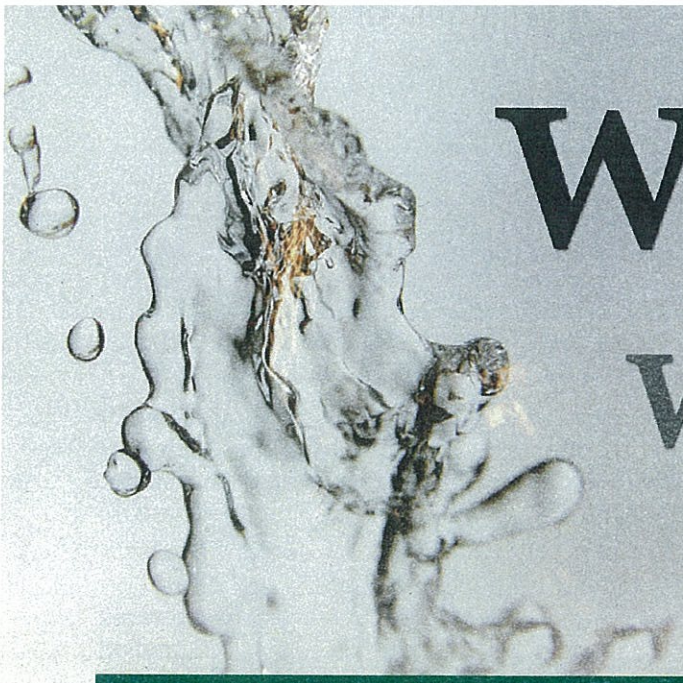

water for the waimea basin

Newsletter 2 • June 2005

Waimea Water Augmentation Committee (WWAC)

Message from the Chair...

Welcome to the second Waimea Water Augmentation Committee (WWAC) newsletter. These newsletters are part of our ongoing commitment to inform the local community and affected parties of our progress. I am pleased to report that we are on track to identifying the options for a long-term solution to water management in the Waimea Basin that is so critical to the district's economic viability.

In this issue we outline the identified water storage options for the Waimea River Catchment and summarise two recently completed reports relating to the project. In addition, we have included an update of work in the pipeline

Our committee members represent a diverse cross section of the community and we are confident of achieving a long-term solution in the near future. If you have any queries or concerns, feel free to contact any committee member. Our contact details are listed on the back page.

Murray King, WWAC Chairman

Photo courtesy of the Nelson Mail

Water storage options identified

Three possible sites for a water storage facility in the historically dry Waimea Basin have been identified. The sites are: Pigeon Valley north branch; the upper Lee Valley beyond the limestone quarry; and the upper Wairoa Valley left branch above the forks.

These three were determined to have the best potential as water storage sites following a process of elimination facilitated by consultants Tonkin and Taylor.

The Waimea Water Augmentation Committee (WWAC) commissioned a study on the Waimea Basin last year in a bid to address the severe water shortages and water restrictions faced by water users. The process began with consideration of 18 sites that could potentially service the Waimea Basin. This has been narrowed down to three based on engineering, hydrological, geological, environmental, community and economic factors.

Chairman of the Waimea Water Augmentation Committee, Murray King, says a final decision on a site will only be made after more in depth research has been carried out. "We are pleased to have narrowed down the options to these three sites, which now makes it feasible to get on with the detailed research work we need to have done before further decisions can be made" Mr King said.

The study began mid 2004 after several dry seasons had taken their toll on production for irrigated crops. The poor rains had also adversely affected the major urban water supplies for the Waimea Basin and both urban water and irrigation supplies were under serious threat of seawater infiltration into the aquifers at the coastal margins.

The Committee intends to consult and keep landowners and local communities informed as further information and reports become available.

See map on the opposite page for details of water storage site options.

Project Progress

Community Survey ESR study completed

The recently published ESR report 'Water in the Waimea Basin: Community Values and Water Management Options' elicited and documented diverse community activities and values relating to the river and aquifer system of the Waimea plains.

The report found that freshwater in the Waimea region was highly valued for irrigating productive land, supplying businesses with water for processing, for drinking water supplies, and for other recreational activities.

