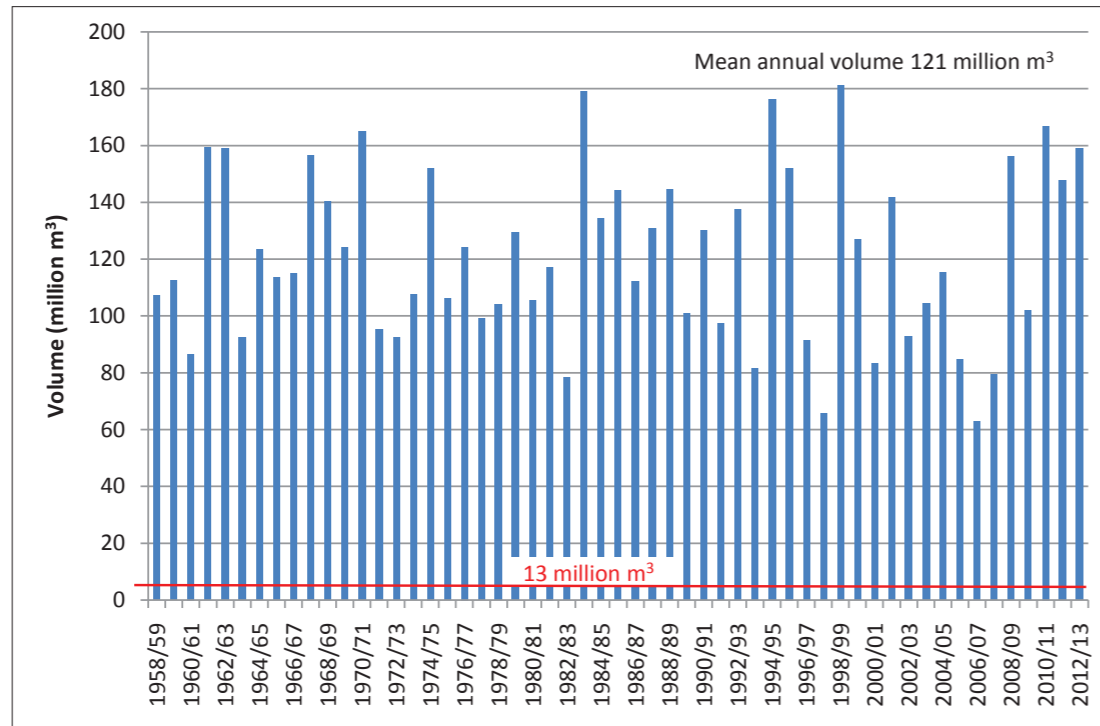


River flows into proposed dam

This table shows the amount of water that would have flowed down the Lee River into the proposed dam over a number of years. It demonstrates that on any given year there is the capacity to fill the dam several times over.



View reports and progress on the project on the WWAC website www.waimeacommunitydam.co.nz or on the Tasman District Council website www.tasman.govt.nz/link/leedam

If you would like to receive your future WWAC newsletters via email please notify Committee Secretary Valerie Gribble - valerie.gribble@tasman.govt.nz.

This project is funded by:

- Tasman District Council
- Nelson City Council
- Waimea Plains water users and landowners
- Community Irrigation Fund
- Fish and Game New Zealand Nelson Marlborough Region

In kind support is received from:

- Iwi
- Department of Conservation

Keep up to date by searching for "Lee Dam"



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WWAC members are available to answer your questions.

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water for the waimea basin

Newsletter 17 • December 2013

Waimea Water Augmentation Committee (WWAC)

Message from the Chairman

Another year is almost over, with the Waimea Water Augmentation Committee continuing to progress the development of a dam in the upper Lee Valley to address the acute water shortage on the Waimea Plains.

I'd like to take this opportunity to recap where we've come from and then look to what lies ahead.

We started on this journey after the severe drought in 2001. At that time it became abundantly clear that, without some form of water augmentation to ensure this region has a secure and reliable water supply, the economic viability of the horticulture businesses on the Waimea Plains would be severely undermined. That would have a flow on effect to the entire region as the productivity of the plains drives a major part of this region's economy.

