

CHRISTCHURCH WEST MELTON WATER MANAGEMENT ZONE COMMITTEE

AGENDA

WEDNESDAY 28 MARCH 2012

AT 6PM

FUNCTION ROOM, CIVIC OFFICES, 53 HEREFORD STREET

Committee: Ian Fox, Community Representative (Chairperson)
Councillor Sally Buck, Christchurch City Council
Deidre Francis, Community Representative (Deputy Chairperson)
Jon Harding, Community Representative
Councillor Debra Hasson, Selwyn District Council
Craig Pauling, Taumutu Rūnanga
Arapata Reuben, Tūāhuriri Rūnanga
Herena Stone, Rāpaki Rūnanga
Hugh Thorpe, Community Representative
Robert Wynn-Williams, Community Representative
Commissioner Rex Williams, Environment Canterbury
Ann Winstanley, Community Representative

Principal Adviser
Peter Kingsbury
Tel: 027 599 4615
Christchurch City Council

Zone Facilitator
Matthew Ross
Environment Canterbury

Committee Adviser
Liz Blayney
Tel: 941 8185
Christchurch City Council

INDEX

	PAGE NO
1. APOLOGIES	
2. CONFIRMATION OF MINUTES – 23 FEBRUARY 2012	2
3. DEPUTATIONS BY APPOINTMENT	2
4. IDENTIFICATION OF URGENT ITEMS	2
5. IDENTIFICATION OF GENERAL PUBLIC CONTRIBUTIONS	2
6. TASK AND FINISH GROUP PROPOSALS ON “BIODIVERSITY PRIORITY OUTCOMES” AND “OUR APPROACH TO IMMEDIATE STEPS”	6
7. INTRODUCTION TO RAIN GARDENS	7
8. POLLUTION HOTLINE DATA – WHAT DOES IT TELL US?	18
9. EARTHQUAKES AND FAECAL INDICATOR BACTERIA CONCENTRATIONS - AVON RIVER/ŌTĀKARO AND AVON-HEATHCOTE ESTUARY/IHUTAI	24
10. THE DRAFT REGIONAL IMPLEMENTATION PROGRAMME	30
11. WORK PROGRAMME UPDATE	31

We're on the Web!

www.ccc.govt.nz/Council/Agendas/

www.ecan.govt.nz/news-and-notice/minutes/Pages/Default.aspx

1. APOLOGIES

2. CONFIRMATION OF MINUTES – 23 FEBRUARY 2012

The minutes of the Committee meeting held on 23 February 2012 are attached.

The Committee is asked to approve these minutes as a true and accurate record of the meeting.

3. DEPUTATIONS BY APPOINTMENT

4. IDENTIFICATION OF URGENT ITEMS

5. IDENTIFICATION OF ANY GENERAL PUBLIC CONTRIBUTIONS

ATTACHMENT TO CLAUSE 2

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.

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.

ATTACHMENT TO CLAUSE 2

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, Deidre 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.

ATTACHMENT TO CLAUSE 2

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.

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.

ATTACHMENT TO CLAUSE 2

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
- 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**

28. 3. 2012

- 7 -

**6. TASK AND FINISH GROUP PROPOSALS ON “BIODIVERSITY PRIORITY OUTCOMES” AND
“OUR APPROACH TO IMMEDIATE STEPS” 6.10PM**

The Committee will receive a verbal update from the Task and Finish Group that was appointed at the Committee’s last meeting on 23 February 2012, to consider biodiversity priority outcomes and the approach to immediate steps funding. The Committee will also be provided with a written feedback, which will be separately circulated.

7. INTRODUCTION TO RAIN GARDENS

7PM

The Committee will receive a presentation from Peter Wehrman (refer **attached**) in relation to Rain Gardens.

ATTACHMENT TO CLAUSE 7

Waiwetu St



Gowerton Place



Addington Rain Gardens

Nineteen Rain gardens of various designs installed ~2006.
Several unsuccessful landscape result.
Only one Rain Garden tested;
(Joseph F Good, 2011 Masters Thesis, U of C). Ok removing total suspended solids
and lead but less success with cu & zinc removal.



ATTACHMENT TO CLAUSE 7

Pre works near cemetery



Seven horizontal lines for notes.

Baxters Ck Overview

-Three temp part/Five permanent property purchase (\$1mill 2006)



Seven horizontal lines for notes.

Baxters Ck- Adopted 6 value Option

Post quake, will we ever have better opportunity for cheap land?
Alternative is the old 300mm would be replaced with a new 425mm pipe very difficult to take in 80/100yrs.
RG= a planted depression that gives rainwater runoff from impervious urban areas the opportunity to be absorbed



In 2100 will the creek with adjacent mature landscaped park with some 94yr Totoria & evolving eco systems that we gifted our grandchildren children be of more or less value than the alternative failing expensive to replace public pipe in private land in a narrow corridor?

Adds recreational value, pedestrian connectivity, off road cycle route, water quality improvement, flood detention, public reserve for replacing diminishing private green space in L3 zone, biodiversity, historic, cultural value, climate change flood storage allowance.....



How do you measure the Whole Of Life cost of an asset that does not die but gets better and better with agebut sometimes needs a face lift?

Seven horizontal lines for notes.

