above the old cement works is one of the potential dam sites being considered by the Waimea Water Augmentation Committee.

Cultural Impact Assessment Summary

The results of the Cultural Impact Assessment (CIA) on the proposed water augmentation scheme in the Waimea basin have been reported back to the Waimea Water Augmentation Committee (WWAC). The assessment, which was carried out by the Motueka Iwi Resource Management Advisory Komiti (MIRMAK), made a number of recommendations that WWAC has responded to. Among the recommendations were:

- Tangata Whenua had concerns about the risk of upstream slips that could make the dam water non-potable and toxic to freshwater plants and animals. Under normal conditions a river would clear itself of toxic material from a slippage within a reasonably short time but the addition of a dam would slow this process.

WWAC responded that the nature of the geology and soils in both proposed sites appeared to be benign. However, it was emphasised that water quality was presently being monitored and would continue to be so.

- Tangata Whenua ki Waimeha would like to see wetlands developed within the bounds of the dam. The purpose of these wetlands would in part be to act as a filter for water entering the dam and in part for biodiversity enhancement.

WWAC was happy to consider this especially as Tangata Whenua said that they would be able to be involved with the funding and establishment of these wetlands.

- Tangata Whenua would like to have a well-designed and functioning fish and water fowl passage incorporated into any dam constructed. This would allow the many native species active in proposed sites to continue to have access to all parts of the rivers.

WWAC were happy to support fish and waterfowl passes being included in any dam development.

- Significant "islands" of indigenous native vegetation, including old growth podocarps such as rimu and kahikatea, would be lost at both sites as a result of flooding from the dams. This represents both a loss of biodiversity as well as (and probably more ecologically importantly) a loss of seasonal bird pathways. This loss of native vegetation also represents a potential loss of rongoā (or medicinal plants) as well as other plant species useful to Tangata Whenua.

Tangata Whenua advocates the creation of new "islands" of indigenous vegetation and the enhancement of existing "islands" left around the lake edge.

Tangata Whenua would like to be given access to harvest any native trees from the area chosen to be flooded when the final site was chosen.

WWAC supported the inclusion of iwi environmental indicators as part of the water monitoring for the Waimea Catchment.

WWAC said that they were supportive of a biodiversity and rongoā plan to be included as part of a dam development.

WWAC agreed with the Tangata Whenua recommendation that a native bird recovery plan to be included as part of a dam development. DOC representative said that it would be sensible to have such a plan aligned to DOC's nature recovery plans.

WWAC were supportive of a "taonga survey" once a final site has been chosen.

WWAC appreciated the input and recommendations of the Tangata Whenua. They also endorsed iwi involvement in the implementation of the recommendations and the continuing process.

The final CIA report is also available at all TDC libraries.

Botanical assessment looks at ecological impacts

The Waimea Water Augmentation Committee (WWAC) commissioned an initial botanical assessment at both proposed dam sites on the Lee and the Wairoa Rivers. The investigations were focused on the proposed dam sites and the "footprint" of the reservoirs, as well as the stretches of riverbank immediately downstream from the dam sites.

The report offered findings in brief and recommended a more detailed study once a final decision is taken on the preferred site.

The findings from this report were that the Lee is botanically more significant than the Wairoa because it has a greater range of ecosystems, good populations of rare or distinctive species, and overall is in better condition than the Wairoa.

It also appears that the downstream impacts may not be critically important although further research is recommended on this topic.

Weeds, animal pests, including pigs and forestry activities, are already damaging natural eco-systems in both areas. A mitigation plan could focus on rectifying this, not only in the dam areas but on the surrounding land as well.

Blue duck in the Wairoa and Lee Rivers

A survey of the Wairoa and Lee Rivers for blue ducks was carried out by Dave Barker a wildlife consultant in November 2005. Dave traversed stretches of the rivers using a trained rare bird locator dog. No blue duck or sign of blue duck was found.

During the last 20 years blue duck were occasionally recorded from the Lee and Wairoa, sometimes well downstream of the bush boundary (Hay & Young 2005). These were usually single birds and there are no known records of any breeding.

The survey result was consistent with the trend of blue duck sightings for the whole Richmond Range in recent years. Twenty years ago blue duck were regularly encountered in all of the major catchments - Pelorus, Wakamarina, Timms, Goulter, Motueka and Wairoa as well as minor catchments such as the Brook, Maitai, Lee and Roding. Whether they bred in all these catchments is not known. Over this period sightings have become less widespread and less frequent. These observations are consistent with what is known of trends elsewhere in the country - breeding productivity is low because of egg predation and while adults may live to an old age, females are often killed on the nest.