The Lee, Wairoa and Waimea rivers were highly valued by Tasman and Nelson residents across a broad spectrum with interests ranging from recreational and aesthetic to environmental and kaitiaktianga (guardianship) responsibilities.

Many of those surveyed were concerned about the sustainability of access to good quality and quantities of fresh water, whether for productive land use, enjoyment, or maintaining environmental/ecological integrity for future generations.

People were generally supportive of storage options in the Upper Lee or Wairoa catchment areas, although concern was expressed about financial contributions, people felt those who benefited directly (irrigators) should pay more than those who received little or no benefit. Respondents also felt that Council should continue to investigate alternative means of encouraging or enforcing water conservation.

Knowledge about the region's water resources, better water management and conservation initiatives were seen as a community responsibility including everyone from Council to individual households.

While charging for water was seen as an effective mechanism for achieving greater efficiency in water use, there were diverse opinions on how charges could be set.

The participants preferred win-win outcomes, but recognised that trade-offs might be an inevitable process in decision-making. People also felt that Council needed to address the lack of knowledge and understanding about freshwater management and decision-making in the community.

The full report is posted on the TDC website. For further information contact WWAC project manager Joseph Thomas (joseph.thomas@tdc.govt.nz) or Ann Winstanley (ann.winstanley@esr.cri.nz).

Cawthron reviews biological data

The Cawthron Institute has completed a review of biological data relating to the Waimea River Catchment . The review assesses what instream values, including the stream biota and habitat values, could be affected by plans to develop a water storage reservoir. It also identifies gaps in existing knowledge that may need to be addressed in order to allow informed decision-making regarding water usage/management in the Catchment.

Biological and water quality data indicate that the Waimea Catchment rivers generally have good water quality, although there are some concerns about nutrient enrichment and faecal contamination in the lower Wai-iti River and also issues surrounding rising water temperatures in rivers during periods of low flow in summer. Current minimum flows in the lower Waimea River are inadequate to maintain fishery values and to always avoid seawater intrusions.

Although the known macroinvertebrate and fish communities do not appear to contain any rare or

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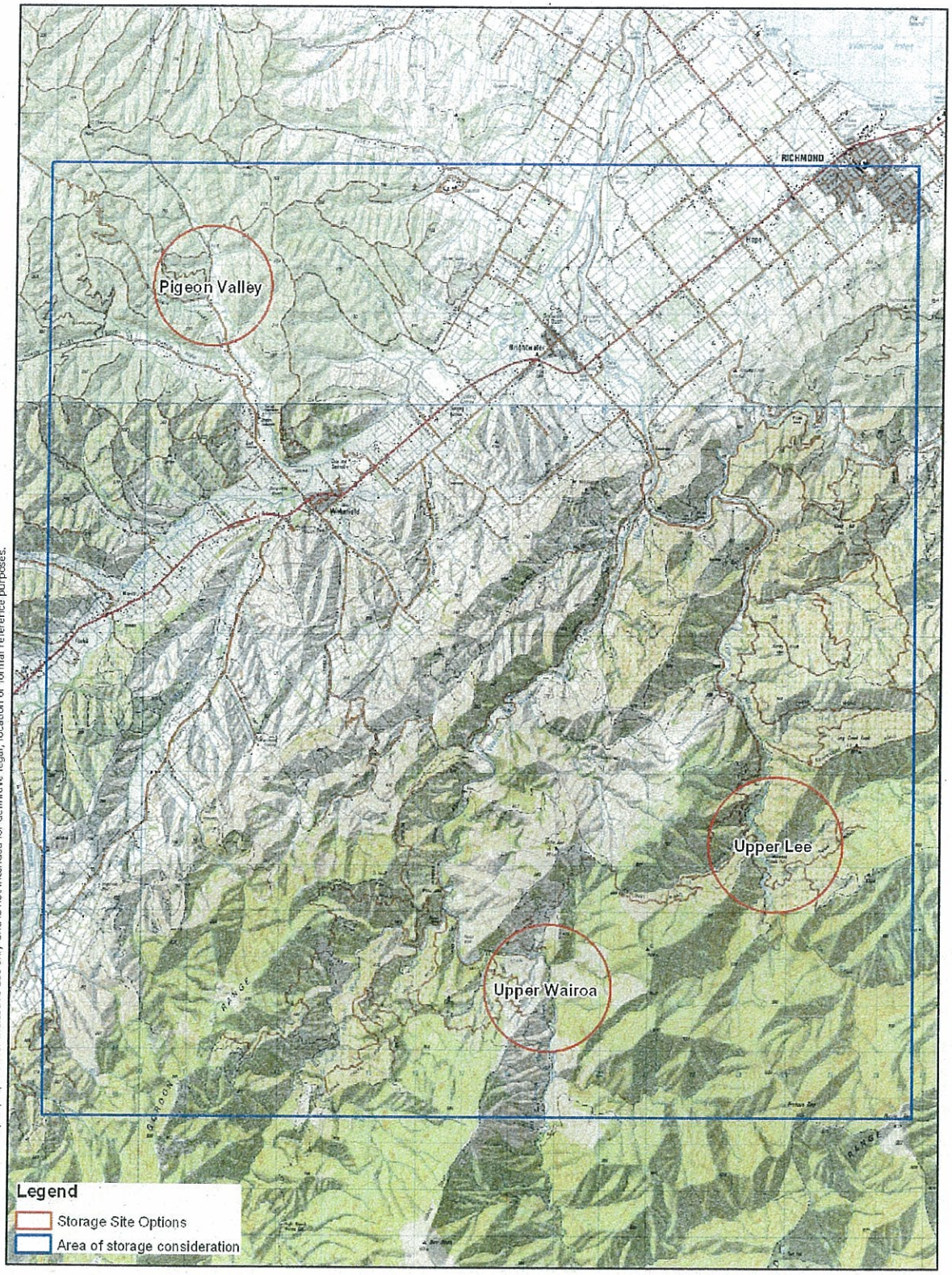