ATTACHMENT TO CLAUSE 7

Webb St Diversion structure



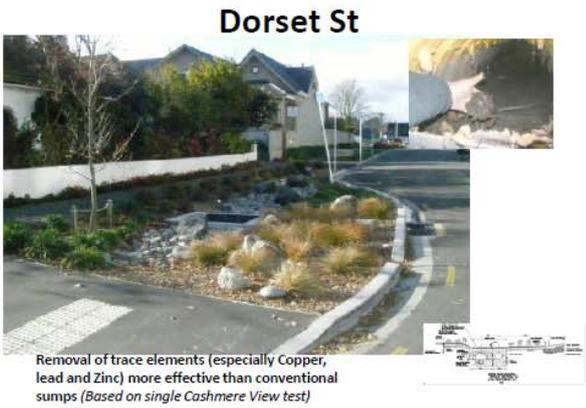
Grants Rd



Wyndham St





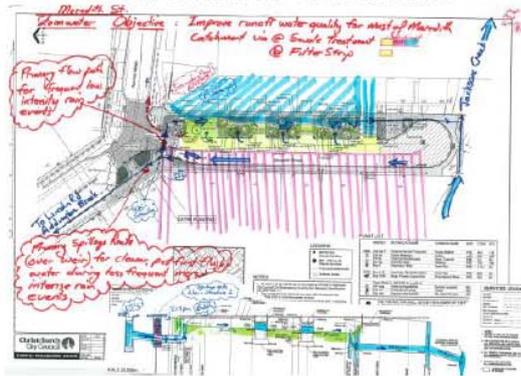




Meredith St- Features

Benefits: (Still early days-only built 2010/11)
 Storm water quality improvement via swale, filter strip, rain garden, cooling thermal pollution.
 Aquifer recharge, flood waters detention, landscape feature, marries adjacent park to street.
 Healthier planting. Educates community about debris/pollution as kept near source.
Innovation:
 -Filter strips (grass and landscaping) with porous check dams.
 -Castellated kerbs for flow dispersal, berm protection & a 300mm wide nib to reduce car passenger trip risk.
 -Hopefully sorted much of 1:500 grassed invert maintenance risk, and landscaped gobi block swale (including 'bubble up' flow from catchment from opposite side of road)
Conns:
 Experimental, driveway complexity, extra cost, pollution kept nearer source therefore more local maintenance needed (less ends up in river). Polluted berm in long term may need planing/replacing.

Meredith St-Overview Features



Proposed Similar to Meredith Concept for Shoulder rebuild



Alternative Proposed Option
 Scaled 3.8m berm photo montages based on Meredith St



- Similar cost to road shoulder job?
- More design flexibility
- Environmental benefits
- Quake/sewer resilience
- Community flood protection better
- Complex driveways/consents?
- Service Cover risk potential
- Only been in ground about a year- experimental
- Loss of overhanging private planting

ATTACHMENT TO CLAUSE 7

Bellamy Ave



Edward Ave
Bings Drain
Before & After



Strategy V's Attitude- Implementation likelihood?

Sustainable Solutions
Outcomes: Integrated & Sustainable
Plan
Concept: Community Engagement, Vision: The Future, Sustainable Outcomes
Brief: Eco-Systems, Overview: At Risk From, Access Through

Sustainable Solutions
Sustainable Solutions are sustainably integrated multi valued opportunities.
Understanding them:
-social and economic benefits & eco-systems & the systems each of these contain & the community systems that contain all these
-complex interrelationships and inter-dependence between these and other systems
-current and probable future problems and their causes at each project site
Placing a low value on:
-our limited resources
-the nature of the land and the unique opportunities of each individual site
-what environment we will leave our children
These are the hard issues that take Designers, Asset Managers and Policymakers outside the realm of familiar theories and traditional computer solutions.
But this is what we must do, our only choice
If we are to stop shifting & compounding our increasingly complex problems & choose to truly grow our community.
A vibrant Content Healthy Community, a Possibility

28. 3. 2012

- 18 -

8. **POLLUTION HOTLINE DATA – WHAT DOES IT TELL US**

7.30PM

The Committee will receive a presentation and a written update from Paul Gofton, Environment Canterbury on the pollution hot line data(refer **attached**).

Christchurch-West Melton

Summary of Pollution Hotline Complaints



Introduction

- Who am I?
- Where do I fit within the organisation?
- Pollution Hotline Complaints



Resource Management Group

Implementation Arm of Environment Canterbury

Biodiversity & Biosecurity	Implementation & Coordination	Consent Monitoring & Compliance	Extension Services
	Coasts & Waterways	Business Support	

