**CHRISTCHURCH WEST MELTON WATER MANAGEMENT ZONE COMMITTEE**
**THURSDAY 23 FEBRUARY 2012**

**A meeting of the Christchurch West Melton Water Management Zone Committee was held in Linwood Service Centre on Thursday 23 February 2012 at 6.09pm**

**PRESENT:** Ian Fox, Community Representative (Chairperson)
Deidre Francis, Community Representative (Deputy Chairperson)
Jon Harding, Community Representative
Arapata Reuben, Tūāhuriri Rūnanga
Herena Stone, Rāpaki Rūnanga
Hugh Thorpe, Community Representative
Robert Wynn-Williams, Community Representative
Ann Winstanley, Community Representative
Commissioner Rex Williams, Environment Canterbury

**APOLOGIES:** A apologies for absences were received and accepted for Councillor Sally Buck, Craig Pauling and Councillor Debra Hasson.

An apology for lateness was received and accepted from Herena Stone, who arrived at 6.28pm and was absent for clauses 1- 6.

Commissioner Rex Williams left the meeting at 7.04pm and was absent for clause 7,8,9,10,12 and 13.

Hugh Thorpe arrived at 6.14pm and was absent for clauses 2,3 and 4.

The meeting opened with a karakia by Arapata Reuben .

## 1. CONFIRMATION OF MINUTES – 26 JANUARY 2012

It was **decided** that the minutes of the meeting held on 26 January 2012 be approved as a true and accurate record of the meeting.

## 2. DEPUTATIONS BY APPOINTMENT

Nil.

## 3. IDENTIFICATION OF URGENT ITEMS

Nil.

## 4. IDENTIFICATION OF ANY GENERAL PUBLIC CONTRIBUTIONS

Nil.

## 5. APPOINTMENT OF CHAIRPERSON AND DEPUTY CHAIRPERSON

The Committee discussed the appointment of the Chairperson and Deputy Chairperson, and expressed concerns about appointing a permanent Committee Member to these roles at this stage.

It was **decided** that the Committee appoint a temporary Chairperson and Deputy Chairperson for a period of 3 months, with the view to appoint a permanent appointment to these positions at its meeting in June.

**5 Cont'd**

The Interim Chairperson called for nominations for the position of Chairperson.

Ian Fox was nominated by Jon Harding, seconded by Deidre Francis.

There being no other nominations, Ian Fox was declared **elected** as Chairperson for a period of 3 months.

The Interim Chairperson called for nominations for the position of Deputy Chairperson.

Deidre Francis was nominated by Jon Harding, seconded by Ian Fox.

There being no other nominations, Deirdre Francis was declared **elected** as Deputy Chairperson for a period of 3 months.

## 6. CODE OF CONDUCT

The Committee **received** the draft code of conduct and noted the standards and operating philosophy outlined for the Committee.

Matthew Ross drew the Committee's attention to content relating to media interactions, Tangata Whenua, and operating ethos/behaviors.

It was **decided** on the motion of Hugh Thorpe, seconded by Robert Wynn-Williams that the Committee adopt the code of conduct as outlined in the agenda.

## 7. WORKSHOP ON BIODIVERSITY PRIORITIES

The Committee separated into focus groups to workshop and reflect on the priority outcomes outlined at the last meeting in relation to biodiversity.

The Committee highlighted the following issues to add to the priority issues:

- how it fits into the Canterbury Water Management Strategy
- look at what is unique in the zone
- protection enhancement of rural streams
- riparian planting – explicit and implicit and rapid progress opportunities
- iconic species such as mudfish and threats to these
- what is special about this zone and relationship of the rivers to the estuary
- wetland re-creation where one previously existed.
- creating habitat to create biodiversity:
    - fish spawning
    - not just indigenous
    - removal of imports
    - specific site Otukaikino Stream.
- threats such as spring sources, day lighting, known sites and sources to sea

## 8. DECIDING OUR "IMMEDIATE STEPS" APPROACH

The Committee considered a report from Matthew Ross, Zone Facilitator, recommending the establishment of the task and finish group to create a considered proposal on biodiversity priorities and the best approach for immediate steps in the zone.

The Committee discussed the remit for this task and finish group and **agreed** that the role be to create draft priority outcomes in relation to biodiversity, and the best approaches for immediate steps, which was to include an explanation on the rationale of the approach taken by the group on these tasks. These findings would then be presented to the Committee for consideration at its March meeting.

**8 Cont'd**

The Committee **decided** to establish an Biodiversity/Immediate Steps Task and Finish Group to consist of the following Committee Representatives:

- Hugh Thorpe
- Arapata Reuben
- Jon Harding
- Deidre Francis.

## 9. IMPROVING URBAN WATERS PROJECT

The Committee received presentation and a tabled written update (refer **attached**) from Jennifer Rochford, Environment Canterbury on the Urban waters projects.

## 10. TACKLING LIQUEFACTION IN WATERWAYS

The Committee received a presentation (refer **attached**) from Owen Southern from Christchurch City Council on tackling liquefaction in waterways, including discussion on urgent works undertaken and ways to deal with the impact of liquefaction in the zone to limit the ecological and landscape damage caused.

The Committee noted that it was generally comfortable with the approach being undertaken by the Christchurch City Council for the removal of liquefaction, in line with the Canterbury Water Management Strategy. The Committee **requested** to receive regular progress updates on this issue due to the interest in this matter within the community.

The Committee raised the following areas for further information on in relation to liquefaction:

- clarification with the regards to the impact on native fish including:
  - provision for the return of native fish species
  - impact of disturbance of the excavation on native fish
  - removal of fish prior to excavation.
- flood carrying capability
- standard to which this is being put back to, whether pre September 2010 earthquake or to improve and enhance what was there previously
- ecological/ biodiversity benefits of this approach.

## 11. WATER AND HEALTH

The Committee **received** a presentation (refer **attached**) from Judy Williamson, Health and Protection Officer/ Drinking Water Assessor for Canterbury District Health Board. Key issues raised for the Zone included ground water protection zones, recreational water usage and Cyanobacteria.

The Committee raised the following areas for further consideration:

- sources of the pollution? (dogs, birds etc)
- feedback on the future ground water protection
- what are the land use trends and demands over time that could impact demand?
- Christchurch north west – programme of improvement and project of WCP
- Cyanobacteria ~~solubility~~ *filtration (amendment made at the Committee meeting on 28 March 2012, during clause 2, confirmation of minutes)*
- contaminated sediments management
- rain water collection and associated human health issues.

## 12. UPDATE FROM THE REGIONAL COMMITTEE REPRESENTATIVE

The Committee **received** an update from the Committees Regional Committee Representative Jon Harding with particular reference to the main issues identified within the draft Regional Implementation Plan (dRIP).

## 13. WORK PROGRAMME UPDATE

The Committee **received** an update from Matthew Ross, Zone Facilitator, on the Committee's upcoming work programme, with particular reference to the Committee's field trip in March.

The Committee also **received** an update from Deidre Francis on a recent workshop attended on rain gardens, and suggested that the Committee receive a presentation on this matter at a future meeting.

