

**BANKS PENINSULA WATER MANAGEMENT ZONE COMMITTEE
21 FEBRUARY 2012**

**A meeting of the Banks Peninsula Water Management Zone Committee was held
in Wairewa Marae, Little River on Tuesday 21 February 2012 at 4.10pm**

PRESENT: Donald Couch, Commissioner Environment Canterbury
(Interim Chairperson)
Yvette Couch-Lewis, Community Representative
Steve Lowndes, Community Representative
Councillor Claudia Reid, Christchurch City Council
Pam Richardson, Community Representative
Pere Tainui, Te Rūnanga o Ōnuku
Richard Simpson, Community Representative
June Swindells, Te Hapu O Ngati Wheke
Wade Wereta-Osborn, Te Rūnanga o Koukourarata

APOLOGIES: An apology for absence was received and accepted from
Iaan Cranwell (Te Rūnanga o Wairewa) and Kevin Simcock
(Community Representative).

1. CONFIRMATION OF MINUTES – 20 DECEMBER 2011

It was **decided** on the motion of Pam Richardson, seconded by Richard Simpson, that
the minutes of 20 December 2011 be approved as a true and accurate record.

2. DEPUTATIONS BY APPOINTMENT

Nil.

3. IDENTIFICATION OF URGENT ITEMS

Nil.

4. IDENTIFICATION OF ANY GENERAL PUBLIC CONTRIBUTIONS

The Committee were advised of a deputation request for its meeting in March from
Paula Smith, a resident of Diamond Harbour on sediment pollution in Lyttelton Harbour:
stormwater management issues impacting on streams of the Lyttelton harbour
catchment. The Committee agreed to receive this deputation at its meeting in March.

The Committee discussed the need to receive staff advice on this matter to ensure the
Committee was well informed, and considered the timing of such advice prior to or after
the deputation. The Committee **decided** to request that staff provide a briefing to the
Committee on this matter prior to the deputation being heard.

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5. REGIONAL COMMITTEE UPDATE

Commissioner Donald Couch advised the Committee that he had been unable to attend the Regional Committee meeting on 17 February 2012 (*amendment made at the 20 March 2012 Committee meeting during the confirmation of minutes item, clause 2*). However Commissioner Couch provided general feedback on the relevant work of the Regional Committee.

This feedback included noting that:

- the draft Regional Implementation Plan (dRIP) is a work in progress, and is still at the draft and pre-public consultation stage
- the Regional Committee identified four issues which fall into what is meant by a 'regional perspective'. These four issues are being progressed in the first instance by separate working groups:
 - kaitiakitanga
 - Ecosystem health and biodiversity
 - land use and water quality
 - regional infrastructure.

Matthew Ross, Zone Facilitator, updated the Committee on the progress of the dRIP, which would be out to public consultation until mid April 2012. The Committee noted that the Banks Peninsula Water Management Zone Committee had not yet had the opportunity to comment on the dRIP.

6. UPDATE OF WORKPLAN

Matthew Ross, Zone Facilitator, updated the Committee on its work plan for the upcoming months (refer **attached**). The Committee **decided** to hold a half day workshop on 13 March 2012 at Little River to identify initial priority outcomes and issues for the Committee to address in future meetings and the Zone Implementation Programme. These initial priorities would be discussed at the next public meeting.

7. TE ROTO O WAIREWA – MORE ON THE SCIENCE AND THE PROPOSALS, AND CATCHMENT ISSUES

The Committee **received** a presentation from Tim Davie (ECAN) on Wairewa/Lake Forsyth water quality issues (refer **attached**).

The Committee identified the following issues of interest:

- nitrogen and phosphorus levels
- fluctuations in trophic states
- the need to identify cultural values.

The Committee agreed that further discussion on the Wairewa catchment would be beneficial in developing its priority outcomes.

8. CULTURAL VALUES – RIGHTS AND INTERESTS (IWI AND CROWN)

The Committee **received** a presentation from Craig Pauling (Ngāi Tahu) on Mana Waimāori – rights and interests in freshwater.

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9. ADJOURNMENT

The Committee adjourned from 6.20pm to 7pm.

10. BANKS PENINSULA STREAMS – NATIVE FISH AND AQUATIC HEALTH

The Committee **received** a presentation from Jon Harding (University of Canterbury) on freshwater invertebrate and fish diversity in Banks Peninsula streams, and noted the importance of unique freshwater ecology in the implementation of the Canterbury Water Management Strategy (CWMS) .

11. BIODIVERSITY AND CANTERBURY WATER MANAGEMENT STRATEGY TOOLS INCLUDING IMMEDIATE STEPS

The Committee **received** a presentation from Christina Robb (ECAN) on tools for the zone committee and Environment Canterbury work programmes (refer **attached**).

The Committee **requested** that issues surrounding weed and pest control be included in the work programme.

Matthew Ross, Zone Facilitator, highlighted the link between what the Committee recommends within the ZIP and the opportunity within Environment Canterbury's work streams to implement them. It was also suggested that the Committee could receive a similar presentation from Christchurch City Council with regards to work streams to implement any recommendations made in the Committees Zone Implementation Plan.

12. IMMEDIATE STEPS (BIODIVERSITY PROJECTS FUNDING) UPDATE

Robyn Russ, Biodiversity Officer, is still working through the submissions and will report back to the Committee when this is completed.

13. APPOINTMENT OF CHAIRPERSON, DEPUTY CHAIRPERSON, AND REGIONAL COMMITTEE REPRESENTATIVE

The Committee received a request from laean Cranwell to defer the appointment of these positions. The Committee decided this item be deferred to the 20 March 2012 meeting.

14. REGIONAL IMPLEMENTATION PLAN FEEDBACK WORKSHOP – COMMITTEE REPRESENTATIVE

Matthew Ross, Facilitator, advised the Committee that the dates for dRIP feedback sessions for Zone Committees were yet to be finalised, and that the Committee would be advised once these were confirmed. In relation to comments on the timing of the dRIP prior to the Banks Peninsula ZIP being completed, the Committee were informed that there would be review of the dRIP to consider any regional synergies identified once the ZIP was available.

Pam Richardson advised the Committee that she had attended a Regional Committee Working Group meeting on Land Use and Water Quality on 23 January 2012.

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The Committee were informed that the working group, consisting of one representative from each of the Zone Committees, discussed the regional implementation of land use and water quality actions through the Land and Water Regional Plan being developed by Environment Canterbury. It was noted that, due to the advancement of other Zone Committees in the process of developing the ZIP, the Banks Peninsula Water Management Zone Committee was at a disadvantage on such discussions, having not yet identified its key priority outcomes.

15. OTHER MATTERS

The Committee confirmed its next meeting to be held on Tuesday 20 March 2012, at 4pm, at the Governors Bay Hotel, Governors Bay.

The Committee agreed that its meeting in April be held at the Koukourarata (Port Levy) Marae.

The meeting concluded at 8.45pm.