Implementation & Coordination

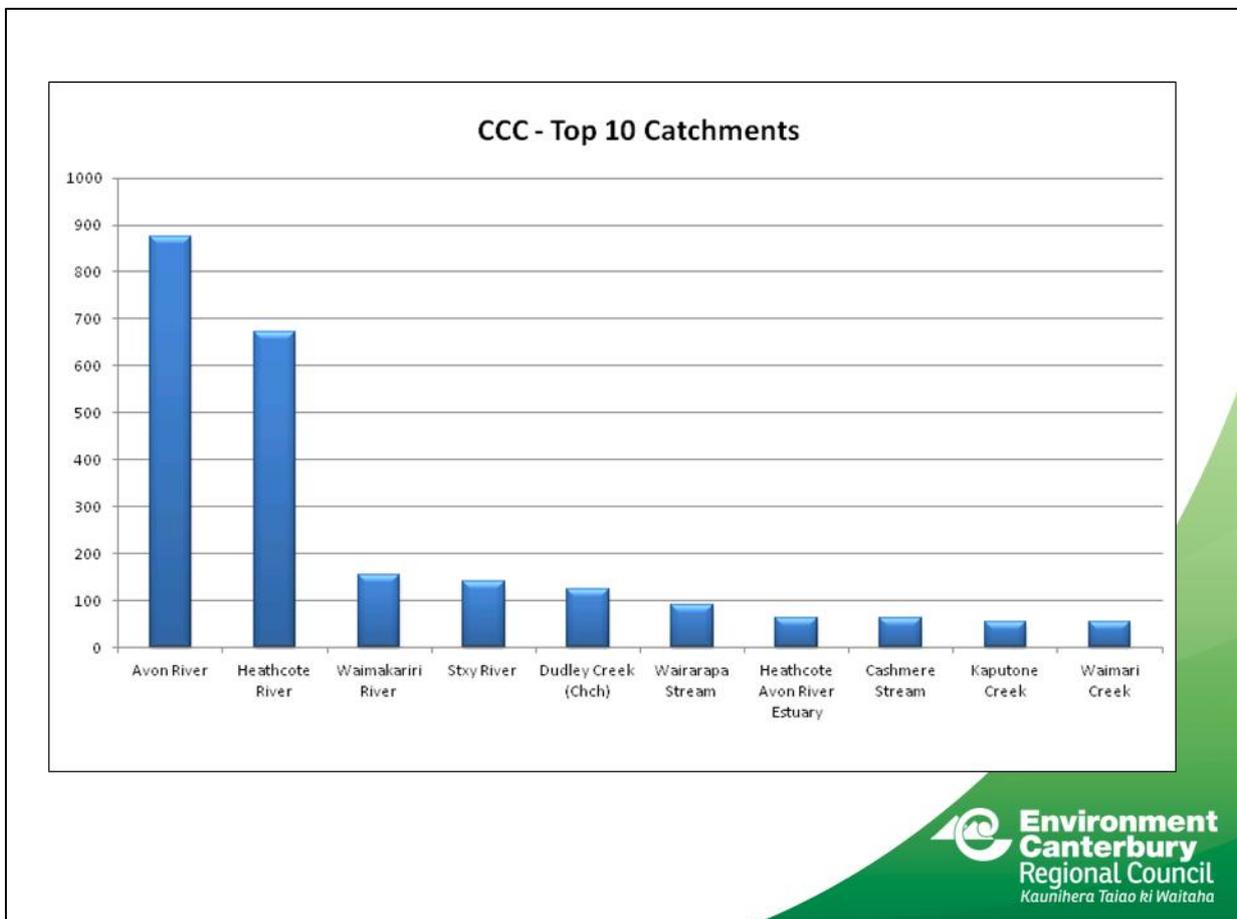
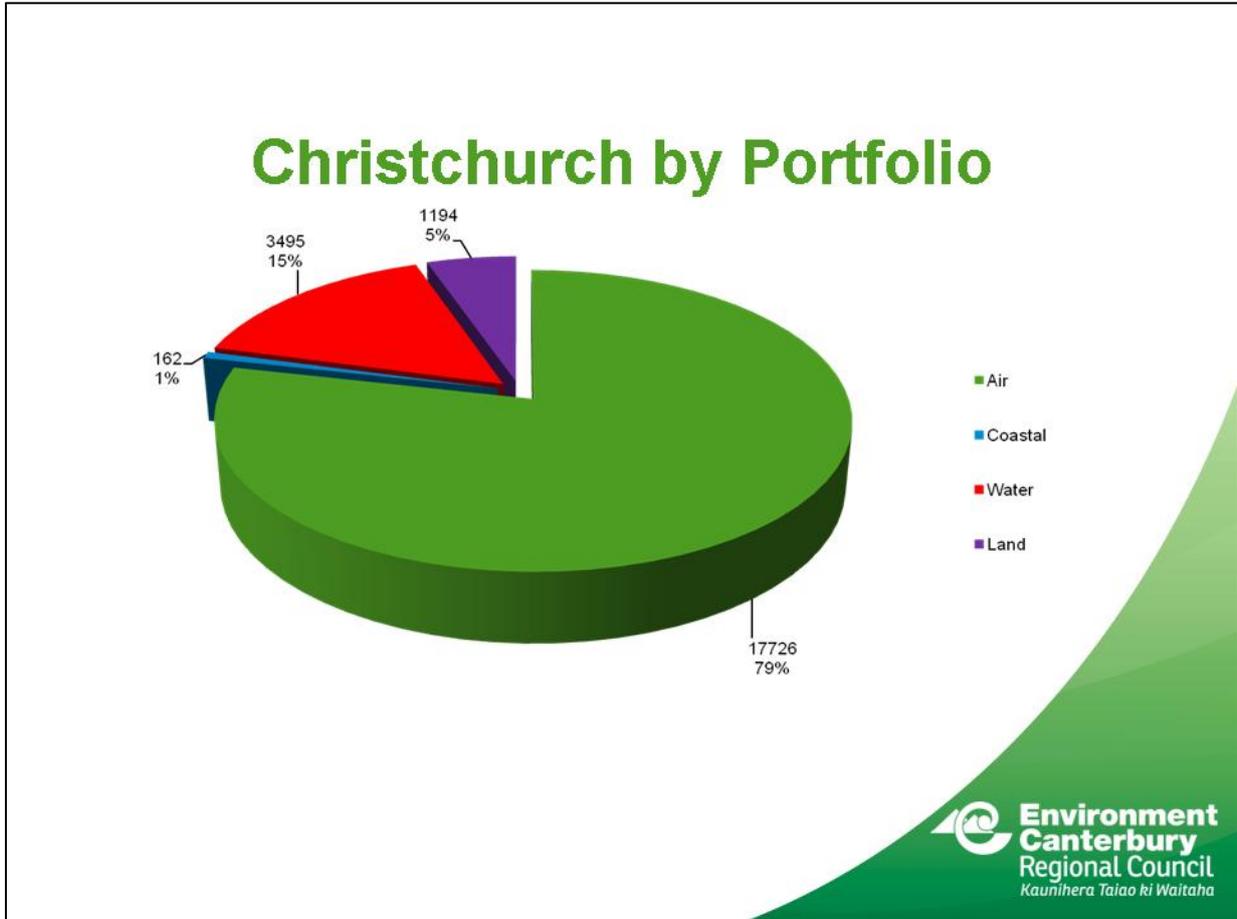
- Rule interpretation and advice Team:
- Permitted Activity Monitoring
- Pollution Prevention Programme Team
- Coordination Team