Add to that the jobs in support and service industries and the need for provision for future domestic use, it was agreed at that time that it was essential to make every effort to address the water shortage issue.

In the background we also knew that the time would come when the current amount of water used and the remaining river flows would be challenged by environmental, recreational and cultural groups. I think it's important to note here that farmers and irrigators share those concerns about environmental impacts and are as keen as anyone to look for opportunities for environmental enhancement.

Rather than have those groups going head-to-head over who should have the scarce water, a diverse group agreed to form one committee to try and find a solution. That group is the Waimea Water Augmentation Committee, with elected representatives from water user groups on the plains and representatives appointed from Department of Conservation, iwi, Fish and Game and both Nelson and Tasman Councils.

The first phase of investigations involved looking at the widest range of options for water augmentation. This included piping water from outside the district, creating a series of small dams and creating large dams and reservoirs in a range of locations.

After exhaustive study, the most cost effective option was found to be a dam in the upper Lee Valley.

From there further extensive investigation has been undertaken into the suitability of that location for building a dam, including looking



at all of the flora and fauna in that area. Seismic investigations, rock testing, water flow monitoring and land stability mapping have all been documented in reports all publicly available on the committee's website and on the Tasman District Council website. Engineering consultants then developed what they believe to be the most suitable dam type for this environment, settling on a concrete faced rockfill dam.

Alongside this, investigations were done into the viability of adding hydro electricity generation to the dam and this remains an option.

The committee has always been of the view that this dam should remain a community owned asset.

Work has been done to establish an ownership model that ensures those environmental, cultural and recreational interests continue to have a voice into the future. Extensive work has also been done looking at potential models for funding the project.

Along the way we have accessed every available avenue for central Government funding and to date have received \$1.5 million in Government contributions.

We are now at a stage where the final dam design is nearing completion, ready for the Council consenting process and tendering. We have chosen to go down this path to enable us to get the most accurate possible cost figure for the project. At this point

Chairman's message ctd...

we could guess a cost to build, but the reality is that we won't have a reliable figure until the construction has been tendered. We expect to have the final design completed and a resource consents lodged by early 2014.

We have also been assisting Tasman District to prepare its regional water plan for the Waimea catchment by ensuring that provision is made for both 'with dam' and 'without dam' scenarios. This plan has now been through its public consultation and hearing process and a decision is expected in the New Year. We have also been preparing the resource consents to enable building of a dam, which is also expected to be lodged early next year.

We know that funding is the most contentious issue this project faces and by the middle of next year the Council should be in a position to begin consultation on a preferred funding model.

The reality is that once we have the design completed and have gained the required consents to build the dam, if a workable funding mechanism cannot be agreed, the Waimea Water Augmentation Committee will not have achieved what it was mandated to do.

Having lived and breathed this project for more than a decade, the Committee members are more convinced than ever that this dam is essential to the future economic prosperity of this region. As I have said before, I think it would be entirely remiss of this generation to not make every endeavour to make this happen. The longer we wait, inevitably the more it will cost.

2014 is going to be a very busy year for WWAC. I would like to reiterate that anyone in the community who has questions or concerns about this project is more than welcome to contact myself, the project manager Joseph Thomas, or any of the Committee members.



I would like to wish you all a safe and happy Christmas and a prosperous New Year.

Murray King, Chairman
Waimea Water Augmentation Committee



Council's water management plan proposals

The Tasman District Council notified its intention to change the Regional Water Plan in April 2013.

The Tasman District Council notified its intention to change the Tasman Resource Management Plan water management provisions April 2013.

The Plan sets out the basis for water management on the Waimea Plains. The changes provide two options for water management and allocation depending on whether the dam project proceeds:

Firstly, the management of the current water resource with no water augmentation (ie no dam) including setting a new minimum flow in the river and restrictions on water use including 'cease take' provisions.

Secondly, the management and allocation of water if the dam in the Lee Valley were in place, with a higher minimum flow, further water available for allocation and no restrictions on water use.

The requirements of the Resource Management Act mean that the Council is obliged to produce a water management plan to sustainably manage the water resource. It is not an option for Council to continue with the current situation of limited water rationing and no set minimum flow.

People were invited to submit on the plan Council proposed and the submission process closed in June 2013.