CONFIRMED THIS 20TH DAY OF MARCH 2012

**DONALD COUCH
INTERIM CHAIRPERSON**

BANKS PENINSULA ZONE COMMITTEE

Updated Work Programme 21 February 2011

Date / Event	Content
<p>Tues 20 December 2011</p> <p>Public meeting 3</p> <p>Lyttelton Recreation Centre Linwood Service Centre</p>	<p>Working together</p> <ul style="list-style-type: none"> • Values exercise • Collaborative behaviour exercise (possibly) • Engagement staircase exercise (possibly) • Adoption of Code of Conduct <p>Water management topics</p> <ul style="list-style-type: none"> • Surface Water Strategy • Coastal Strategy • Cultural values – Wairewa and Koukourarata • Biodiversity • Summary of what learnt at public workshops • Marty Mortiaux, hotline complaints • (deputation on stormwater)
<p>Tues 17 January 2012</p>	<p>Optional Meeting</p> <ul style="list-style-type: none"> • Hold if Zone Committee feels it is not making progress fast enough • NB: if want to have this meeting the agenda and any speakers will need to be developed before Christmas.
<p>Tuesday 21 February 2012</p> <p>Public meeting 4</p>	<p>Working together</p> <ul style="list-style-type: none"> • Identifying stakeholders exercise (and will need contact details) • Understanding an outcome exercise <p>Water management topics</p> <ul style="list-style-type: none"> • Te Roto o Wairewa – more on the science and the proposals, and catchment issues – Tim Davie, Iaeen Cranwell, Robin Wybrow • Banks Peninsula Streams – native fish and aquatic health – Jon Harding and Zoe Dewson • Biodiversity and CWMS tools including Immediate Steps – Christina Robb • Cultural Values – Rights & Interests (Iwi & Crown) – Craig Pauling • Appoint Chairperson and Deputy Chairperson • Appoint representative for Regional Committee • Decide who will represent ZC at RIP feedback workshop
<p>Late February or early March Date?</p>	<p>Zone Committee half day workshop to Identify desired Outcomes</p> <p>Working together</p> <ul style="list-style-type: none"> • <i>Identifying stakeholders exercise (and will need contact details)</i> • <i>Understanding an outcome exercise</i> <p>Separate half day workshop (not open to public) – should be held prior to 20 March meeting, having it on a Tuesday at 4pm may be a good option</p>
<p>Tuesday 20 March 2012</p> <p>Public meeting 5</p>	<p>deputation on stormwater)???</p> <p>4:15pm Update of Workplan</p> <p>Water management topics</p> <p>4:20pm CCC Water Supply strategy presentation (30mins)</p> <p>4:50pm CCC Surface Water Strategy presentation (30mins)</p> <p>5:20pm Presentation from Crown & Public Health drinking water issues and recreational water issues from a public health perspective – Angela Sheat (30mins)</p> <p>6:00pm Light meal (30mins)</p>

	<p>6:30pm Values exercise</p> <p>7:30pm Peter Constantine – update on Land and Water Regional Plan (30mins)</p> <p>8:00pm Decide whether committee wants to establish working groups (if not done at outcomes workshop) and what these groups are [if decide no, then whole committee develops all recommendations together] OR working groups to provide an update on when they plan to meet and how they plan to work</p> <p>AND/OR <i>Further work on identifying desired outcomes if not completed in February (these need to be written as clear outcome statements of the desired end result the Zone Committee wants to practically see</i></p> <p>8:30pm Other Matters General Public Contribution</p> <p>•</p>
<p>March 2012</p> <p>Fieldtrip 3</p>	<p>Pigeon Bay and Port Levy Lytelton Harbour?</p> <p>NB: keep to half a day</p>
<p>Tuesday 17 April 2012</p> <p>Public meeting 6</p>	<p>Working together</p> <ul style="list-style-type: none"> • <i>Identifying stakeholders exercise (and will need contact details)? (could leave to working groups to work through this – needs to be done no later than April)</i> • <i>Understanding an outcome exercise? (could do this as part of outcomes workshop – can't be done later than then)</i> • Collaborative behaviour exercise • Engagement staircase exercise <p>Water management topics</p> <ul style="list-style-type: none"> • Further topics to be identified based on identifying what topics zone committee feels it needs further detail on to assist in their development of ZIP <p>Topics that have already been suggested by committee (these need to be discussed and prioritised in terms of what is necessary knowledge for the ZC to be able to complete drafting its ZIP)</p> <ul style="list-style-type: none"> • Algal blooms – Lesley Bolton-Ritchie. • Coastal planning – David Gregory. • Audited Self Mgmt - James Tricker. • Taiapure, mataitai, marine reserves etc = an information paper, not ZC role • Akaroa small settlement strategy and where the future developments will be, and the urban impacts of this; • Planning for development of Lyttelton post earthquake; • Urban effects on other smaller settlements, including Governors Bay. • The treaty relationship in terms of the Resource Management Act, the obligations under this, and how the settlement sits within there -Donald Couch and Ilean Cranwell.
<p>Tuesday 15 May 2012</p> <p>Public meeting 7</p>	<p>Working together</p> <ul style="list-style-type: none"> • Exercises (as needed) <p>Water management topics</p> <ul style="list-style-type: none"> • To be identified based on identifying what topics zone committee feels it needs further detail on to assist in their development of ZIP • Develop feedback process for draft ZIP <p><u>Other tasks and meetings this month:</u> <i>Consultation on draft Priority Outcomes (and if possible, pathways)</i></p> <ul style="list-style-type: none"> • 3x public workshops <p><i>Liaise with Selwyn-Waihora Zone Committee</i> <i>Liaise with Christchurch-West Melton Zone Committee</i> <i>Liaise with Regional Committee</i></p>

	<i>Working Groups (or ZC if working groups not established) to complete preparation of draft pathways (the actions, strategies and tactics the ZC believe are required to achieve its outcomes)</i>
May 2012 <i>Field trip 4</i>	Okains Bay?
Tuesday 19 June 2012 Public meeting 8	<p>Working together</p> <ul style="list-style-type: none"> • Exercises (as needed) <p>Water management topics</p> <ul style="list-style-type: none"> • To be identified based on identifying what topics zone committee feels it needs further detail on to assist in their development of ZIP • Finalise feedback programme for draft ZIP <p><u>Other tasks and meetings this month:</u> <i>Hold workshops with stakeholders and interested individuals on draft pathways</i></p> <ul style="list-style-type: none"> • <i>As required (to be developed and facilitated by working groups if these are set up)</i> <p><i>Feedback on draft ZIP begins</i></p> <ul style="list-style-type: none"> • <i>Feedback process opens approx 19 June</i>
Tuesday 17 July 2012 Public meeting 9	<p>Working together</p> <ul style="list-style-type: none"> • Exercises (as needed) <p>Water management topics</p> <ul style="list-style-type: none"> • To be identified based on identifying what topics zone committee feels it needs further detail on to assist in their development of ZIP • Consider feedback on draft pathways and prepare draft ZIP <p><u>Other tasks and meetings this month:</u> <i>Feedback on draft ZIP</i></p> <ul style="list-style-type: none"> • 3x public workshops • Nga runanga workshop • CCC Councillor workshop • ECan Commissioner workshop • CCC and ECan staff feedback • Stakeholder feedback presentations or appointments with ZC • Written feedback open for 6 weeks. Needs to close approximately 31 July
Tuesday 21 August 2012 Public meeting 10	<p>Working together</p> <ul style="list-style-type: none"> • Exercises (as needed) <p>Water management topics</p> <ul style="list-style-type: none"> • To be identified based on identifying what topics zone committee feels it needs further detail on to assist in their development of ZIP • Consider feedback and Update draft ZIP
September 2012 Public meeting 11	<p>Working together</p> <ul style="list-style-type: none"> • Exercises (as needed) <p>Water management topics</p> <ul style="list-style-type: none"> • To be identified based on identifying what topics zone committee feels it needs further detail on to assist in their development of ZIP • ZIP version 1 finalised
September-Nov 2012	Environment Canterbury Commissioners and Christchurch City Councillors – formal process
December 2012	Celebration
December 2013	Monitor implementation of ZIP