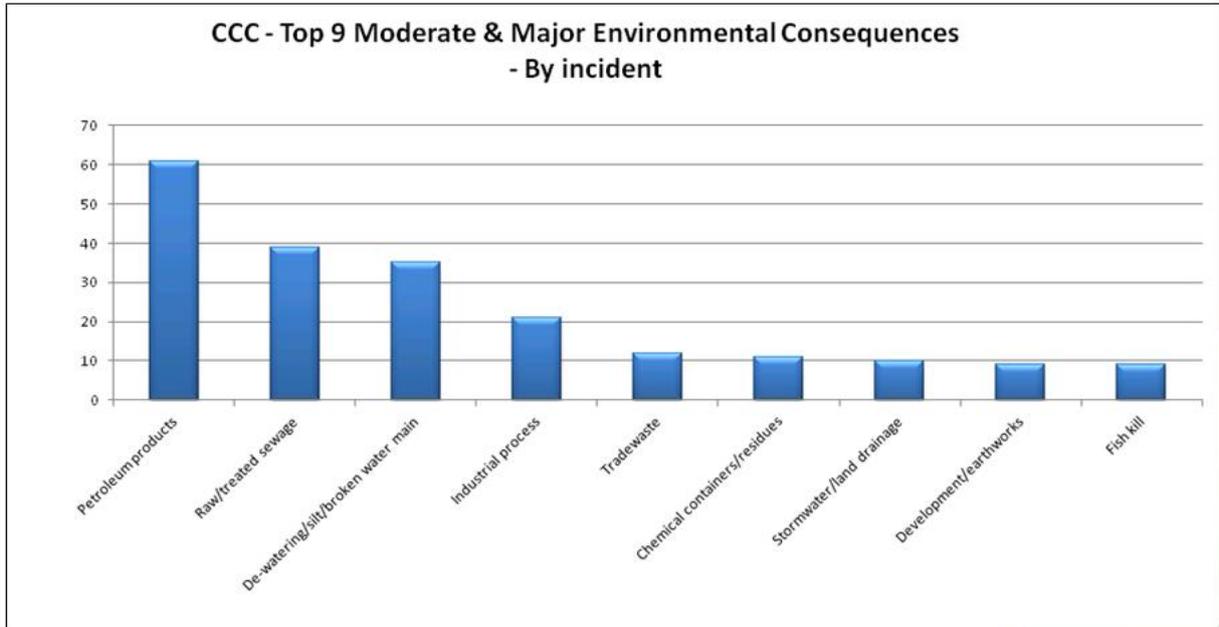
Coordination Team

- Ex-resource care
- On-farm experience, facilitating & coordinating community engagement and community projects e.g. Living streams.
- One-on-one farm projects
- Enhancement projects (with Biodiversity)
- Ballance Farm Environment Awards

Pollution Prevention Team

- Work with industry in urban areas
- Encourage best practice
- Ensure sites comply with relevant regional rules
- Catchment based targeting e.g. Haytons Drain
- Recognition of industries that comply





28. 3. 2012

- 24 -

9. **EARTHQUAKES AND FAECAL INDICATOR BACTERIA CONCENTRATIONS - AVON RIVER/ŌTĀKARO AND AVON-HEATHCOTE ESTUARY/IHUTAI** **8PM**

The Committee will receive a presentation from Lesley Bolton-Ritchie, Environment Canterbury, on Ecoli levels in the Estuary (refer **attached**).

Earthquakes and faecal indicator bacteria concentrations

Avon River/Ōtākaro and Avon-Heathcote Estuary/Ihutai

Dr. Lesley Bolton-Ritchie

January 2012



Faecal indicator bacteria (FIB)

used as an indicator of faecal contamination

E. coli - fresh water FIB

Enterococci - sea water FIB

In an estuary which is a mix of sea water and fresh water both *E. coli* and enterococci concentrations are measured



Following the February and June earthquakes untreated human sewage was discharged into the Avon River/Ōtākaro and Avon-Heathcote Estuary/Ihutai

The river and estuary were closed for recreation over the period of the discharges

All discharges had ceased by 28 October 2011

As discharge volumes were reducing weekly FIB monitoring was undertaken at 5 river sites (by CCC) and 4 estuary sites (by Environment Canterbury)