The meeting concluded at 9.14pm

**CONFIRMED THIS 28TH DAY OF MARCH 2012**

**IAN FOX**
**CHAIRPERSON**

# Improving Urban Waterway Health (IUWH)

86% of people say “Councils should tell us more about how we can better help to improve the health of our rivers, streams and waterways”

*

42% didn’t know what stormwater was

*

Most people can name the Avon and Heathcote rivers, but less than 10% could name any of the other 400 waterways in Christchurch

Environment Canterbury Regional Council

# Improve ecological health of urban waterways by:

1. Increasing the level and effectiveness of urban community involvement in management and care of urban waterways.

Environment Canterbury Regional Council

# Improve ecological health of urban waterways by:

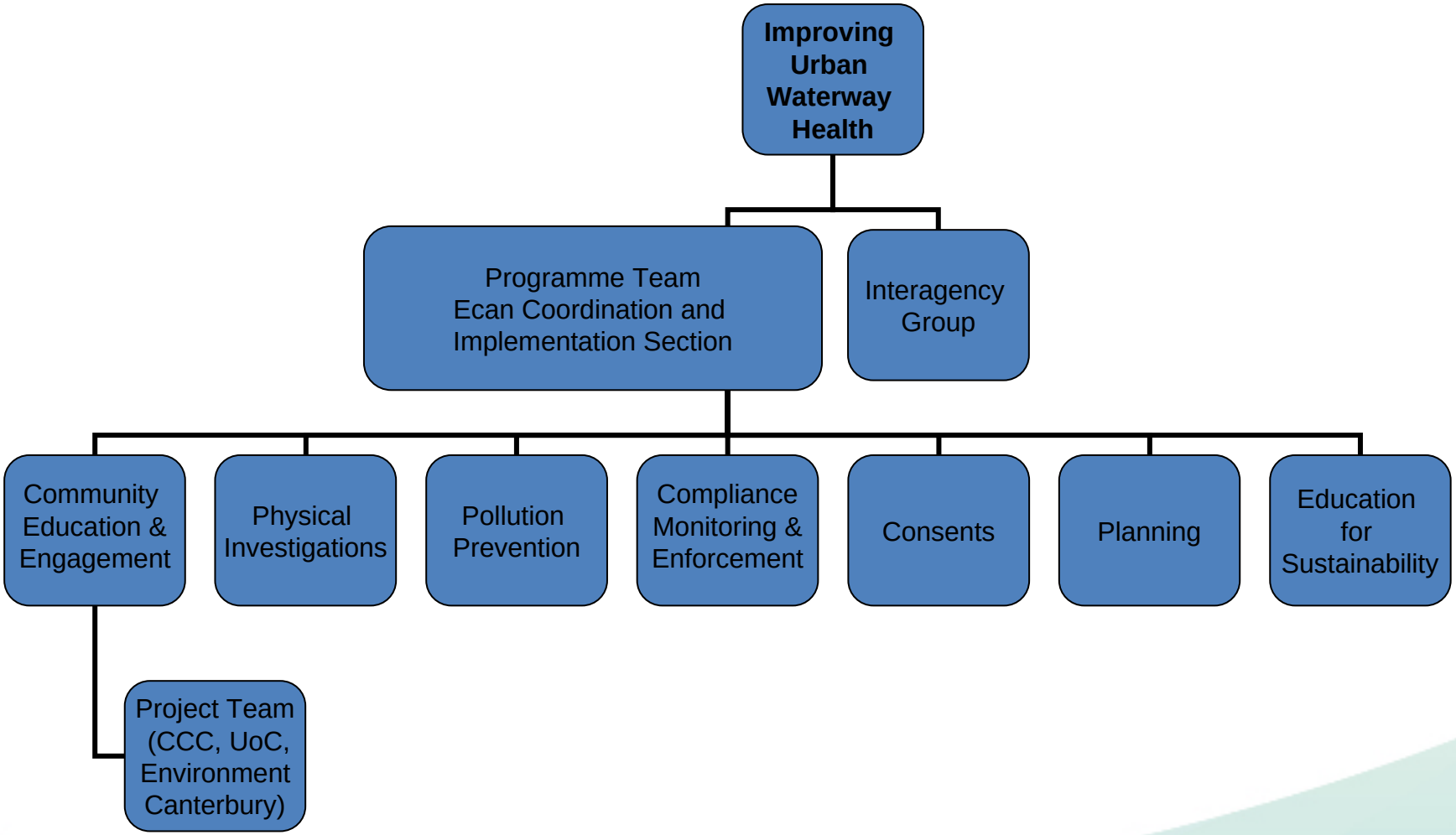

2. Increasing community knowledge, environmental awareness and responsibility with regards to the effect of individual and cumulative actions on urban waterways.

Environment Canterbury Regional Council

# Improve ecological health of urban waterways by:

3. More effective and proactive agency management of urban waterways through increased co-ordination and appropriate regulatory enforcement.

Environment Canterbury Regional Council




Environment Canterbury Regional Council

# Component 1:  General Awareness

# Be careful where you wash the car... you may be washing out the rivers.

**Christchurch Waterways.**
Let's change our ways,
to change our waterways.

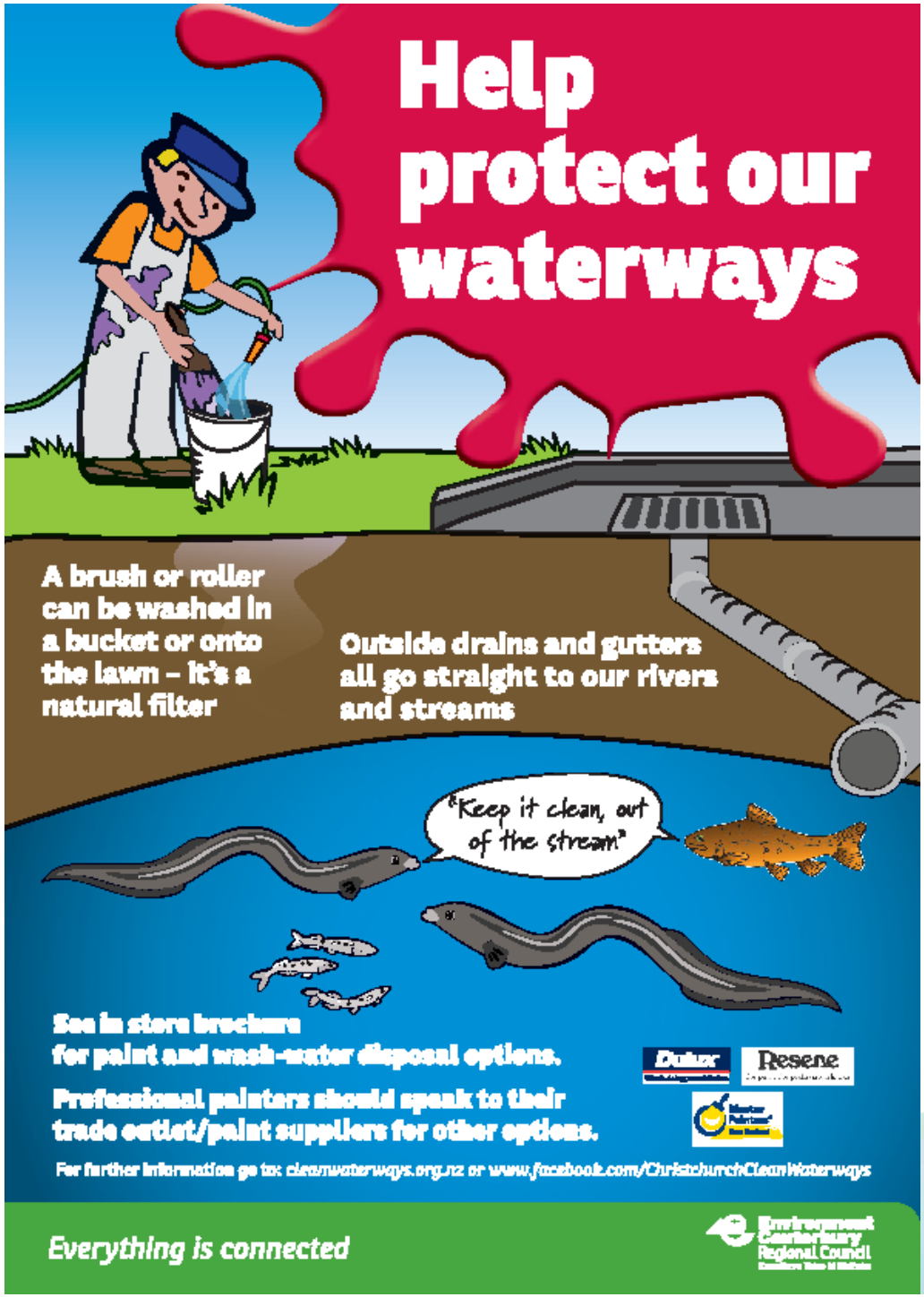
**cleanwaterways.org.nz**

Christchurch City Council

PLEASE GIVE WAY

Environment Canterbury Regional Council

vironment
nterbury
Regional Council




In collaboration with:

Dulux
Resene
Master Painters NZ

Environment Canterbury Regional Council

romoting cleaner water in Christchurch, New Zealand - Windows Internet Explorer

nwaterways.org.nz/

Live Search

ols Help

rld RID RID - admin RID Doc WQL21 IUWH IUWHweb Cleanwaterways ESC guide ESC interest NRRP amend request River boundaries Minor Corrections

Cleanwaterways.org.nz -...