onwards	Implement actions that are Zone Committee's responsibility Help implement other actions that Zone Committee is involved with Work towards development of ZIP version 2 Further field trips, community and stakeholder engagement
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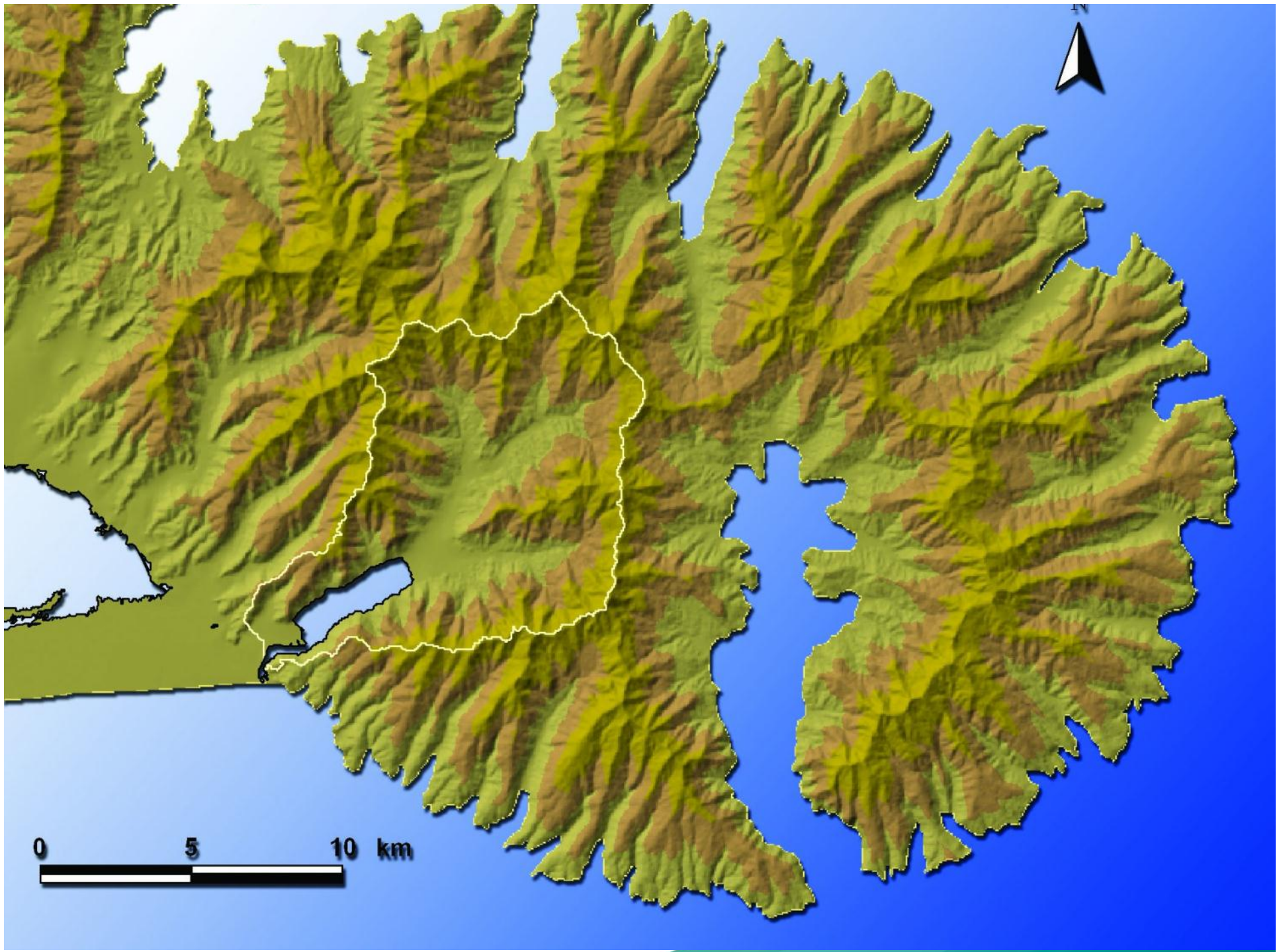
Wairewa/Lake Forsyth water quality issues

Tim Davie

Tim.davie@ecan.govt.nz

Issues

- Catchment overview
- Biophysical history
- Nutrients & trophic status
- Algae – cyanobacteria



Wairewa Catchment

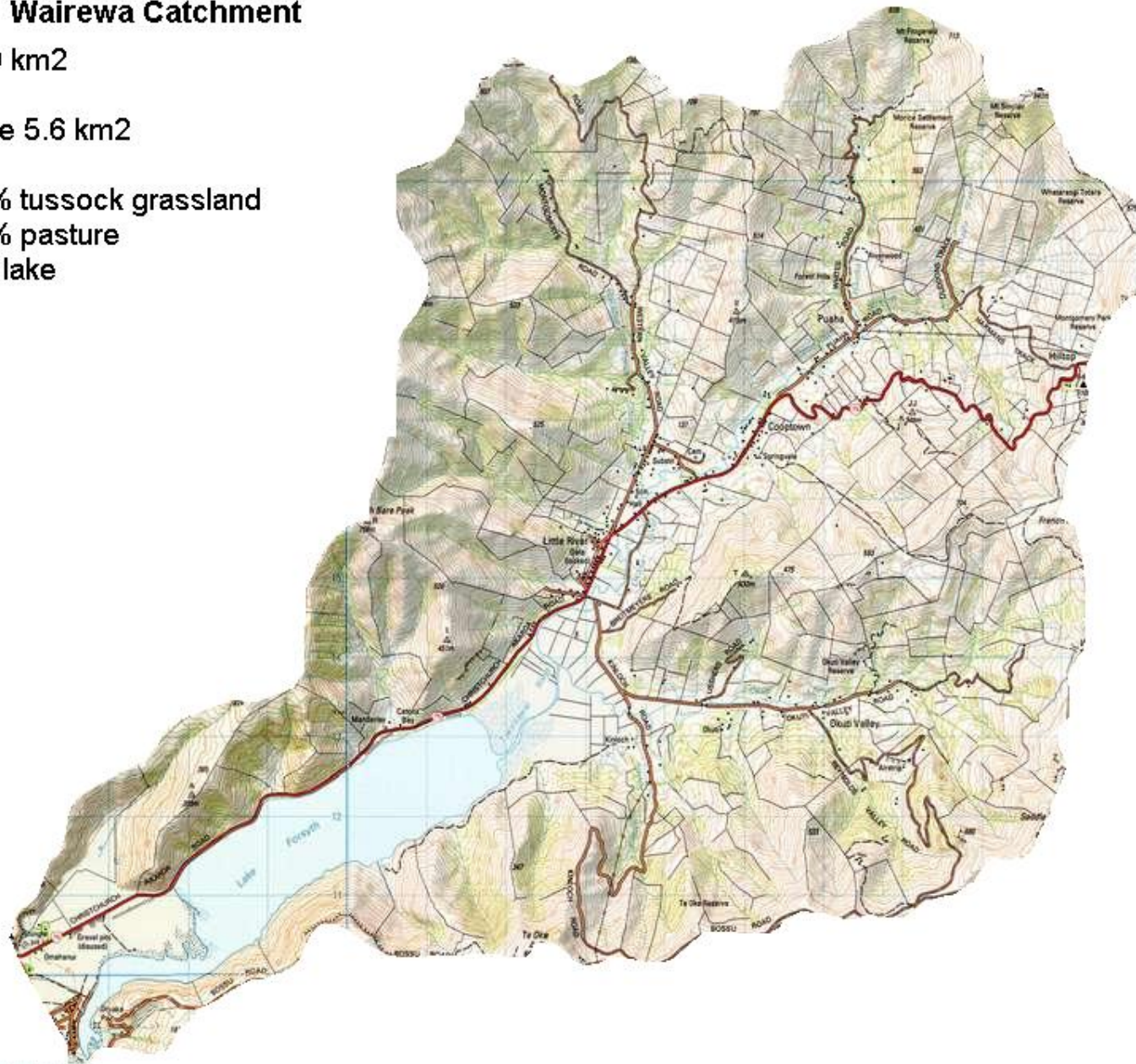
109 km²

Lake 5.6 km²

56% tussock grassland

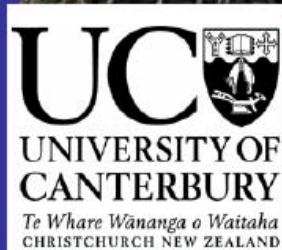
39% pasture

5% lake



Learning from the past: A 7000 year history of environmental change in Lake Forsyth (Te Wairewa).