The results are available at

<http://ecan.govt.nz/publications/General/water-monitoring-results-post-eq.pdf>

Environment Canterbury's summer monitoring at sites began in mid November 2011

Kaunihera Taiao ki Waitaha

Results are presented for five sites

Avon River/Ōtākaro site of Kerrs Reach

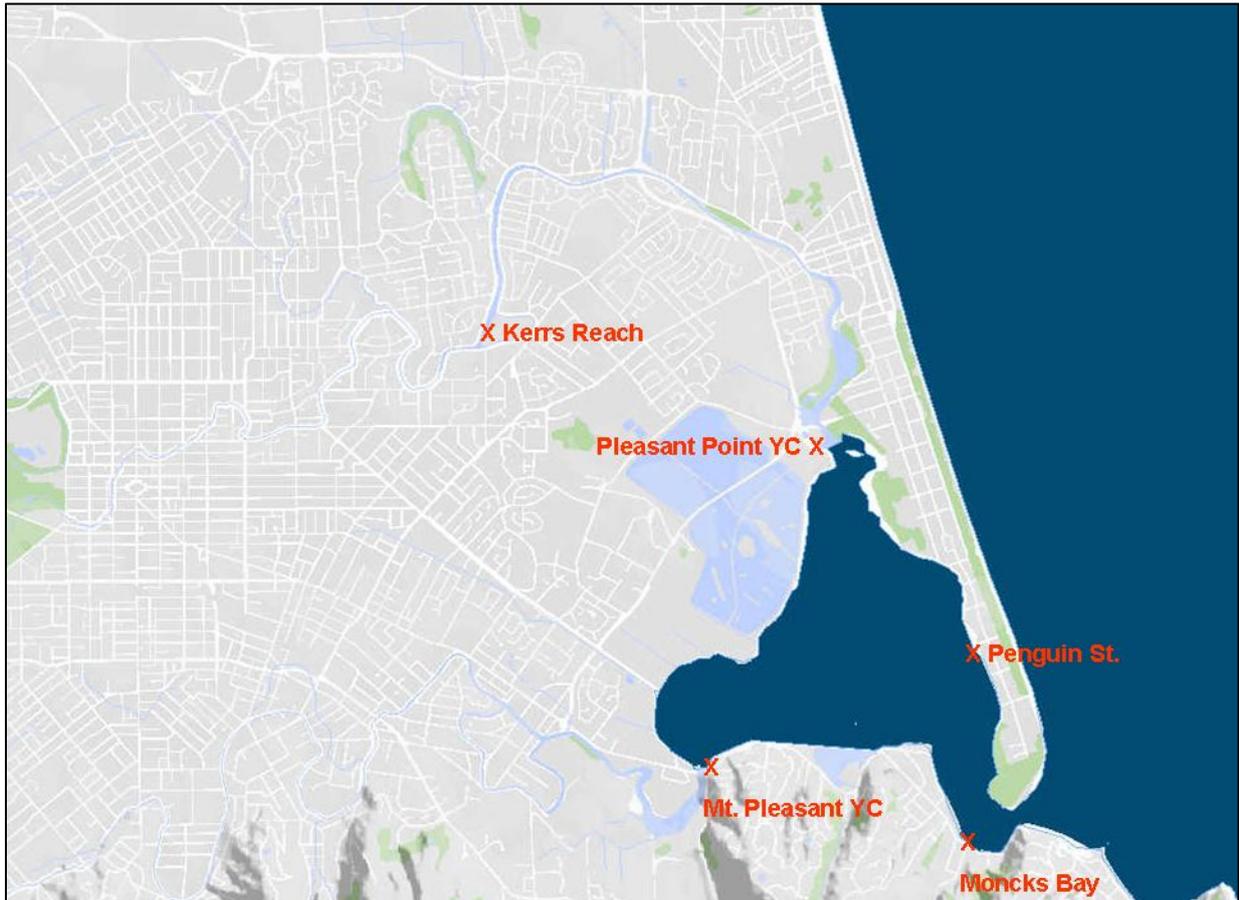
monitored routinely over summer for a number of years so before earthquake data available

Four estuary sites

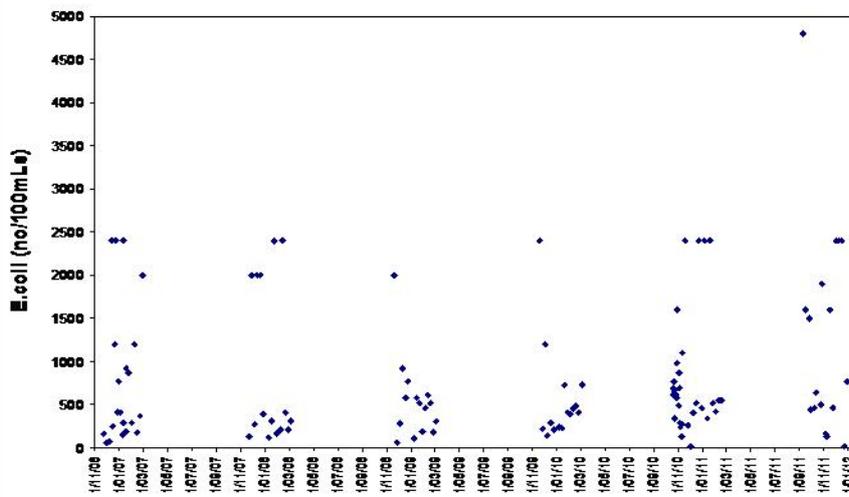
monitored routinely over summer for a number of years so before earthquake data available