The Waimea Water Augmentation Committee made submissions only on the "with dam" proposal. A range of other water users, groups and individuals also made submissions and the majority of these focussed on Council's proposed management of water if there was no dam. This was not surprising as the proposal under the no dam scenario has serious consequences for all water users and those interested in maintaining a healthy river. All water permits would have to be reviewed to reflect actual usage, crop type and water availability. Water rationing would be initiated at a much earlier stage and a cease take notice would be issued when the minimum flow was reached.

The proposals and submissions made are now being considered by independent Commissioners. The Commissioners will report back to the Council in January 2014. Council will then have to decide whether it accepts those recommendations. If, for some reason Council did not accept the Commissioner's recommendations, which is unlikely, the whole process of submissions and hearing would have to start again, under new Commissioners.

Assuming Council adopts the Commissioner's recommendations, that decision will be publicly notified in the form of a revised plan in February 2014.

Cease take – what does it mean and will it ever happen?



At present when the flow in the Waimea River at Appleby reaches 2500 l/s at Wairoa Gorge the first stage of water rationing is implemented. Water takes are reduced by 20 percent.

From there the Dry Weather Taskforce and Tasman District Council manage further restrictions, however there is no minimum flow. The water rationing regime also affects urban water users with hosing restrictions.

Under the proposed new water management plan water restrictions will start when the flow in the Waimea River at Wairoa Gorge reaches 3000 l/s. This rationing will be more frequent and longer than at present. A cease take notice would be issued when the flow reaches 2300 l/s. This will apply to everyone.

Cease take at 2300 l/s measured at Wairoa Gorge would stabilise river flow losses and drag out the river flow in an effort to keep the river at 800 l/s at Appleby.

Why can't we keep our current rationing system?

Council is required by law to set flow levels in the river that will ensure the water resource is managed in a sustainable way. The current informal low flow of 225 l/s (at Appleby) does not meet the required standard for environmental flows in the Waimea River and therefore Council is required to increase it.

The final decision on minimum flows will be made by Commissioners Their decision is appealable to the Environment Court. There is a possibility the Environment Court could come up with an even higher low flow than those currently being proposed.

How will that affect me?

Based on the flow levels released in the Tasman District Council Plan the water flows since 2000 would have dropped to a level that would require all users to "cease take" for a total of 457 days.

In 2001 the cease take would have been in place for:

- 7 days in January
- 28 days in February
- 31 days in March
- 28 days in April
- 6 days in May
- 1 day in June
- 4 days in July
- 7 days in August

Essentially, no one would have been able to irrigate crops during

February, March and April, which is the period in which most water is required.

Water users need to seriously consider what impact that loss of water at key times would have on their production. Most say they can survive with less water, but the key question is "can you survive with no water"?

The table on the back page gives the flow figures for "cease take" 2000-2013.

Looking for solutions

Council has known that it would be required to implement these water management changes for the last decade. In order to find a way to avoid getting to the point of cease take, the Waimea Water Augmentation Committee was formed in 2003. Its sole objective was to find the best possible way to augment the water supply to the Waimea Plains to maintain the economic, environmental, cultural and recreational values of this resource.

The Committee has over those years canvassed all available options, such as piping water from out of the area, and has come to the conclusion that harvesting water within the catchment and then releasing that water when required is the best and most cost effective option.

The committee looked at more than 18 possible dam sites before settling on the upper Lee Valley as the best option.

One of the great advantages we have on the Waimea Plains is that by releasing water back into the river the natural underground aquifers will be replenished and water will be delivered to all users. Apart from the dam itself, there is no infrastructure, such as pipes, required to deliver water to users on the Waimea Plains.

Size of the dam / water allocation

The proposed dam has the capacity to hold 13million m³ of water.

About one third of that capacity is allocated for environmental/recreational needs and the remainder is to meet consumptive demand. The dam is designed to generate a minimum flow of 1100 l/s in the Waimea River at Appleby. The quantity does not reflect the actual expected consumption over any given year by users. It is the storage required to ensure that the peak demand can be met during drought conditions. We know most users require the majority of their water in the lead up to harvest in December, February, March and April. Those also tend to be our driest months. The storage capacity in the dam would provide water that could be released to guarantee a water supply during that time.