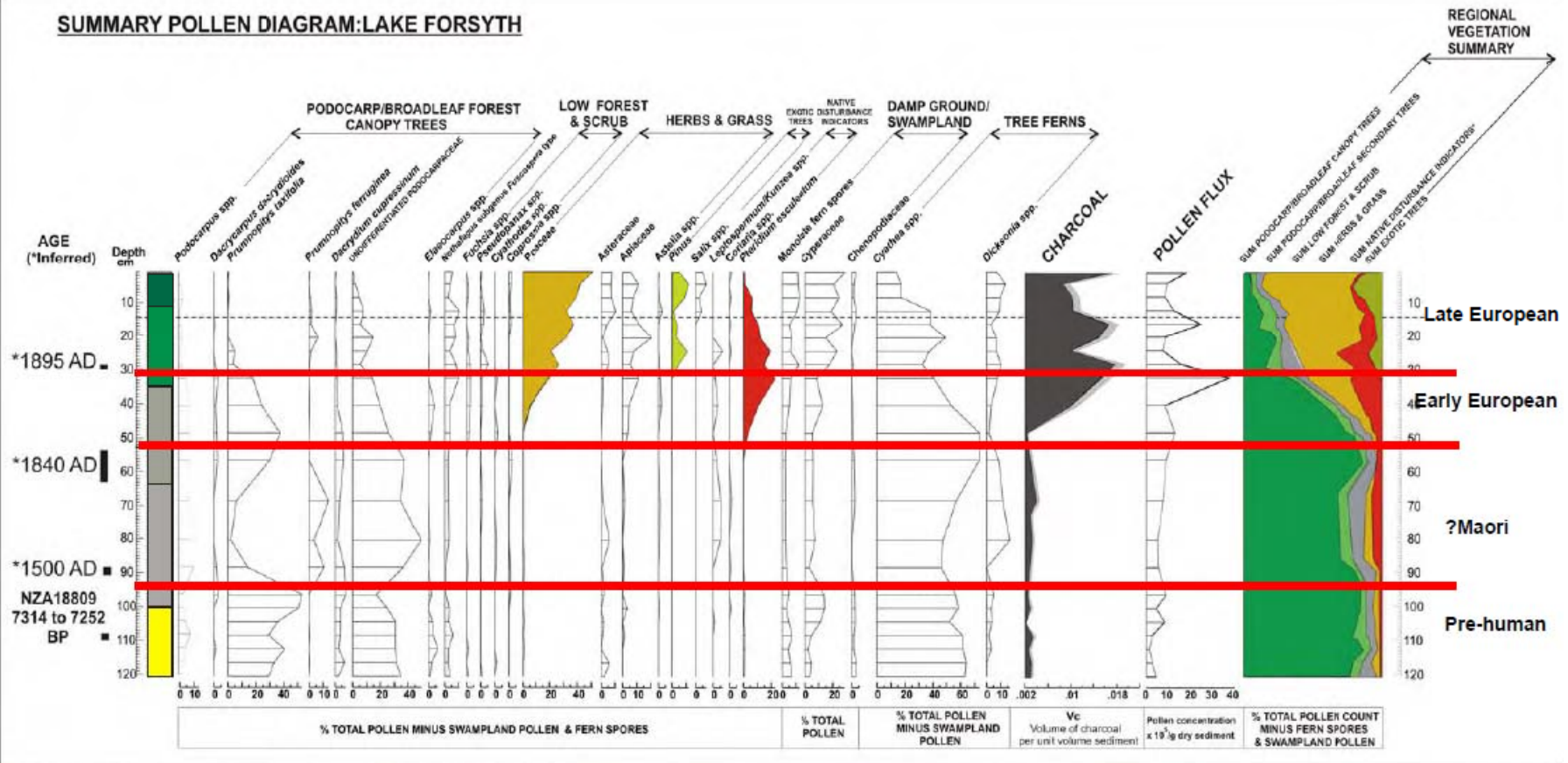
Craig Woodward, Michael Reid, James Shulmeister, Jon Harding.