Page



Toi tū te marae o Tangaroa
Toi tū te marae o Tāne
Toi tū te iwi

If we look after the waters and land around us, we will be looked after in turn.

Environment Canterbury Regional Council
Kaunihera Taiao ki Waitaha

Christchurch City Council

## Latest update...

### Quantifying the impact of car washing on water quality and assessing simple treatment strategies

Download the report (1.9 MB)

### New research on stormwater contamination available

Download the Getting the stormwater message across report (pdf 2.8MB)

### We are on Facebook!

Join us on our cleanwaterways Facebook page to receive regular updates and event notices.

**All the stormwater from Christchurch City's roofs, roads, driveways, footpaths and carparks flows down gutters and drains into a series of underground pipes and open waterways, our stormwater network.**

This water eventually flows into one of our City's rivers, the

### Download the tips...

There's things you can do at home, at work, at school and at play to improve the health of our waterways... See all the tips here

### How your family can help

Do you wash your car in the driveway? Why not wash it on the lawn or take it to a carwash?... Read more tips on what you can do around home to keep our waterways clean.

### Get your workplace involved

Covering and labelling waste and recycling skips, and locating them away from stormwater drains, helps prevent contaminants from getting into our waterways... Read more tips on what you can do at work to keep our waterways clean.

Internet

Cleanwaterwa... paint - Microso... ECan section 8... ZIP meeting ou... IUWH ZIP pres... JenniferZ$ on '... posters_broch... 2298 PPG Paint...

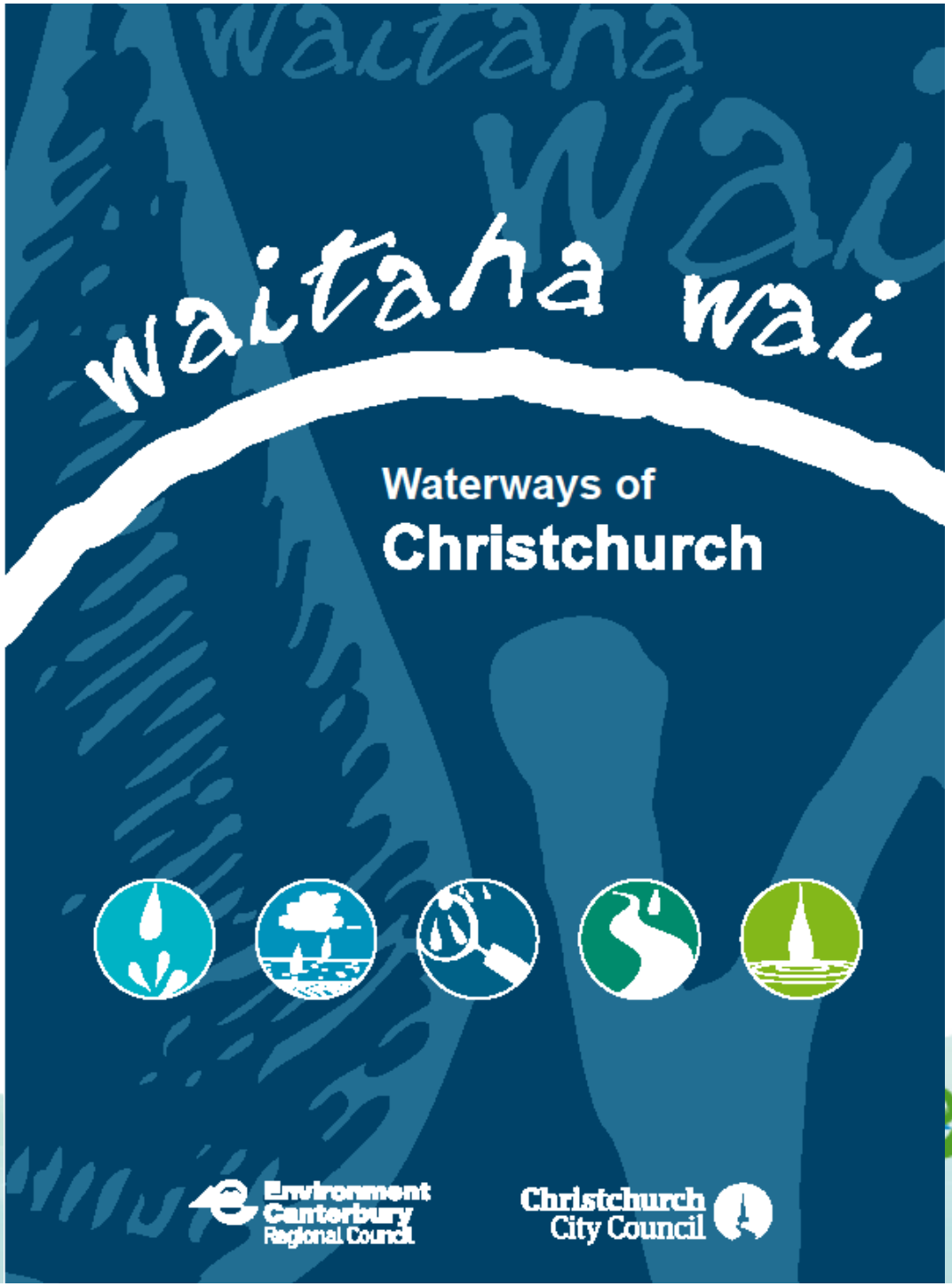
Environment Canterbury Regional Council
Kaunihera Taiao ki Waitaha

# Getting the stormwater message across

## Supporting information on the effects of selected residential activities on stormwater quality

*(with particular reference to the aquatic ecosystems of the Avon River/Ōtākaro and Heathcote River/ Opāwaho in Christchurch)*

Environment Canterbury Regional Council




Environment Canterbury Regional Council

## Threats to waterways

There is a lot of water available in Canterbury and the groundwater is of a very high quality. However, demand for water is increasing and some groundwater supplies have started to dry up at times of drought. Groundwater could also become polluted if we are not careful.

Although there is pristine, drinkable water below ground in Christchurch, much of the surface water is not of a high quality. Regular monitoring by the Christchurch City Council indicates that many contaminants in waterways around the City exceed recommended guidelines at least some of the time. Water quantity is also of concern around Christchurch and Canterbury. Some streams in the City have run dry permanently because the springs that fed them have dried up or have been disrupted as a result of industrial or housing developments.

Forests, grasslands and wetlands act like sponges that slow down and absorb water when it rains. However in cities, these areas are often replaced with impermeable surfaces such as roads, footpaths and car parks. Water is no longer absorbed by the action of the plants and instead flows directly into streams via storm drains.

The concrete and tarmac surfaces in urban areas drastically increase the speed at which water enters streams and rivers.

**Factors that can affect an urban stream include:**

- Water, unable to soak through the ground and recharge aquifers or rivers, instead runs along gutters and into stormwater drains, collecting pollutants and litter along the way.
- Riparian (river bank) vegetation is often removed for building or other developments, or so that people can see the waterways.
- Large amounts of sediment can be washed into the waterway as a result of new building developments or the building and extension of houses.
- Erosion of unstable stream banks.
- A greater variation in river flows – much lower flows when there is little rain and much shorter, sharper floods in times of heavy rain because the water runs off quickly rather than soaking into the ground and recharging aquifers.
- Straightening of stream channels and piping of waterways, which decreases the amount of habitat available for invertebrates and fish.