Sites selected for the following reasons

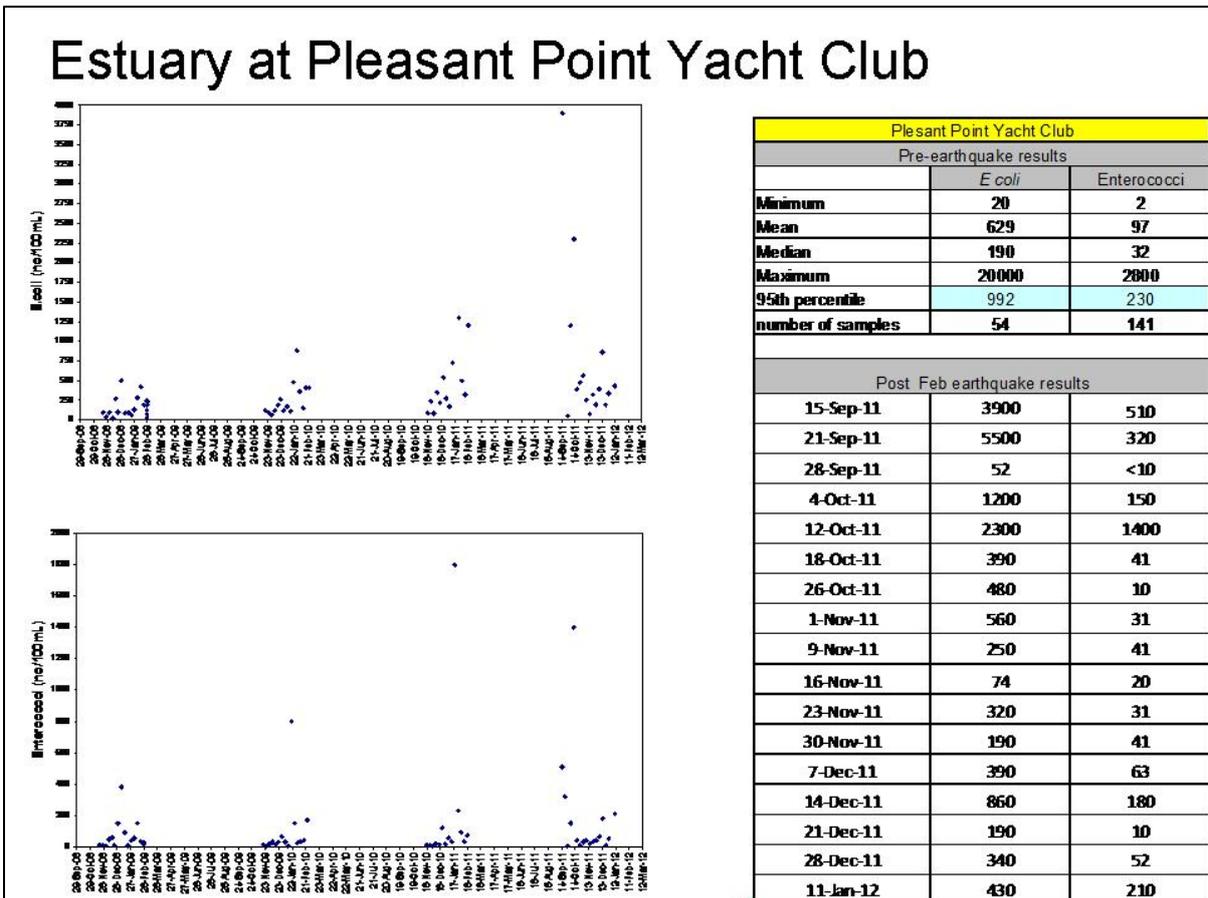
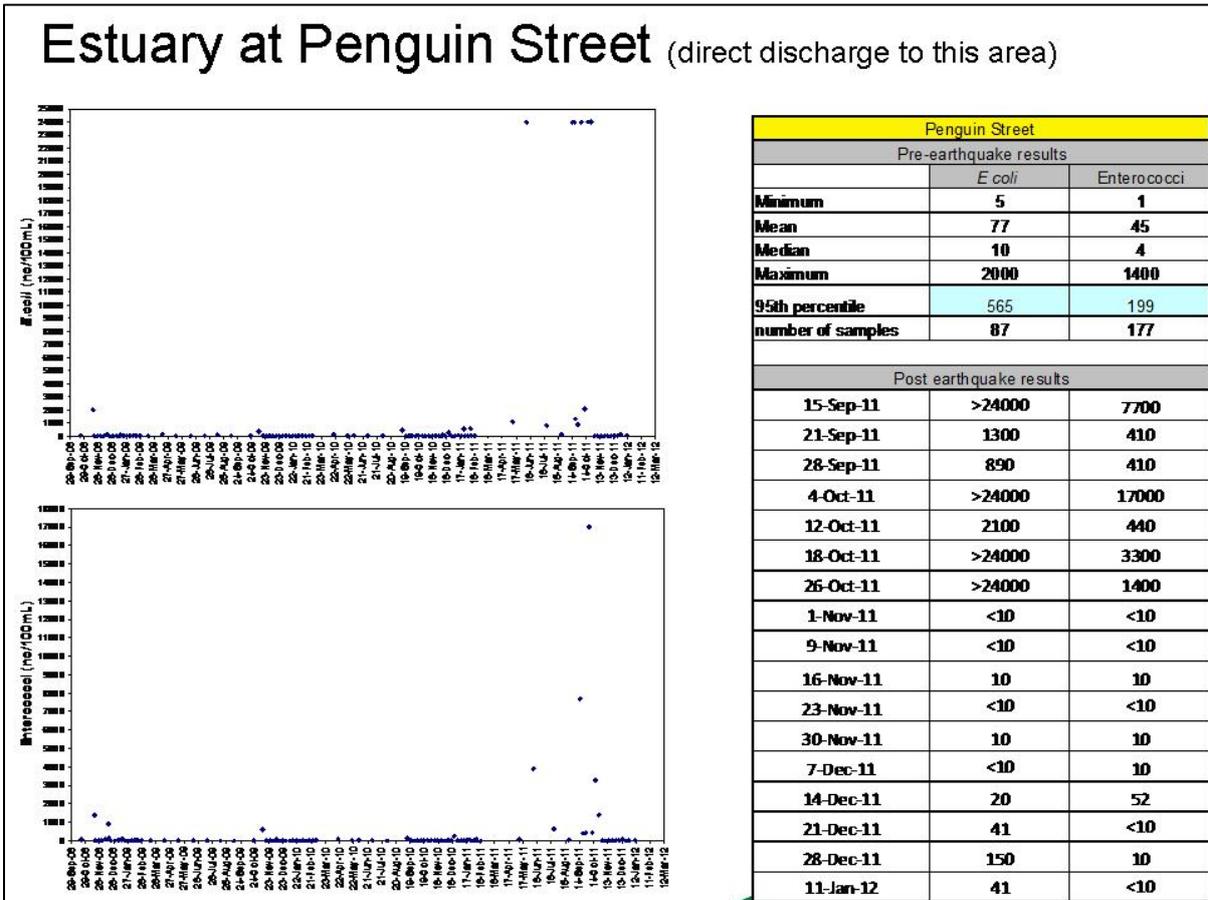
- Penguin Street (direct discharge of untreated sewage)
- Pleasant Point Yacht Club (influenced by Avon River water, used for sailing in the past)
- Mt. Pleasant Yacht Club (area used for sailing)
- Moncks Bay (area used for sailing)