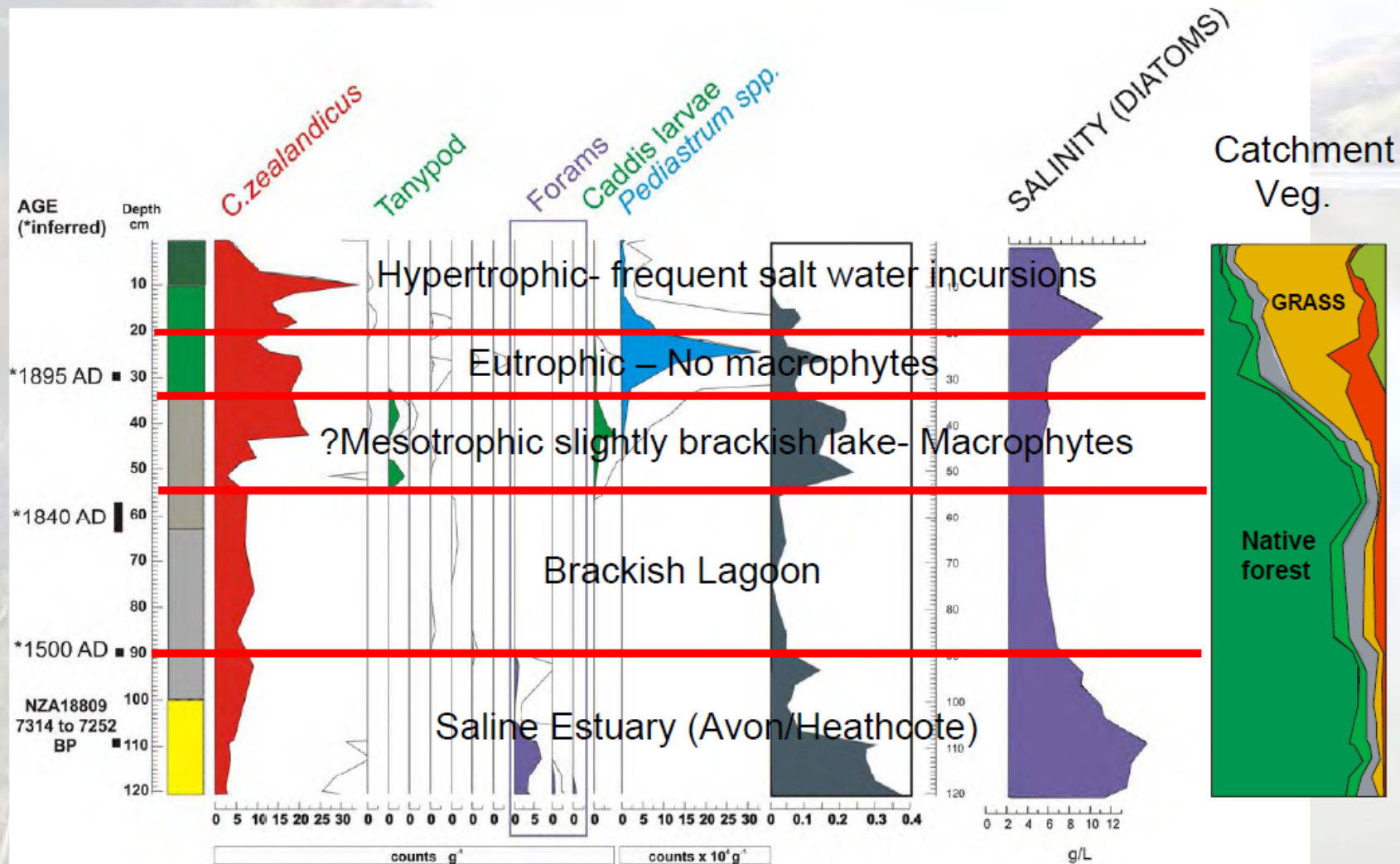
Fresh water Ecology
RESEARCH GROUP

RESULTS: Pollen

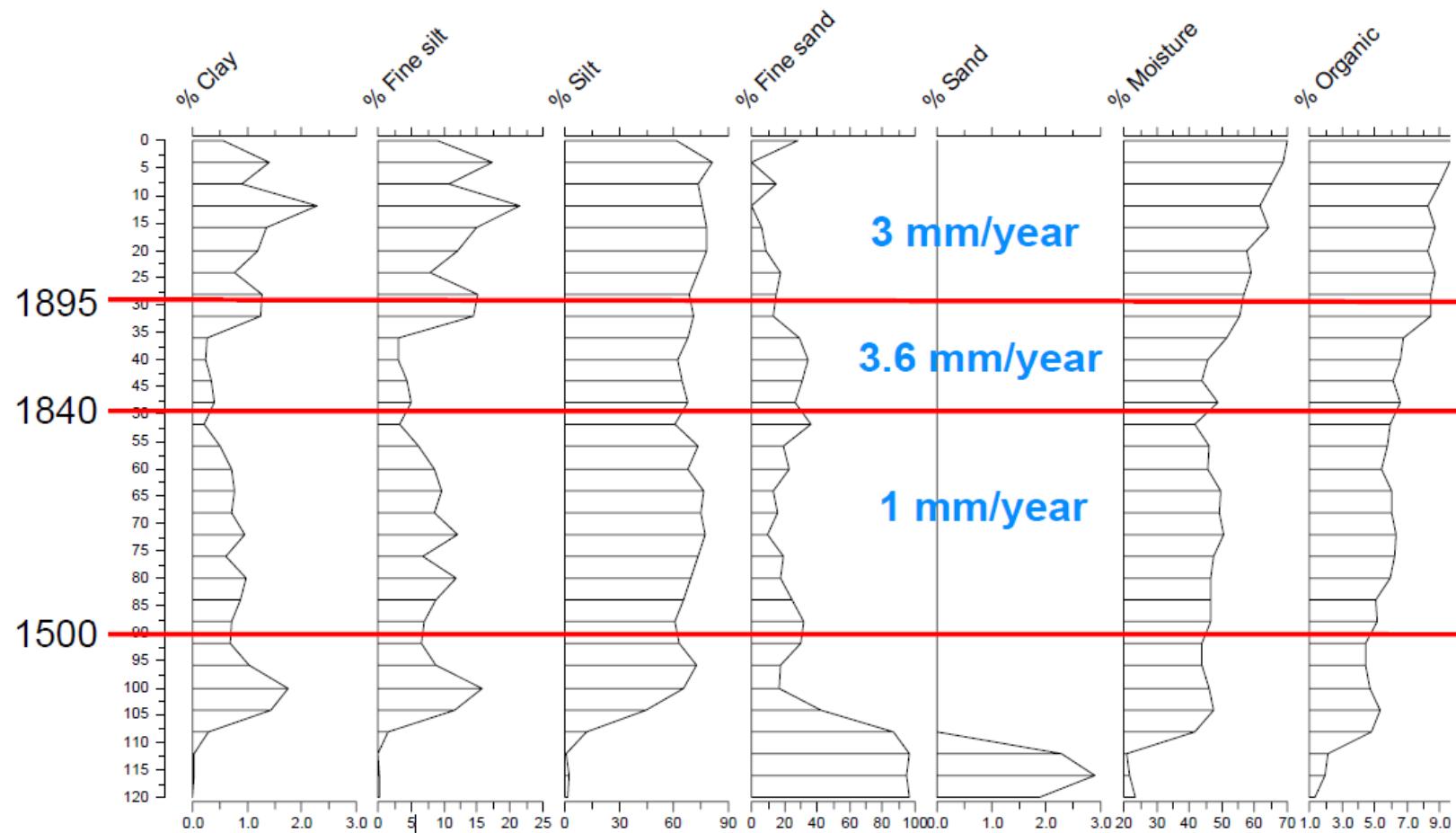
SUMMARY POLLEN DIAGRAM: LAKE FORSYTH

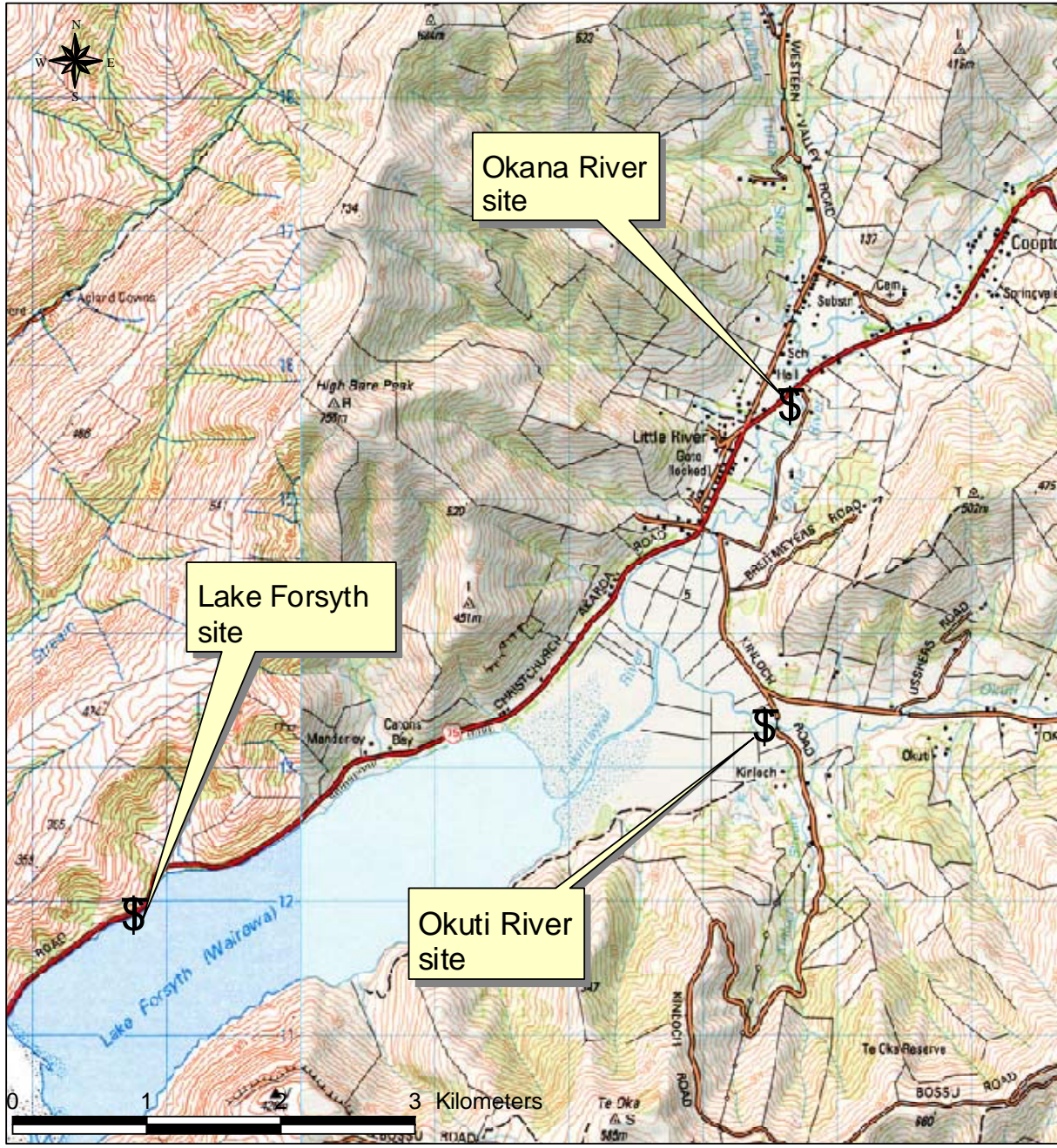


RESULTS: Aquatic biota



RESULTS: Physical stratigraphy





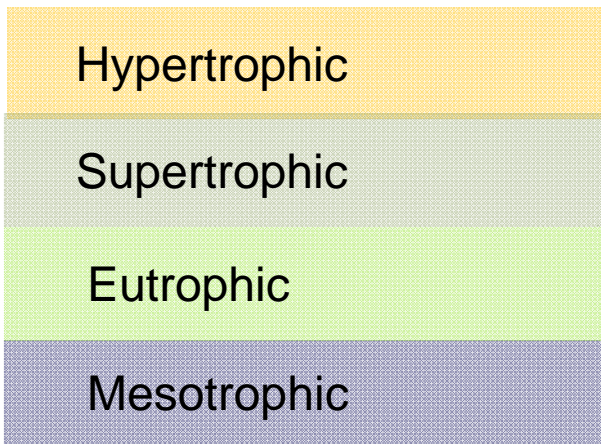
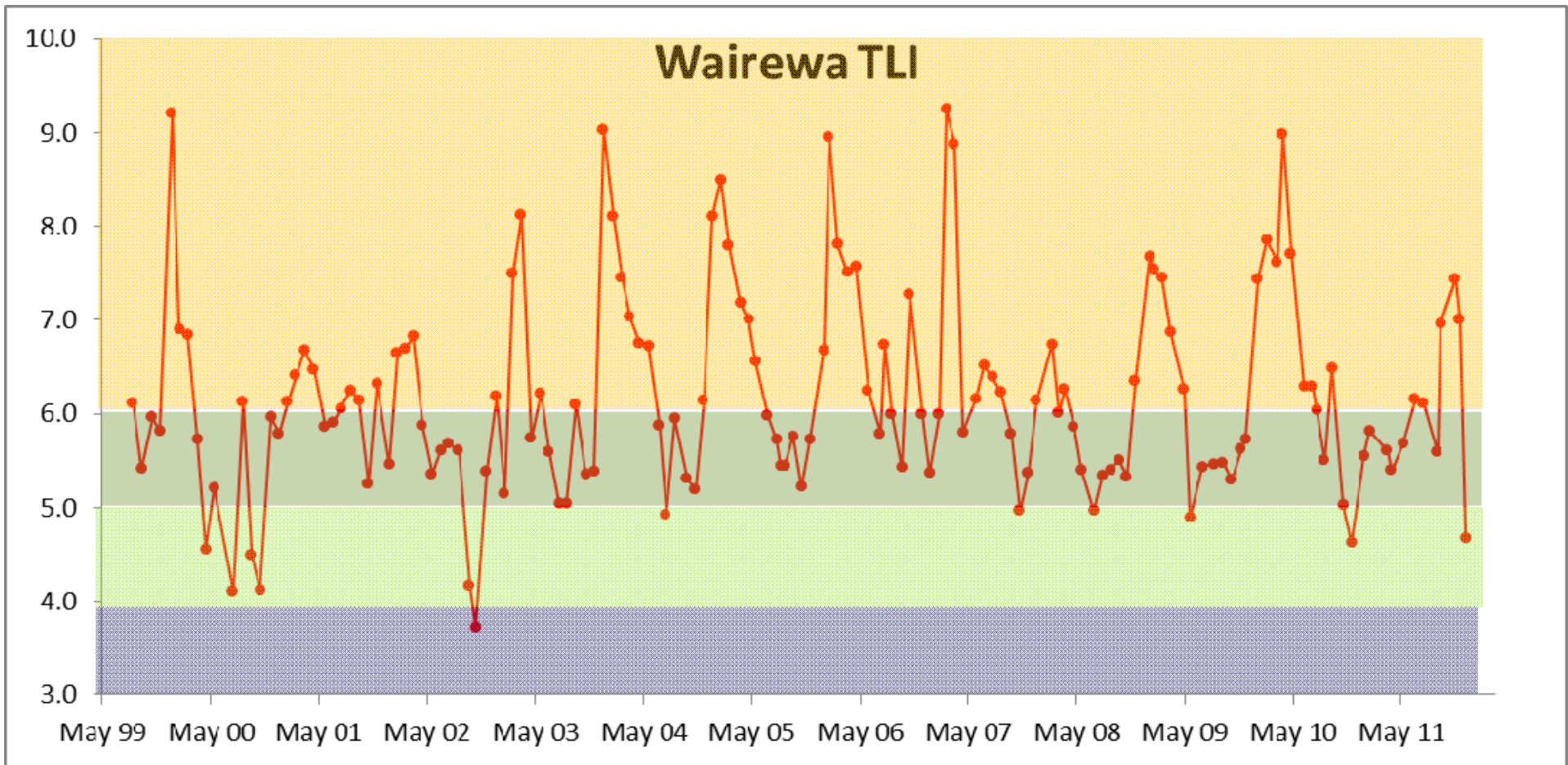
Sampling sites

▲ Water quality sites

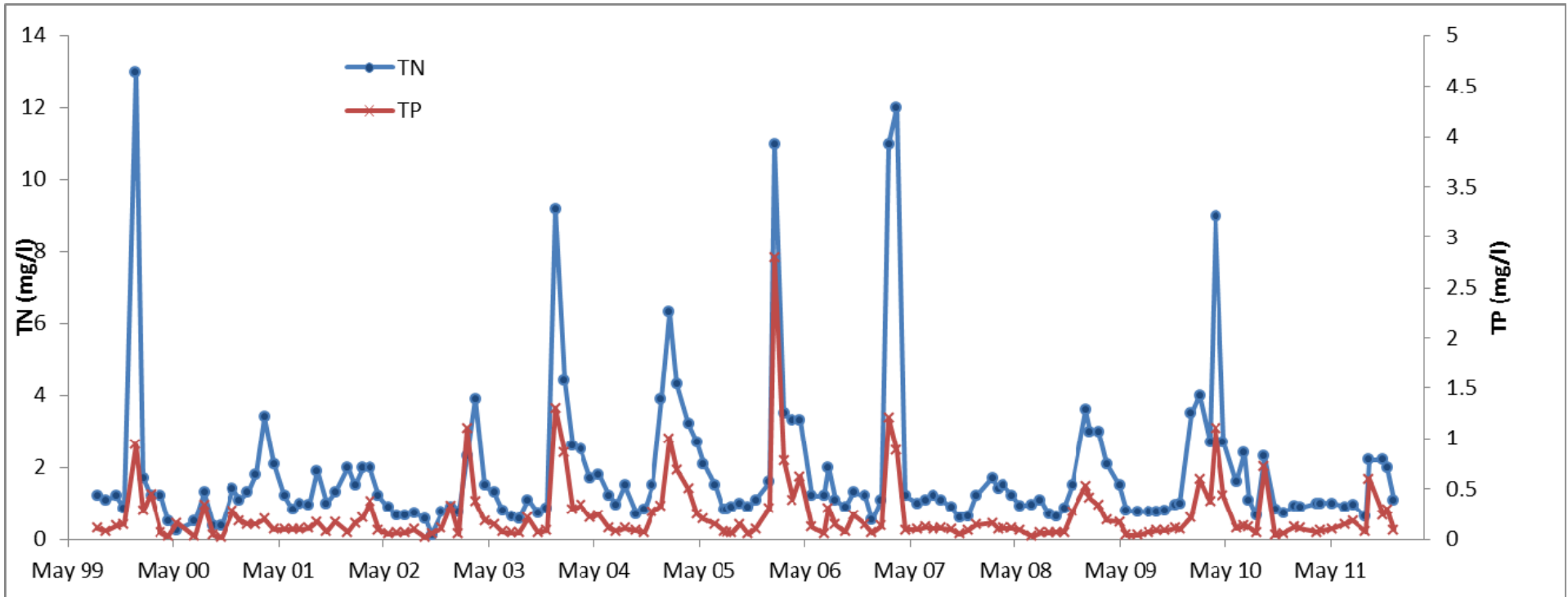
What to the results tell us?

Nutrient concentrations for Lake Forsyth/Wairewa and the two main tributaries
(June 2004 – July 2005)

	Dissolved inorganic N mg/L	Total Nitrogen mg/L	Dissolved Reactive P mg/L	Total Phosphorus mg/L	TN:TP ratio
Okuti River					
min.	0.06	0.11	0.017	0.036	1.2
median	0.10	0.20	0.029	0.056	3.2
max.	0.26	0.7	0.051	0.580	15
Okana River					
min.	0.02	0.04	0.013	0.033	0.5
median	0.07	0.20	0.023	0.055	2.6
max.	0.43	1.0	0.044	0.092	25.3
Lake Forsyth/Wairewa					
min.	0.01	0.65	0.001	0.039	3.7
median	0.03	1.9	0.003	0.26	10.4
max.	0.52	23	0.54	2.2	18.5