Environment Canterbury Regional Council

# Erosion and Sediment Control
## Training Workshops


### Contractors and Consultants!

*Learn about the Erosion and Sediment Control Guidelines, and how to put them into practice in your day-to-day work to prevent waterway and dust-related pollution.*

**Enrol now!** Places are limited on the following workshops:

**Introduction for Contractors**

For those on earthwork sites who build, operate, maintain or decommission measures set out in erosion and sediment control plans.

Christchurch Tuesday 28th April

**Cost:** $460 incl. gst
(includes Guidelines and catering)

**Chemical Use (Flocculants)**

Focusing on the appropriate use, design and operation of flocculation systems.

Christchurch Wednesday 29th April, afternoon

**Cost:** $140 incl. gst
(includes catering)

**Preparing Erosion & Sediment Control Plans**

This is a more advanced course that concentrates on how to effectively develop erosion and sediment control plans.

Christchurch Thursday 30th April

**Cost:** $285 incl. gst
(includes Guidelines and catering)

*"An essential tool/must do" "Very practical" "An excellent workshop run by excellent presenters"*
*- participants' comments*

Environment Canterbury · MACCAFERRI Engineered Environmental Solutions · rst environmental solutions · ORICA

**TO REGISTER** or find out more **CALL** (03) 353 9007 / 0800 32 46 36 or **VISIT** www.ecan.govt.nz/escg

# Component 2:  Catchment Projects

Pilot Project:
Okeover Stream

Environment Canterbury Regional Council

# Okeover STREAM

**All water that falls in this catchment from roofs, roads, footpaths and residential carparks, drains untreated to the Okeover Stream. We need to keep our stormwater clean to keep our waterways clean.**

## NEVER WASH YOUR CAR ON THE DRIVEWAY


## WASH YOUR CAR ON THE GRASS

### Downstream Section

Good riparian environment. Habitat has been restored and there is predominantly water flow. Some native birds present but water quality needs to improve to support a greater diversity of in-stream species.

### Ephemeral Section (flows only when it rains)

Receives stormwater from the surrounding suburban catchment. Partly piped, partly confined and partly have open channel. This section has poor water quality which impacts on aquatic life.

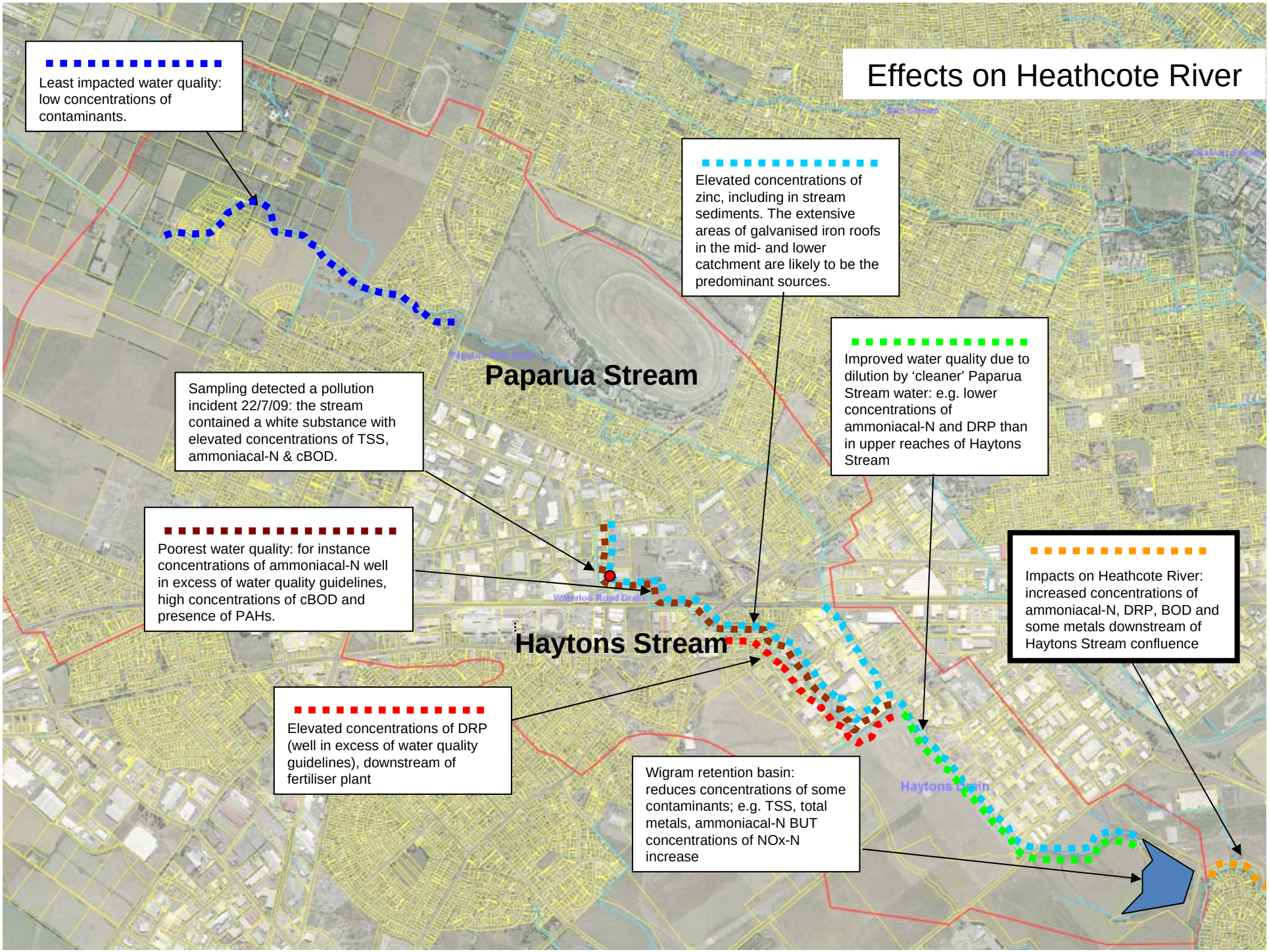
**Stormwater versus Wastewater/Sewer:** when you flush your toilet, have a shower, or wash your dishes and laundry the wastewater goes to the sewer to be treated. When you wash your car on the driveway or the street, the water goes to stormwater and into the Okeover Stream.

Environment Canterbury Regional Council

Brought to you by Environment Canterbury working with UCSC

Haytons and Paparoa
Streams Catchment


Environment Canterbury
Regional Council


Effects on Heathcote River
Least impacted water quality: low concentrations of contaminants.
Elevated concentrations of zinc, including in stream sediments. The extensive areas of galvanised iron roofs in the mid- and lower catchment are likely to be the predominant sources.
Paparua Stream
Improved water quality due to dilution by 'cleaner' Paparua Stream water: e.g. lower concentrations of ammoniacal-N and DRP than in upper reaches of Haytons Stream
Sampling detected a pollution incident 22/7/09: the stream contained a white substance with elevated concentrations of TSS, ammoniacal-N & cBOD.
Poorest water quality: for instance concentrations of ammoniacal-N well in excess of water quality guidelines, high concentrations of cBOD and presence of PAHs.
Haytons Stream
Impacts on Heathcote River: increased concentrations of ammoniacal-N, DRP, BOD and some metals downstream of Haytons Stream confluence
Elevated concentrations of DRP (well in excess of water quality guidelines), downstream of fertiliser plant
Wigram retention basin: reduces concentrations of some contaminants; e.g. TSS, total metals, ammoniacal-N BUT concentrations of NOx-N increase

Environment Canterbury Regional Council

# Improving
## *urban waterway health*

**Improving the water quality of Haytons and Paparua Streams and the Heathcote River in southwest Christchurch**

*Information for at-risk businesses in the Haytons sub-catchment July 2010*


*Everything is connected*

Environment Canterbury Regional Council

Cashmere Stream


Environment Canterbury Regional Council

Environment Canterbury
Regional Council

# IUWH Program

- Able to adapt to work in varied catchments
- Mix of science and community engagement
- Several Ecan departments working together
- Interagency group to develop common goals

Environment Canterbury Regional Council

# Silt Removal Christchurch Rivers Stream and Lakes Consent Application

- Christchurch City Council has traditionally managed Waterways, Lakes Ponds and Utilities.
- This consists or weed control, bank stabilisation, and regrading when necessary.
- Following the September 2010 emergency drain clearing was undertaken to ensure reasonable drainage
- In October 2011 CCC was advised that it did not have a consent to excavate from the bed of Rivers and Tributaries waterways and should cease until a consent was obtained.
- The CCC has a multi value approach to Waterway Management.