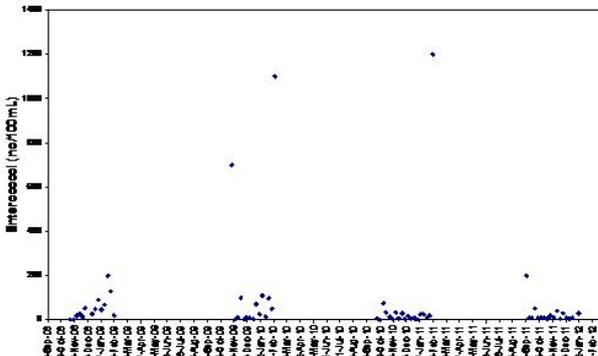
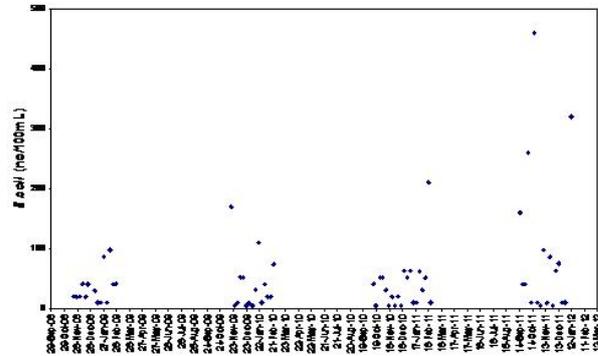
River at Kerrs Reach



Kerrs Reach <i>E.coli</i> concentration	
Pre-earthquake results	
Minimum	18
Mean	724
Median	460
Maximum	> 2400
95th percentile	2400
number of samples	116
Post Feb earthquake results	
8-Sep-11	4800
14-Sep-11	1600
25-Sep-11	1500
28-Sep-11	440
7-Oct-11	460
11-Oct-11	640
23-Oct-11	500
26-Oct-11	1900
5-Nov-11	160
7-Nov-11	130
16-Nov-11	1600
23-Nov-11	460
30-Nov-11	2400
7-Dec-11	2400
14-Dec-11	2400
21-Dec-11	18
28-Dec-11	770
11-Jan-12	820

