

Catchments Otago Visit to Southland January 2018



Background

On 30 and 31 January 2018, Catchments Otago, Environment Southland, Fish and Game Southland and Te Ao Marama staff spent two days on a tour of the Oreti and Waiau catchments in Southland with the following aims:

- To build relationships and connections between the organisations involved and identify opportunities to work together.
- To develop a shared understanding of the issues, challenges and opportunities for the Southland region.
- To provide an overview of current (and past) research being undertaken in the region, as well as plans for new research.
- To discuss research priorities and opportunities for future projects.

These notes capture some of the discussion and ideas that emerged from the visit, as captured via a set of feedback forms. Further information is still to be collected via a survey monkey.

Stop 1 – New River Estuary

Comments/observations from the discussions:

- Several Southland estuaries are under stress. There are challenges connecting people in the upstream catchments with estuary values.
- Cultural health indices, and natural indicators, may offer a pathway to assist with the above.
- You have to understand how the ecosystem functions if you are to make good choices about what to monitor.
- The way the community values an ecosystem shifts over time.
- There are opportunities for different parts of the University of Otago (social as well as biophysical) to assist with the challenges surrounding estuaries.
- New River Estuary has an interesting history.
- The historical aspect of any issue is an important way of connecting to people.
- This estuary has seagrass but no mangroves.
- Leaching is occurring from the old landfill.
- The estuary is not just ‘one system’ but instead a set of different sub-systems that function quite separately in their own way.
- Implications with cumulative effects occurring down the system.



Stop 2 – Saunders' hill country sheep and beef property

Comments/observations from the discussions:

- Wow! Impressive!
- Te Mana Lamb www.teamanalamb.com is a good news story.
- Sustainable farming example:
 - No cows in winter on low paddocks.
 - Treating different soils differently.
 - Riparian vegetation and fencing off of waterways.
 - No irrigation! (didn't know that was possible)
- Hundreds of farmers do look after their environment.
- NZ farmers need to identify and access markets where they can be paid the true value of their products by discerning customers.

- Sediment loss biggest issue.
- Multi-faceted farming operation (sheep/beef/dairy grazing/forestry/wind farm) where diversity is valued.
- High value lamb meat (\$300/kg)
- More grass grows when you have forest (20%) and you can generate carbon credits.
- We all wanted to get Simon's story known far more widely throughout NZ (and overseas) and as far as I'm concerned, to all generations, not just the generation that uses Instagram.
- Some good news farming stories but we need to be more innovative in getting these stories out.
- Simon was extremely articulate with well thought through ideas.



Other comments/observations from remaining stops

Day 1



The Key/Concept Plan - Environment Southland is seeking alternatives to spraying to control weeds along rivers.

Ramparts Road – Introduction to issues facing the Te Anau Basin/Waiau catchment by Sue Bennett (Guardian of the Lakes).



- The Guardians of the Lakes have very good guidelines to help them make wise decisions about lake management.
- Meridian is currently consulting with the Guardians about a proposal to alter how quickly the company can lower lakes levels, and reduce the minimum operating level of Lake Te Anau by 20 cms.
- Considerable community interest/concern re the above proposal e.g. letter to the editor in The Southland Times. Lower lake levels can cause beach slumping.
- The proposal does not need to go through a consent process. The current consents for the Manapouri Power Scheme expire in 2031.

Day 2



- Significant investment and progress has been made by the Waiau Trust.
- The Trust is now seeing some very good gains from the hard work that has been done – see their annual report <http://www.waiautrust.org.nz/>



Possible opportunities for working together

- The Curious Minds project (and marine animal transporter) led by Sally Carson is already linked in with Environment Southland's Environmental Education team. Discussions underway about expanding the planned Mataura catchment school visits to include community sessions.
- The type of approach outlined above could potentially be expanded further as part of People, Water and Land (NB: freshwater mobile laboratory also available).
- To facilitate the above, it would be useful to have a small cross-organisational working group catching up regularly to identify aims/objectives and to develop/implement a plan of attack (reasonable lead in time to get all 'ducks in a row').
- Possible shared pest control projects.
- Use of small Envirolink advice grants to work on 'knotty' problems.
- Shared education programmes.
- Develop of a research needs/opportunities list for potential Masters/PhD to use to help select topics that lines up with the needs of Southland agencies.
- MSc projects on data analysis using multivariate statistics to get a signature of variables that drive environmental health.
- Cross-organisational input into National Science Challenges.
- Estuaries values project and the development of meaningful indicators to monitor ecosystem health.
- Science communications possibilities e.g. telling farmer stories such as Simon Saunders. Social media critical.
- Promulgate Simon's story through our media outlets, education programmes and community outreach activities/accesses – even U3A programmes. Don't underestimate the influence of older generations on the younger generations.