- Application prepared in consultation with Ecan and lodged January 2012
- The proposed conditions are as expected and include
  - an annual schedule of works to be submitted.
  - allowance for emergency works
  - signage to be erected
  - project management plans to be approved
  - sediment control
  - protection of known fish spawning sites
  - bio security protection
  - sediment sampling and disposal
  - protection of ecological sites

- It is hoped that the consent will be granted soon.
- Presently we are clearing silt from Wai-Iti Stream.
- We are planning to remove silt from the road rebuild site in Fitzgerald Ave and improve the riparian margin prior to the road opening.
- Also the south end of Kerrs Reach where rowers are now hitting the bottom. (Have Consent for this section) and at Owles Tce.
- There will be a need to act quickly with silt clearance as the property rebuilds commence.
- River and Stream modelling is well underway and we are in a position to develop a full program.

- This work is in line with the Council values approach to waterway management
- While it has done immense damage it has also created great opportunities.
- There will be opportunities to enhance and protect riparian margins and we are already talking to CERA about these.
- The inunga spawning areas were developed by the Council since 1989 and will be developed once again.
- It is important to limit the damage and this consent will assist in allowing the Council to start returning the streams to be an asset rather than a liability

**PRESENTATION TO:**

**Christchurch-West Melton Zone Cmte**

Canterbury District Health Board
Te Poari Hauora ō Waitaha

# Water and Health

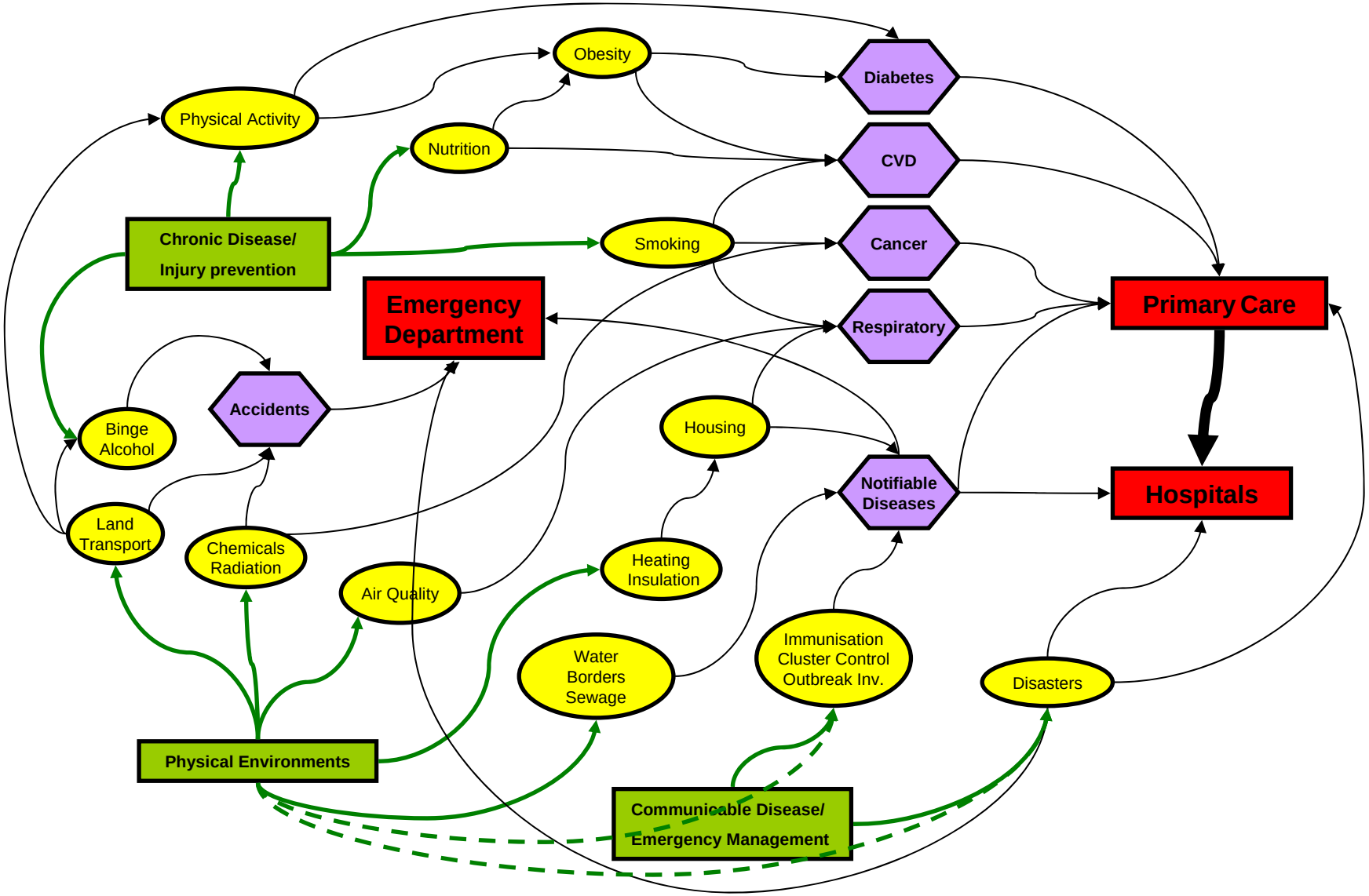

Judy Williamson

Health Protection Officer/Drinking Water Assessor

# What does C&PH do?

## - Reduces Hospital Admissions

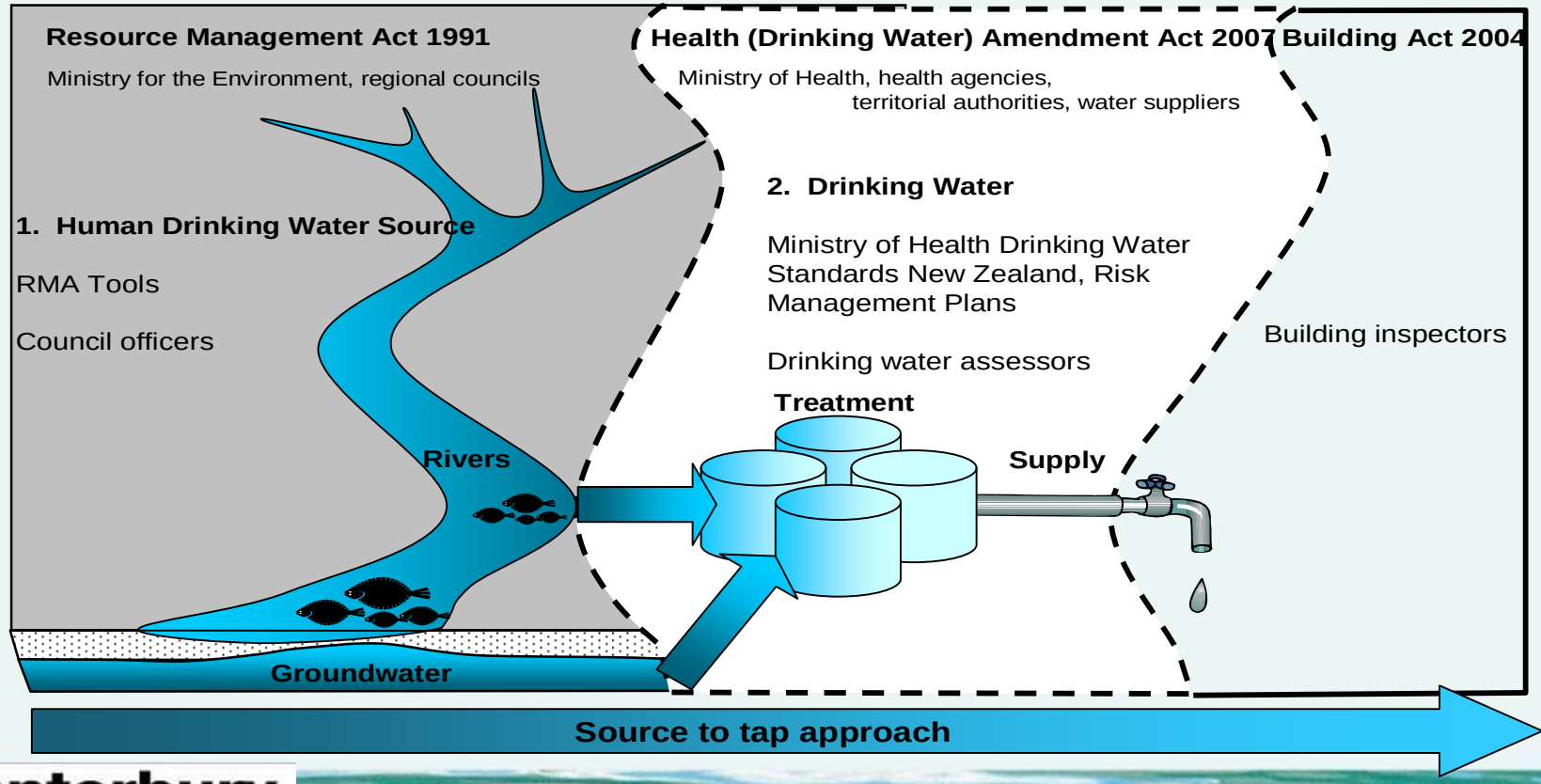
Canterbury District Health Board
Te Poari Hauora ō Waitaha