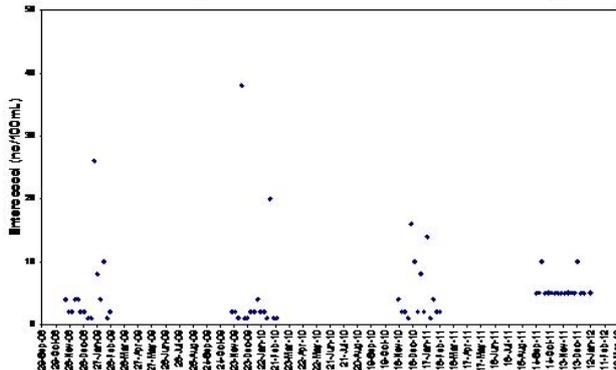


Estuary at Mount Pleasant Yacht Club

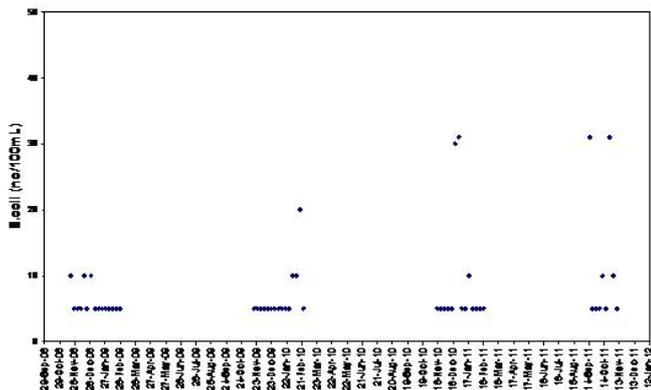


Mt. Pleasant Yacht Club		
Pre-earthquake results		
	<i>E. coli</i>	Enterococci
Minimum	10	1
Mean	40	60
Median	30	18
Maximum	210	1200
95th percentile	105	173
number of samples	49	118
Post earthquake results		
15-Sep-11	160	200
21-Sep-11	41	10
28-Sep-11	41	10
4-Oct-11	260	52
12-Oct-11	10	10
18-Oct-11	460	10
26-Oct-11	10	10
1-Nov-11	<10	<10
9-Nov-11	98	20
16-Nov-11	10	10
23-Nov-11	86	41
30-Nov-11	5	5
7-Dec-11	63	31
14-Dec-11	75	10
21-Dec-11	10	5
28-Dec-11	10	10
11-Jan-12	320	30

Estuary at Moncks Bay



Moncks Bay Enterococci and *E. coli* concentrations pre and post earthquake are low



10. THE DRAFT REGIONAL IMPLEMENTATION PROGRAMME

8.30PM

The draft Regional Implementation Plan (dRIP), the Annex 1, and the Feedback form have been separately circulated to the Committee.

The Committee will have a structured discussion to consider any synergies within the dRIP and the Christchurch - West Melton Zone.

11. **WORK PROGRAMME UPDATE**

9PM

The Committee's draft work programme is **attached**.

CHRISTCHURCH-WEST MELTON ZONE COMMITTEE
DRAFT WORK PROGRAMME, AS OF 28 MARCH 2012

Date / Event	Content
<p><i>February 2012</i></p> <p><i>Public meeting 4</i></p>	<p><i>Water management topics</i></p> <ul style="list-style-type: none"> • <i>Deciding our "Immediate Steps" approach</i> • <i>Improving Urban Waters Project</i> • <i>Tackling liquefaction in waterways</i> • <i>Water and Health</i>
<p>March 2012</p> <p>Public meeting 5</p>	<p>Working together</p> <ul style="list-style-type: none"> • Stakeholder exercise: Who, what, when? <p>Water management topics</p> <ul style="list-style-type: none"> • Task and Finish Group recommendations: <ul style="list-style-type: none"> ○ Biodiversity priority outcomes ○ Our approach to Immediate Steps • Pollution Hotline data – what does it tell us? • E.coli levels in the Estuary • Rain-gardens • Discussion on draft Regional Implementation Programme
<p><i>TBC</i></p> <p><i>April 2012</i></p> <p><i>Fieldtrip 3</i></p>	<p><i>Field trip to see local community groups involved in zone with focus on issues raised in relation to surface water, water supply, biodiversity, earthquake recovery to date.</i></p> <p><i>Building relationship "capital" of committee.</i></p>
<p><i>TBC</i></p> <p><i>April 2012</i></p> <p><i>Workshop</i></p>	<p><i>"What is an outcome" session workshop.</i></p> <p><i>Workshop to develop initial ideas on priority outcomes for the Zone.</i></p>
<p>5th April 2012</p> <p>Workshop</p>	<p>Dairy NZ presentation to Waimakariri Zone Committee on Audited Nutrient Management.</p> <p>Invitation to Christchurch West Melton Zone Committee to attend.</p>
<p>April 2012</p> <p>Public meeting 6</p>	<p>Water management topics</p> <ul style="list-style-type: none"> • Discuss and refine initial priority outcomes • CERA Recovery Strategy and implementation of the CWMS • Suburban development on fringes of Christchurch • Improve water use efficiency • Water and recreation in the Zone • Water and the urban/rural economy <p>Working together</p> <ul style="list-style-type: none"> • Stakeholder exercise: Who, what, when? • Establish working groups to reflect initial priority outcomes
<p>May 2012</p> <p>Public meeting 7</p>	<p><i>Develop Pathways To Implementing Outcomes</i></p> <p><i>Working / task & finish groups progress</i></p> <p><i>Presentations in line with priority outcomes</i></p> <p><i>Joint session with Waimakariri Zone Committee</i></p> <p><i>Highlight to Regional Committee/Environment Canterbury, any regional synergies from initial zone priority outcomes that may need to be addressed in the new Land and Water Regional Plan at a cross-zone level.</i></p>

<p>June 2012</p> <p>Public meeting 8</p>	<p><i>Review interim Chair and Deputy Chair appointments/arrangements</i></p> <p><i>Consultation on draft Priority Outcomes</i></p> <p><i>Liaise with Waimakariri Zone Committee</i> <i>Liaise with Selwyn-Waihora Zone Committee</i> <i>Liaise with Banks Peninsula Zone Committee</i> <i>Liaise with Regional Committee</i></p>
<p>July 2012</p> <p>Public meeting 9</p>	<p><i>Agree consultation draft ZIP</i></p>
<p>August 2012</p> <p>Public meeting 10</p>	<p><i>Consultation on draft ZIP</i></p>
<p>September 2012</p> <p>Public meeting 11</p>	<p><i>Consider feedback and Update draft ZIP</i></p> <p><i>ZIP version 1?</i></p>
<p>October 2012</p> <p>Public meeting 12</p>	<p><i>ZIP version 1?</i></p>