- Cataloguing biodiversity then and now using historical photographs and museum collections to help inform decisions (possible research project).
- Talked with Nick, David and Richard about various student projects from 1 semester, 1 year, MSc and PhD. Would like to get some projects formulated this year
- Lake and catchment management examining pressures building in Te Anau basin.
- Some regular circulation of published reports, upcoming field days/workshops etc and maybe things of note (e.g. an email that gets circulated 1-2x a year) and staff changes/appointments. Similar to what we do with regional council Significant Interest Groups so that people know who to contact and that sense of knowing what each other are up to is maintained.
- Hypothetical marketing of Southland if the regional community wanted to really go “clean and green” or “resilient” or “bio diverse” and seek a premium on “everything”, based on changes in behaviour throughout the community (all of us) etc. What if farmers were “paid” to produce clean water?
- Would be useful to do a joint ORC/ES/CO session of some sort.

Attendees:

| Catchments Otago | |
|-----------------------|---|
| Carolyn Burns | Zoology-lakes Carolyn.burns@otago.ac.nz |
| Cynthia Lawrence | Zoology-microbiology Cynthia.lawrence@otago.ac.nz |
| Damien Mather | Marketing-decision making Damien.mather@otago.ac.nz |
| Gerry Closs | Zoology – fish Gerry.closs@otago.ac.nz |
| Kath Dickinson | Botany kath.dickinson@otago.ac.nz |
| Rhonda Rosengren | Pharmacy-chemical toxins Rhonda.rosengren@otago.ac.nz |
| Anna Carr | Tourism anna.carr@otago.ac.nz |
| Alan Mark | Botany-grasslands alan.mark@otago.ac.nz |
| Brent Lovelock | Tourism brent.lovelock@otago.ac.nz |
| Candace Martin | Geology Candace.martin@otago.ac.nz |
| Mara Wolkenhauer | Research/Enterprise mara.wolkenhauer@otago.ac.nz |
| Peter Wigham | Information science peter.wigham@otago.ac.nz |
| Sally Carson | Marine Science sally.carson@otago.ac.nz |
| Environment Southland | |
| Graham Sevicke-Jones | Director of Science and Information graham.sevicke-jones@es.govt.nz |
| Karen Wilson | Senior Science Coordinator Karen.wilson@es.govt.nz |
| Keryn Roberts | Environmental Scientist – Estuaries and Lakes keryn.roberts@es.govt.nz |
| Nick Ward | Freshwater and Marine Science Leader nick.ward@es.govt.nz |
| Tim Ellis | Soils and Water Team Leader tim.ellis@es.govt.nz |
| Nathan Cruickshank | Senior Land Sustainability Officer nathan.cruickshank@es.govt.nz |
| Roger Hodson | Environmental Scientist – Surface Water Quality roger.hodson@es.govt.nz |
| David Collins | Environmental Data Team Leader david.collins@es.govt.nz |
| Rachael Millar | Science Manager Rachael.millar@es.govt.nz |
| Richard Bowman | Biosecurity Manager Richard.bowman@es.govt.nz |
| Lawrence Kees | Environmental Scientist – Water Resources (Day 1 only) Lawrence.kees@es.govt.nz |
| Bonny Lawrence | People, Water and Land Programme Manager (Day 1 only) bonny.lawrence@es.govt.nz |

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|---------------------------|--|
| Pat Hoffmann | Environmental Education Officer pat.hoffman@es.govt.nz |
| Fish and Game | |
| Cohen Stewart | cohen.stewart@southlandfishgame.co.nz |
| Te Ao Marama | |
| Eva Hendriks (Day 1 only) | Eva@tami.maori.nz |

We were also joined for dinner by George Ledgard (Department of Conservation, gledgard@doc.govt.nz) and Mark Sutton (Waiau Trust, mark.sutton@waiautrust.org.nz), who in addition accompanied us for much of Day 2.

Environment Southland Visit to Catchments Otago April 2018

On 9 and 10th of April 2018, Environment Southland staff visited Catchments Otago at the University of Otago to participate in a day-long Symposium (9 April; Water, Biodiversity, People) and to continue discussions arising from the January field meetings.

- Ali Meade, Biodiversity Programme Leader, Environment Southland presented at the Symposium.
- Research priorities identified at the field meetings were further explored for identifying specific funding opportunities and student projects.
- Planning commenced for a 'Solutions-based' workshop in 2019 with Prof Bob Costanza (ANU) to tie in with the Environment Southland People, Water and Land programme.
- Marine Science Centre - Environment Southland EnviroSchools project planned for July/August finalised.
- Discussed how the University of Otago could best prepare graduates for Council roles.

Attendees:

Environment Southland

Rachael Millar

Keryn Roberts

Lawrence Kees

Nick Ward

Roger Hodson

Graham Sevicke-Jones

Ali Meade

John Prince

(*Pat Hoffman & Fiona Young joined the Tuesday meeting via phone link*)

Catchments Otago (10 April Meeting attendees only)

Gerry Closs

Kath Dickinson

Phil Seddon

Mara Wolkenhauer

Rhonda Rosengren

Sally Carson

Cynthia Winkworth

(*18 additional CO members attended 9 April Symposium*)