



Water allocation and Minimum Flows in the Ruamahanga Whaitua

Carterton Events Centre

25th July 2016

The Proposed Natural Resource Plan

- Ki uta ki tai: Mountains to the Sea
 - Objective 5; Freshwater bodies and the coastal marine area, as a minimum, are managed to:
 - Safeguard aquatic ecosystem health and **mahinga kai**, and
 - Provide for contact recreation and **Māori Customary use**, and
 - In the case of freshwater, provide for the health needs of people

Cultural Values for Wairarapa Waterways

Project Aim;

The aim of the Cultural Values for Wairarapa Waterways project was to determine the values associated with Wairarapa streams and rivers, and to quantify the amount of water required to conserve, maintain and enhance the values identified.

Cultural Values for Wairarapa Waterways

- The Māori values in the report are a subset of what actually exist.
- The report was limited to the data sets that were available with flow rates at specific sites unable to be measured.
- There are assumptions around basic community 'activities' at Pā sites

How was the data limited?

- Ruamahanga flow is measured at Wardells bridge – what is the relationship at Hurunui-a-rangi Marae (Gladstone)?
- Waipoua River is measured at Mikimiki bridge (relationship to sites of significance?)

Waipoua 1000L/s @ Mikimiki



How was the data limited?

- Ruamahanga flow is measured at Wardells bridge – what is the relationship to flows at Hurunui-a-rangi Marae (Gladstone)?
- Waipoua River is measured at Mikimiki bridge
- No flow data – Makoura, Makahakaha, Huangarua, Abbots, Stonestead
- River, groundwater and stream interaction

Relationship of flow data to values

- Minimum flows were generally set using MALF
- Very limited assessments based on instream ecology
- Information around quality vs quantity
- No consideration of Māori values

Calculating the MALF

- Mean Annual Low Flow (MALF), and lowest 7 Day Low Flow. The 7 day low flow in any year is determined by calculating the average flow over 7 consecutive days for every 7 consecutive day period in the year and choosing the lowest. When this is done for every year of record, the MALF can be determined by adding the lowest 7 day low flows for every year of record and dividing by the number of years in the record.

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Māori occupation and essential services

People wanting to nourish their spiritual wellbeing (Wairua) visit churches and others house's of religion and prayer. People nourishing their physical wellbeing (Tinana) go to the supermarket for food, their bathroom to wash, and building suppliers for goods. Our mental wellbeing (Hinengaro) is provided for by the doctors surgery, schools and universities, and our water is chemically treated to make it safe to drink. People celebrate each other (whanau) through the network of roads that link us, gather for sporting events, and share food and resources during times of celebration.

Traditional Maori occupation sites had all of the services mentioned above provided for by the rivers/streams and environs which surrounded them. In order for a Maori community to survive, the activities associated to the themes in table 1 were a prerequisite.

Values within a Māori framework

Te Whare Tapawhā

- Wairua (spiritual) - Tohi rites, removal of tapu associated with war/death, baptisms and blessings of people and items.
- Tinana (physical body) – washing after child birth or menstration, water for cleaning and cooking, collection of food and weaving resources, preserving/storing food.
- Hinengaro (mental wellbeing) – collection of rongoa (healing plants), drinking water (mental clarity), teaching and learning (education), meditation.
- Whanau – transportation (waka), recreation, gathering of building resources, positioning of Pa, manaaki (sharing) the bountiful resources.



What did we find?





HEALTH WARNING



Discharge of treated sewage upstream of this site
**SWIMMING AND FOOD GATHERING IS
NOT RECOMMENDED**