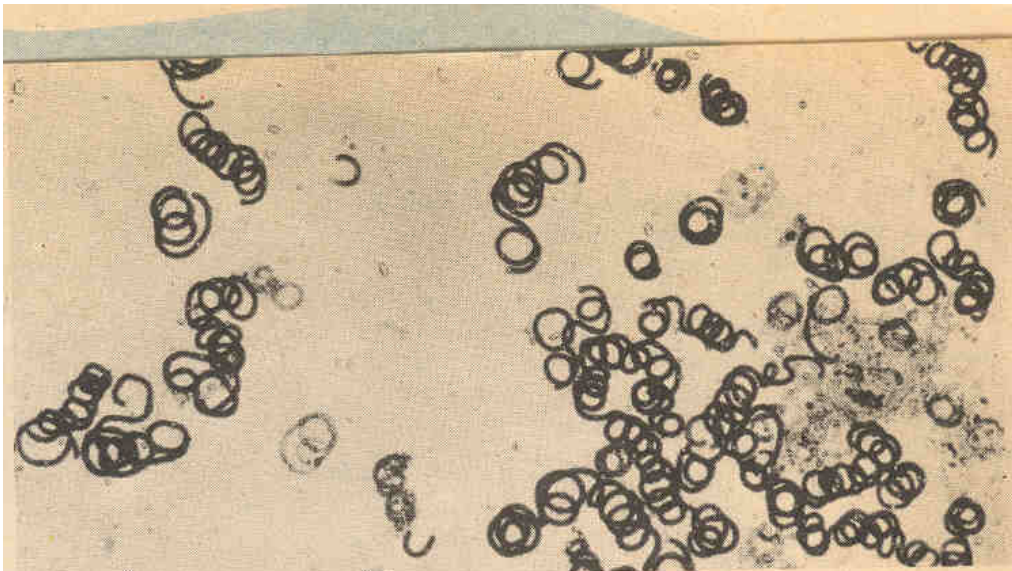
Nitrogen & Phosphorus







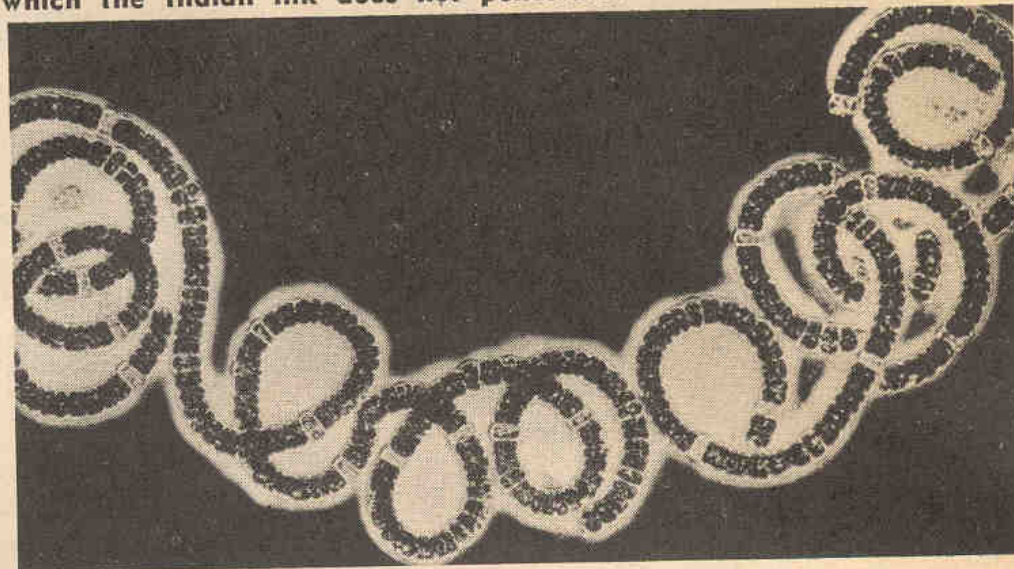




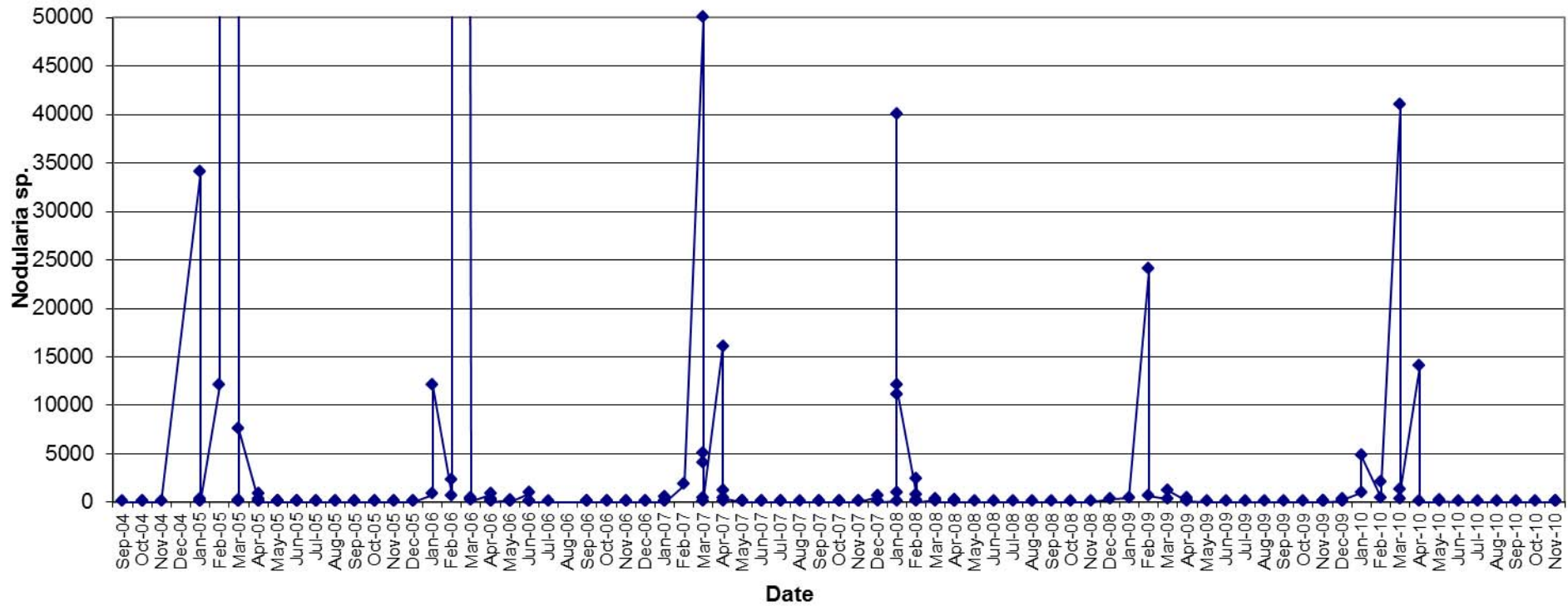
Separate coils of Nodularia, magnified 60 times.

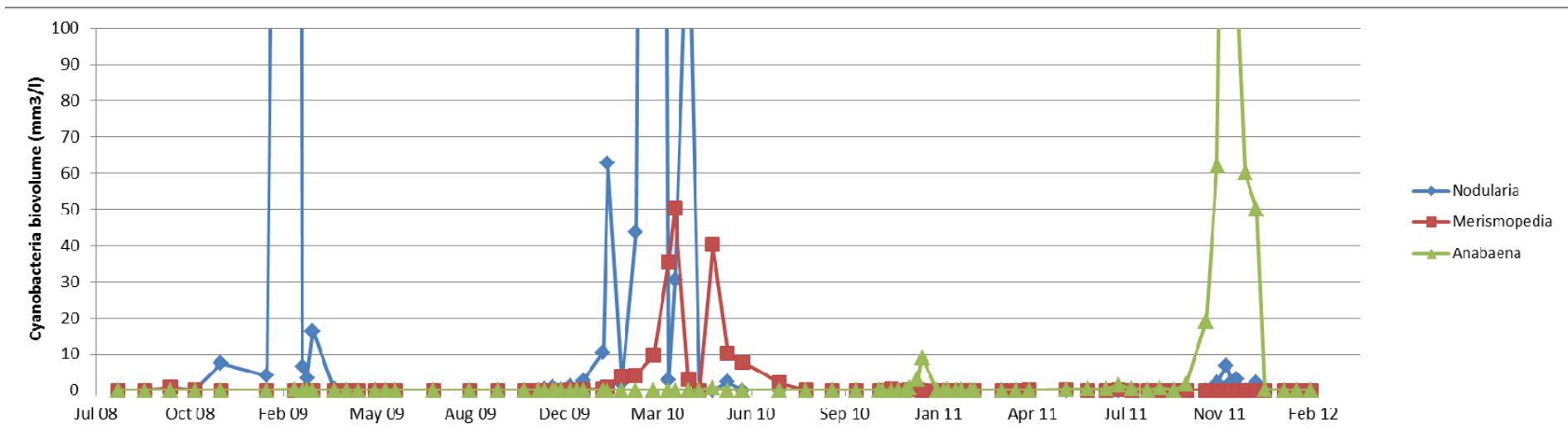


Below: Coils of Nodularia mounted in Indian ink. The white halo around the coils is the gelatinous envelope through which the Indian ink does not penetrate.