# Legislative framework for water

Canterbury District Health Board
Te Poari Hauora ō Waitaha

## Environment and Health




Canterbury District Health Board
Te Poari Hauora ō Waitaha

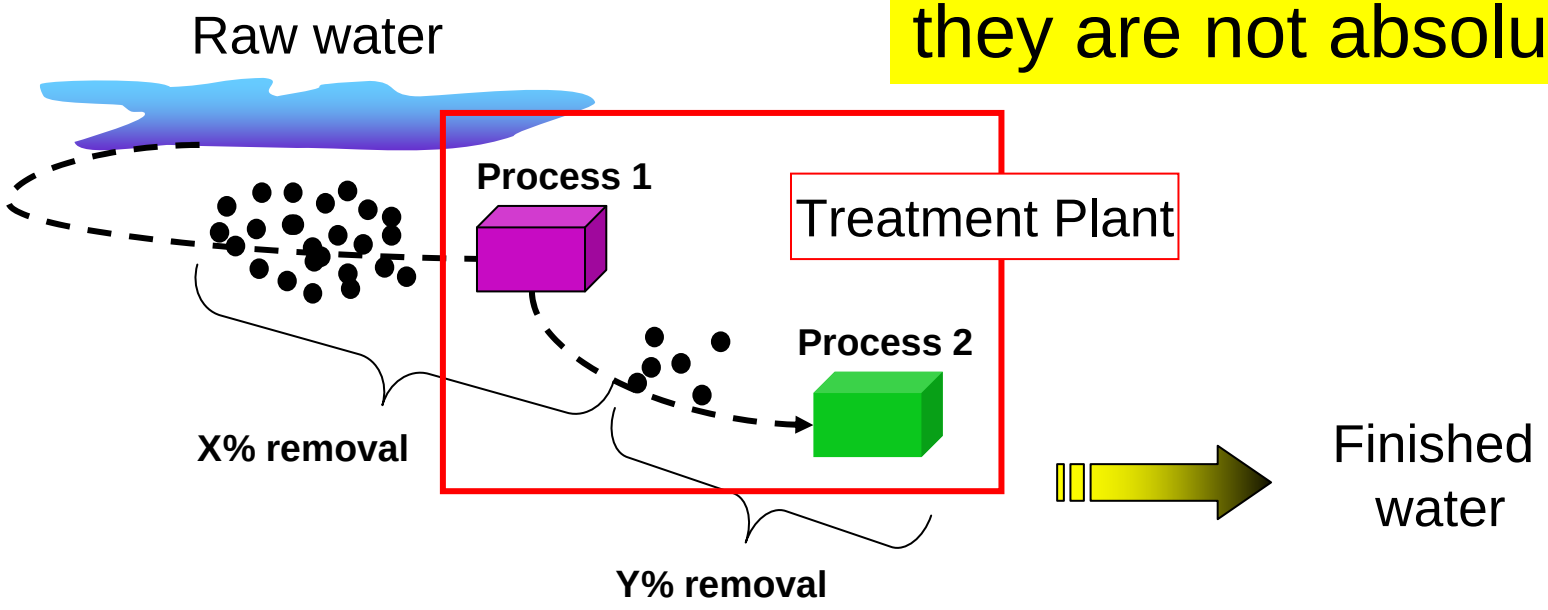
Environment Canterbury

# Multiple barrier approach

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- Multiple barriers

Treatment barriers work on a % basis, they are not absolute



No one ever died from drinking
a glass of water

Yeah right.

# Cholera, Haiti: 2010

Canterbury
District Health Board
Te Poari Hauora ō Waitaha

# Leptospirosis, Queensland: 2011

Canterbury District Health Board
Te Poari Hauora ō Waitaha

## Flood Sickness in 3 People from Theodore and Moura, Queensland

Prakash Sharma on Wed, 01/19/2011 - 13:57

The flood situation is still falling heavily on Queenslanders as another 3 people were reportedly fallen sick due to a flood related infection in Theodore and Moura.
According to Queensland Health, the three victims were tested positive to Leptospirosis which is a bacterial infection commonly found in soil and water in rural areas in the region.

# Rates of Disease

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- 17,000 notified cases of gastroenteritis per year
- Up to 34,000 cases of waterborne illness per year
- Highest rate of Campylobacteriosis in the world

# Average Annual Rates[1] (per 100,000 population) of Other Enteric Diseases[2] by Age (2006-2010)

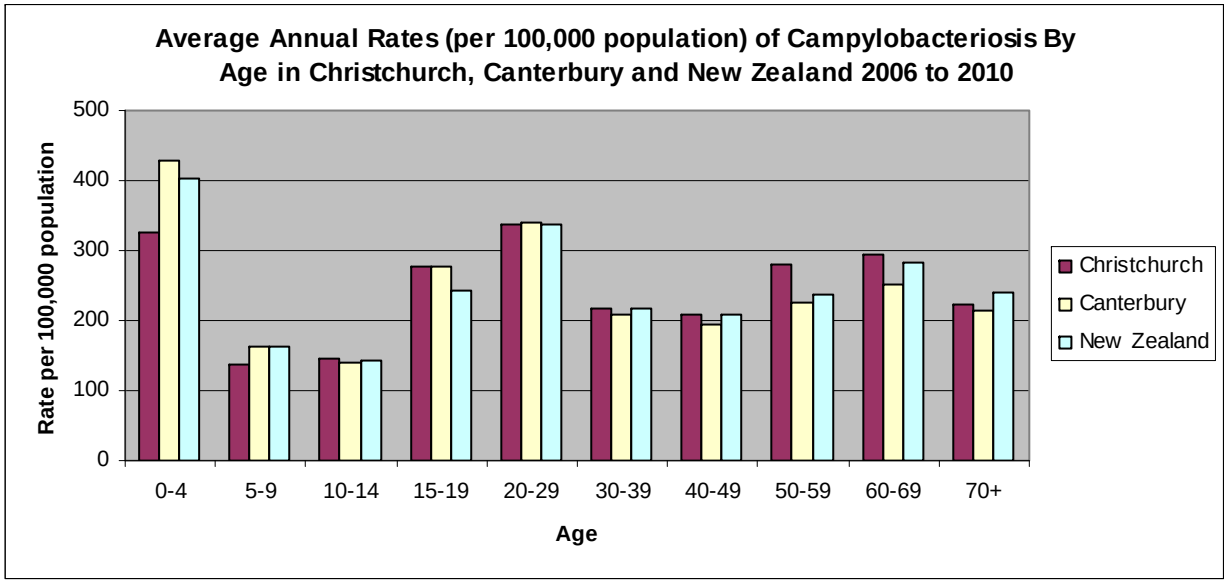
Canterbury District Health Board
Te Poari Hauora ō Waitaha

| Area \ Age | 0-4 | 5-9 | 10-14 | 15-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70+ |
|---|---|---|---|---|---|---|---|---|---|---|
| **Christchurch City[3]** | 365 | 152 | 88 | 60 | 120 | 163 | 151 | 130 | 134 | 113 |
| **Canterbury Region[4]** | 439 | 158 | 85 | 71 | 107 | 138 | 105 | 91 | 97 | 97 |
| **New Zealand[5]** | 453 | 121 | 60 | 63 | 106 | 133 | 93 | 91 | 97 | 83 |