greater WELLINGTON
THE REGIONAL COUNCIL

 Wairarapa DHB
Wairarapa District Health Board
Te Poari Hauora a-rohe o Wairarapa

For more information contact:
Masterton District Council. Ph 06 378 9666



Remutaka Rd Photo point

Western Lake Rd Photo point

Donaldson Creek Photo Point

Longwood west Photo point

South Soldiers Photo point

Fitzherbert St
Revans St

No 1 Line

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Kahurangi Rd

State Hwy

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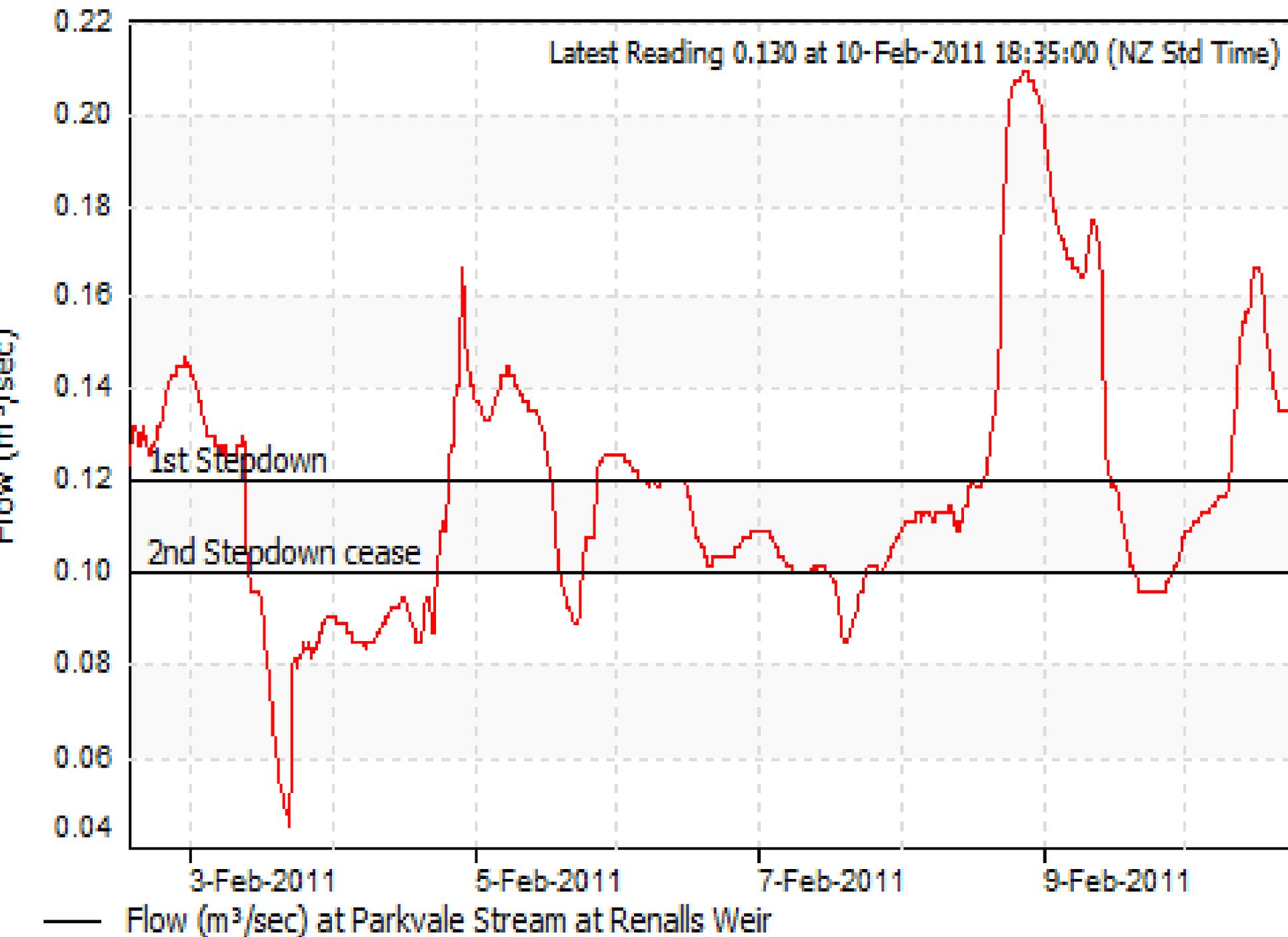












What the plan says and our best guess

Waterway	GWRC minimum flow value Regional Freshwater Plan	Suggested minimum flow to support Maori values
Ruamahanga River	2400L/s at Wardells 8,500 L/s at Waihenga	10,000L/s at Wardells
Waipoua River	250 L/s at Mikimiki	500L/s 'cease take' limit (Mikimiki)
Kopuaranga River	270 L/s at Palmers Bridge	600L/s 'cease take' limit (Palmers Bridge)
Waingawa River	1100 L/s at Kaituna	2500 L/s 'cease take' limit (Kaituna). NB concession made for Masterton water supply
Makoura Stream	No value set	To be determined – lack of data
Booths Creek and Parkvale Stream	No value set	Parkvale 150L/s (Renalls weir) Booths 60L/s (Old Mill)
Taueru River	No value set	600L/s 'cease take' limit (Te Whiti rd bridge)
Huangarua River	No value set	2000L/s 'cease take' limit (Hikawera)
Waiohine River	2300 at gorge	3570 L/s (Gorge)
Makahakaha Stream	No value set	80L/s 'cease take' limit (Gladstone Rd bridge – Te Whiti end)
Stonestead Creek	No value set	570 L/s (Otukura confluence)
Tauherenikau River	1100L at gorge	1350L/s 'cease take' limit (gorge)
Abbots Creek	No value set	To be determined – lack of data