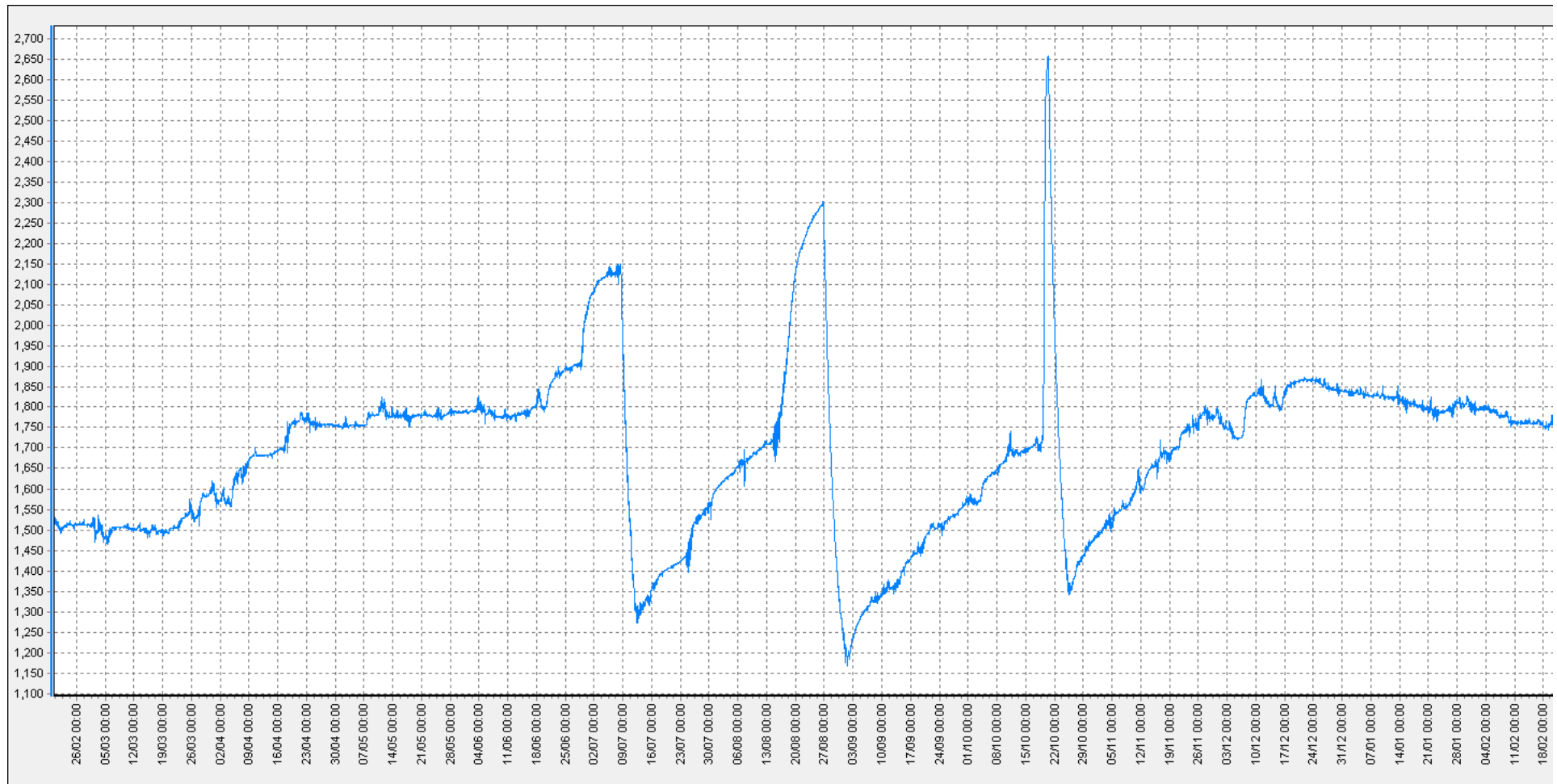


Nodularia sp. Cell counts Over Time





Lake level fluctuations 2011 til Feb 2012



Environment Canterbury

**Tools for the zone committee and
Environment Canterbury work
programmes**

Zone Committee tools

- Support and promote community and industry initiatives
- Direct funding sources towards what matters
- Increase understanding of issues
- Recommend practical actions
- Support and promote innovative management
- Support and promote regulation and guidelines

Environment Canterbury work programmes

Environment Canterbury work programmes

Long Term Plan 2012-22

- Business plan
- Funding and allocation across all Council activities

Spreadsheet of all recommendations for
tracking

Other parties

Work programmes

Influences

- CWMS targets
- Responding to zone and regional implementation programmes
- Partnerships
- Tuia joint work programme with Ngāi Tahu

2011-12 programmes

CWMS implementation - facilitation

RMA framework

Water quality and quantity monitoring
Protection of recreational and drinking water

Biodiversity/ecosystem health
Regional water infrastructure
Water use efficiency
Urban waterways
Land-use and water quality
(add Te Waihora for 2012-13)

RMA framework programme

- National Policy Statement
 - Strengthening the limit based regime
 - Requires regional councils to set and manage to limits (by 2014)
- Regional Policy Statement
 - Sustainable management, parallel processes, integrated management, priorities
 - “Seek and have regard to recommendations from.... zone committees”

RMA framework programme

Regional plans

To support and enable action identified in the zone and regional implementation programmes.

- Limit setting process – Regional Land and Water Plan July 2013
- Policies and rules around in Land and Water Regional Plan
 - river-bed weed control
 - bore drilling
 - septic tanks
- Environmental flows in all streams
- Come back for an integrated plan

Freshwater biodiversity programme

- Immediate Steps Biodiversity
- Identification of wetlands and significant native ecosystems
- Fish monitoring
- Community initiatives – Living Stream, Landcare groups
- Funding – incl. Government's clean-up fund
- Inventories/effectiveness monitoring
- Dairy effluent project
- River engineering, drains clearing
- Links to environmental limits, and LUWQ, stock access, wetland protection

Drinking water programme

- Relationships with health authorities and councils
- Education on conservation
- Government funding – new drinking water standards
- Marae water supplies
- Assess options to supply drinking water as part of storage proposals
- National Environmental Standard on Sources of Human Drinking Water
- Regional plans – set aside amounts, exempt from minimum flows
- Regulate –risks to shallow groundwater – contaminated land, septic tanks, household conservation

Urban waterways programme

- Community initiatives – Stream care
- Industry initiatives and support – pollution prevention unit
- Increased understanding, compliance monitoring
- Stormwater Management Plans and stormwater consents
- Environmental limits

Land Use and Water Quality Programme

- Regional Partnership agreement by Sept 2011
- Awareness raising, understanding the science, practices and costs
- Location-specific data on farm nutrients
- Limit setting process
- Putting it in to regulation
 - Catchment load limit
 - Nutrient allocation
- Implementation - extension
- Monitoring
- Incentives and funding for farm mitigation

Audited Self Management

- National initiative
- Trials underway Eiffleton, Opuha
- Related to water quantity
- Extend to water quality
- Audited Self Management – criteria by Sept 2011

Water quality and quantity monitoring

- Focus for 2012-13
- Link with cultural value monitoring
- Integrating with other agencies
- Availability of data

Long Term Plan

- Zero rates envelope
- Across all portfolios savings to support increased activity in land/water/biodiversity
- On-the-ground action
 - Nutrients
 - Freshwater biodiversity

LTP 2012/13 (starting 1 July 2012)

- Freshwater biodiversity
 - Immediate steps – continue for 10 years at least
 - Increase funding to support Whakaora Te Waihora – new programme
 - Increase funding per zone
 - Greater external contribution
 - Links to water quality
 - Flagships in each zone?

LTP 2012/13

Land use and water quality

- Increase resourcing so that for each 2 zones
 - Three people working on:
 - Biodiversity action
 - Nutrient management
 - Catchment groups
 - Supported by
 - Scientists – monitoring and information
 - Water metering/audited self-management
- Increased monitoring – water quality
- Regional partnership agreement – primary sector support

Ongoing arrangements

- Annual schedule of projects
 - Biodiversity
 - Riparian planting
 - Nutrient management - extension
 - Communications
 - Biodiversity – identification/action
 - Monitoring updates/information sharing
- Prioritise to fit resources
- Support from others very important