1. Rates based on 2006 Census data.
2. Other enteric disease include Cryptosporidiosis, Gastroenteritis / foodborne intoxication, Gastroenteritis - unknown cause, Giardiasis, Paratyphoid fever, Salmonellosis, Shigellosis, VTEC/STEC infection and Yersiniosis.
3. Age-specific rates do not include 16 Christchurch City cases who have missing information on age.
4. Age-specific rates do not include 15 Canterbury cases who have missing information on age.
5. Age-specific rates do not include 261 national cases who have missing information on age.

# Campylobacter rates

Canterbury District Health Board
Te Poari Hauora ō Waitaha



# Walkerton, Ontario – May 2000

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- Rural town of about 5000 people
- Poor monitoring of a poorly maintained well
- 7 people died, half the town were ill – *E.coli 0157*
- $64m direct costs, $135m indirect costs
- $4000 per household (total $6.9m)
- $2.7m lost revenue
- $9m to fix system, $1.5m for institutions
- $3.5m legal fees

Canterbury
District Health Board
Te Poari Hauora ō Waitaha

# Could a "Walkerton Outbreak" Happen in Canterbury?

# The Springston Outbreak 2008-

## The Walkerton that wasn't

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- February 2008
  – 3 campylobacter notifications from a town of 500+ people. Reports of much gastro and a E.coli 0157
- In response to repeated transgressions of NZDWS Selwyn District Council issued a boil water notice on 7th March
- Public meeting convened on 13th March by residents association

# Outbreak investigation

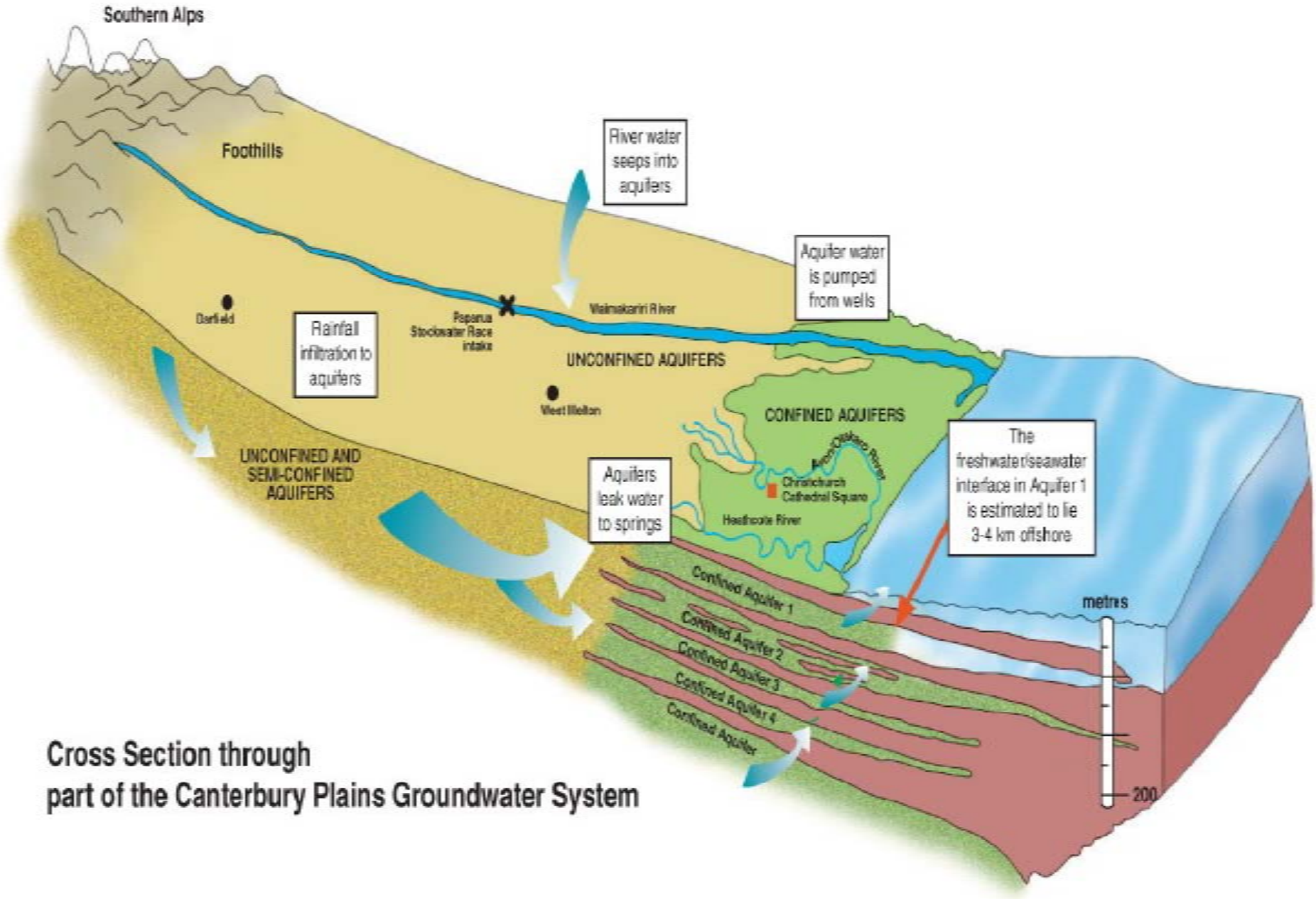
Canterbury District Health Board
Te Poari Hauora ō Waitaha

- **42 out of 89 Springston residents met the case definition**
- **2 out of 64 controls met the case definition**
- **Odds ratio for consumption of unboiled Springston Water 16.25**
- **2 cases of *campylobacteriosis* in visitors to Springston**
- **One sample was positive for *E.coli* 0157 (non-toxigenic)**

# Christchurch Water supply

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- Minimal barriers in place
- Catchment protection important
- Reticulation controls