Waimea Water Augmentation Storage Site Options

May 2005

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Work in the pipeline

Availability and demand analysis underway

All hydrological data is being analysed in detail to obtain information on catchment outputs (i.e. river outputs) for storage consideration in the Waimea Basin.

This runs in tandem with water demand analysis to address current shortfalls, provide higher low flows in the Waimea /Wairoa Rivers, provide some further irrigation water, and to meet community supply needs for the next 50 years.

The existing TDC computer river/aquifer model is also being used to analyse groundwater buffers and the option of using the river as a conduit for replenishment of both downstream groundwater and river flows.

Cultural Impact Assessment (CIA) brief finalised

This study will bring all the iwi inputs, in terms of the river and its related environs, for consideration within the concept of augmentation and supplementation of flows.

Storage site options evaluated

Detailed site evaluations are to be carried out on the three identified storage options in the Waimea Basin. This will involve further detailed mapping, geological and geotechnical investigations, and the consideration of conceptual storage design to suit the site/s.

Low flow on the Wairoa River

Environmental assessments planned for summer

Environmental work in relation to the specific storage localities, involving flow, habitat, water quality, and sediment issues, are also to be investigated through the coming spring/summer periods.

...Progress report from page 2...

endangered species, the diversity of the Wairoa River's fish community is important.

Existing information on the different rivers in the Catchment varies considerably. The most obvious knowledge gap is the paucity of information about the distribution of the blue duck.

The report concludes that, based on existing information, storage systems on the western tributaries of the Wai-iti river would have the least potential ecological impacts, while effects on the Lee River and the right and left branches of the Wairoa River are likely to be similar. However, the greater level of access to the trout fishery in the upper branches of the Wairoa River increases their perceived value, which could indicate greater impacts there and the confirmed presence of blue duck in the Left branch of the Wairoa River points to the need for impact studies to be undertaken in that area. A storage system in the mid reaches of the Wairoa River would most likely have the greatest ecological impact due to the large proportion of flow potentially retained there and the substantial change to the hydrological regime downstream.

The work is a thorough review of the current state of knowledge regarding the aquatic biology and water quality of this catchment and will be integrated with further ongoing work Cawthron is performing in the coming year on the project.

The Waimea Water Augmentation Committee

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

TASMAN DISTRICT
It's the Lifestyle That Counts