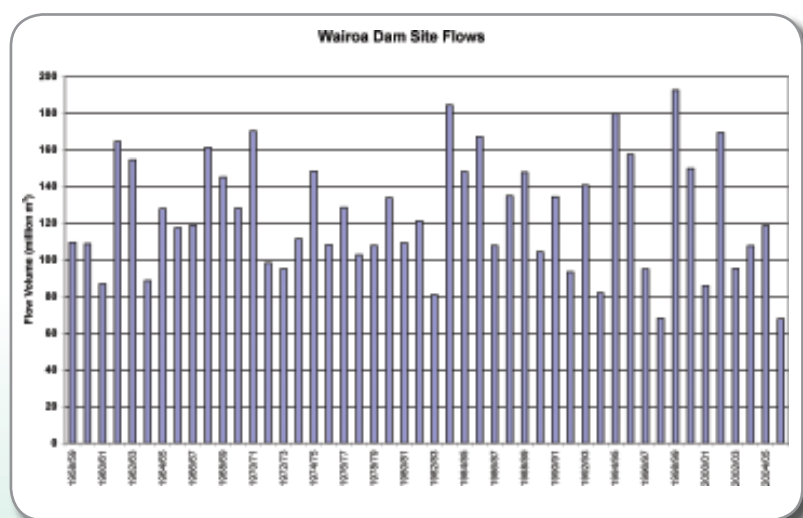
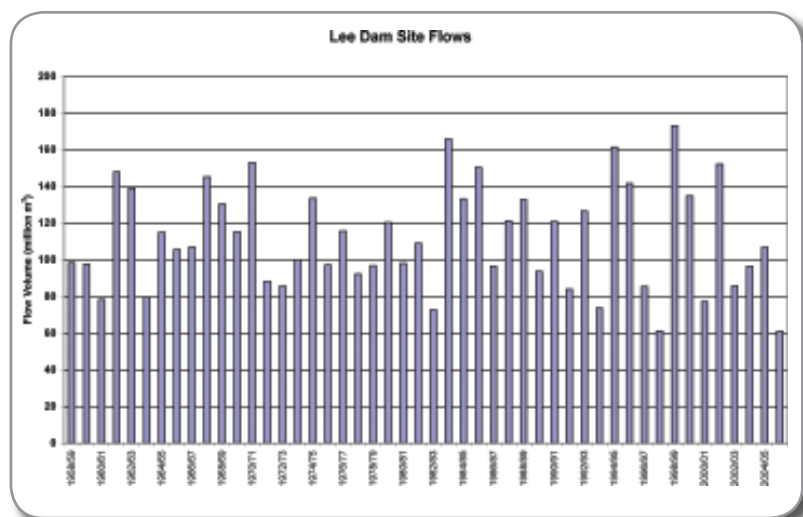


No signs of blue duck were found in the Upper Lee or Wairoa Rivers

The table below shows the storage requirements for the various security of supply targets to meet all demand within the Waimea Basin, including future regional needs in the 50-100 years horizon, while also providing for minimum flows in the Waimea River at Appleby.

Drought return period years (for storage)	Storage requirements million m ³	
	For residual flow at 1,100 l/s at Appleby	For residual flow 600 l/s at Appleby
10	5.8	3.7
20	7.9	5.2
35	9.8	6.6
50	11.1	7.6
100	13.9	9.6

The graphs below show catchment outputs from the Upper Lee and Upper Wairoa left branch storage sties assessed for 1958 – 2005. The storage requirements in the table above are easily met by the catchment outputs as shown in the graphs below.



Time line for project progress

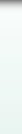
July 2006 – September 2006 – On going research on assessing the storage options at both sites.



September 2006 – An optimal dam site is chosen, a conceptual structure is designed and costs and effects for different delivery methods for stored water are detailed.



March 2007 – Economic analysis of scenarios with and without augmentation to be completed.



June 2007 – Final reports completed and presented to Council. Future steps for the project identified from responses to the final reports.

Lee/Wairoa Liaison Group Formed

A meeting was held in Brightwater for residents in the Lee and Wairoa Valleys in February this year. A group of volunteers has been organised from this meeting to act as a point of contact for the Waimea Water Augmentation Committee.

If you have any queries or input about this project, contact one of the members listed below:

Lee/Wairoa Liaison Group Volunteers

Emma Manhart (<i>Lee Valley</i>)	03 542 4495
Terry Trembath (<i>Lee Valley</i>)	03 542 3387
Allen and Maree Parsons (<i>Wairoa</i>)	03 541 9637
Wayne Neal (<i>Lee Valley</i>)	03 542 4424
Don Morrissey & Nicola Harwood (<i>Wairoa</i>)	03-5418948
Tony Chivers (<i>Wairoa</i>)	03 541 8810
Bill & Joan O'Neill (<i>Lee Valley</i>)	03-542 3707
G & L O'Meara (<i>Lee Valley</i>)	03-542 4004



The Waimea Water Augmentation Committee

Murray King (<i>Chairman</i>)	03 544 8465
Dennis Cassidy (<i>Delta Zone</i>)	03 544 2852
Kit Maling (<i>Waimea East Irrigation Co</i>)	03 544 0536
Stephen Sutton (<i>Waimea West</i>)	03 544 4026
David Easton (<i>upper Confined Aquifer</i>)	03 526 6854
Julian Raine (<i>Golden Hills/Hope Aquifer</i>)	03 547 5338
Barney Thomas (<i>Nelson iwi</i>)	03 547 4934
Cr Tim King (<i>Tasman District Council</i>)	03 542 3849
Cr Richard Kempthorne (<i>Tasman District Council</i>)	03 544 8082
Peter Thomson (<i>Tasman District Council</i>)	03 543 8440
Neil Deans (<i>Fish and Game</i>)	03 544 6382
Dave Plant (<i>NCC</i>)	03 546 0267
Martin Heine (<i>DOC</i>)	03 546 9335

Project Manager – Joseph Thomas
(*Tasman District Council*)

Phone 03 543 8494, fax 03 543 9524 or
e-mail joseph.thomas@tdc.govt.nz.

Please contact your local zone representatives or the
Project Manager if you want any further information.