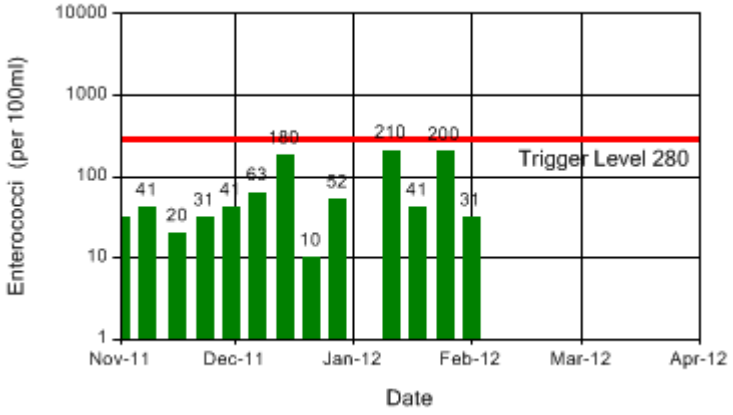



**Cross Section through part of the Canterbury Plains Groundwater System**

# Recreational water quality

Canterbury District Health Board
Te Poari Hauora ō Waitaha

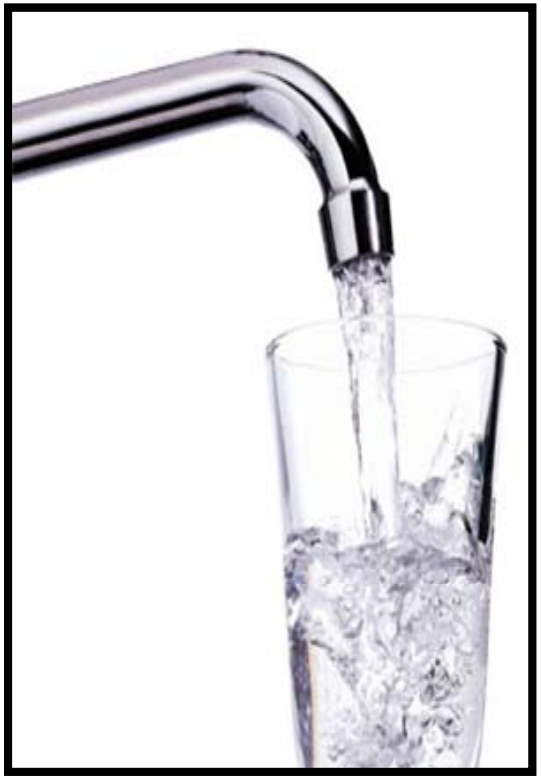
- ECan undertakes sampling during summer
- Results shared with CPH and TLA
- CPH – media release from Medical officer of Health around action/alert level breaches
- TLA puts up signage
- Christchurch area remains vulnerable post earthquakes



# Cyanobacteria

Canterbury District Health Board
Te Poari Hauora ō Waitaha

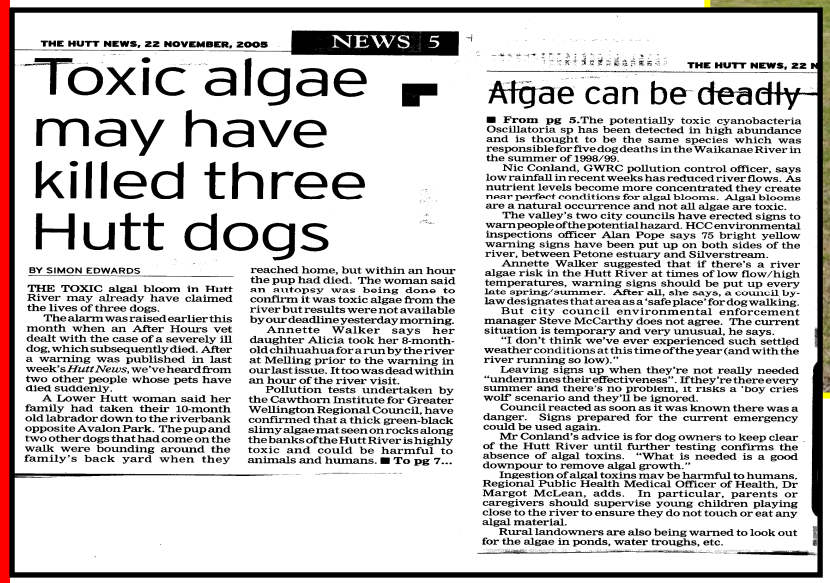
- Emerging issue
- Risk for surface water users (and animals)
- Potential risk to water supplies

# Cyanobacteria

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- Ancient photosynthetic organisms
- 2000sp worldwide
- Planktonic and benthic



THE HUTT NEWS, 22 NOVEMBER, 2005 NEWS 5

## Toxic algae may have killed three Hutt dogs

BY SIMON EDWARDS

THE TOXIC algal bloom in Hutt River may already have claimed the lives of three dogs.

The alarm was raised earlier this month when an After Hours vet dealt with the case of a severely ill dog, which subsequently died. After a warning was published in last week's *Hutt News*, we've heard from two other people whose pets have died suddenly.

A Lower Hutt woman said her family had taken their 10-month old labrador down to the riverbank opposite Avalon Park. The pup and two other dogs that had come on the walk were bounding around the family's back yard when they reached home, but within an hour the pup had died. The woman said an autopsy was being done to confirm it was toxic algae from the river but results were not available by our deadline yesterday morning.

Annette Walker says her daughter Alicia took her 8-month-old chihuahua for a run by the river at Melling prior to the warning in our last issue. It too was dead within an hour of the river visit.

Pollution tests undertaken by the Cawthorn Institute for Greater Wellington Regional Council, have confirmed that a thick green-black slimy algae mat seen on rocks along the banks of the Hutt River is highly toxic and could be harmful to animals and humans. ■ To pg 7...

THE HUTT NEWS, 22 N

## Algae can be deadly

■ From pg 5.The potentially toxic cyanobacteria Oscillatoria sp has been detected in high abundance and is thought to be the same species which was responsible for five dog deaths in the Waikanae River in the summer of 1998/99.

Nic Conland, GWRC pollution control officer, says low rainfall in recent weeks has reduced river flows. As nutrient levels become more concentrated they create near perfect conditions for algal blooms. Algal blooms are a natural occurrence and not all algae are toxic.

The valley's two city councils have erected signs to warn people of the potential hazard. HCC environmental inspections officer Alan Pope says 75 bright yellow warning signs have been put up on both sides of the river, between Petone estuary and Silverstream.

Annette Walker suggested that if there's a river algae risk in the Hutt River at times of low flow/high temperatures, warning signs should be put up every late spring/summer. After all, she says, a council by-law designates that areas as a 'safe place' for dog walking.

But city council environmental enforcement manager Steve McCarthy does not agree. The current situation is temporary and very unusual, he says.

"I don't think we've ever experienced such settled weather conditions at this time of the year (and with the river running so low)."

Leaving signs up when they're not really needed "undermines their effectiveness". If they're there every summer and there's no problem, it risks a 'boy cries wolf' scenario and they'll be ignored.

Council reacted as soon as it was known there was a danger. Signs prepared for the current emergency could be used again.

Mr Conland's advice is for dog owners to keep clear of the Hutt River until further testing confirms the absence of algal toxins. "What is needed is a good downpour to remove algal growth."

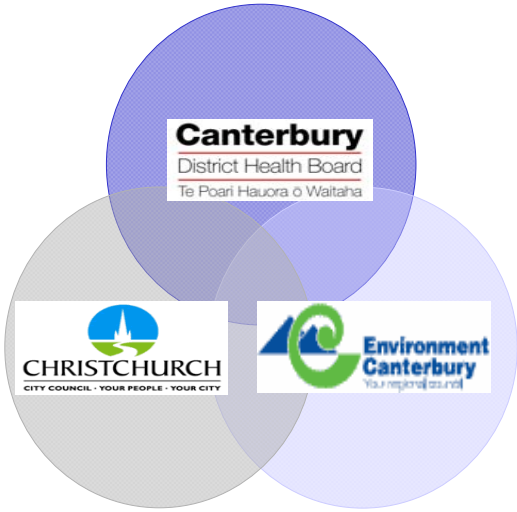
Ingestion of algal toxins may be harmful to humans, Regional Public Health Medical Officer of Health, Dr Margot McLean, adds. In particular, parents or caregivers should supervise young children playing close to the river to ensure they do not touch or eat any algal material.

Rural landowners are also being warned to look out for the algae in ponds, water troughs, etc.


# Strategic relationships

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- Current strategic relationship with ECAN (eg NRRP rules/UDS/ policy development on a range of issues/Maori advisory committee)
- Our developing relationship with the Water Executive, Regional Water Committee and Local Committees seen within this context.
- Opportunity for both to collaborate to achieve both health and environmental goals within the context of the strategy.



# Key recreational and drinking water quality issues

Canterbury District Health Board
Te Poari Hauora ō Waitaha

- Groundwater protection zone
- Recreational water
- Cyanobacteria

# Questions?

Canterbury
District Health Board
Te Poari Hauora ō Waitaha