

"from ridge tops to the sea"

Integrated Catchment Management

Facilitating voluntary action to reduce rural land use impacts in the Motueka River catchment

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& the Sherry River Catchment Group



Landcare Research
Manaaki Whenua



C A W T H R O N

TDC **Tasman**
District Council

Common Ground Ltd

Tiakina te Taiao Ltd

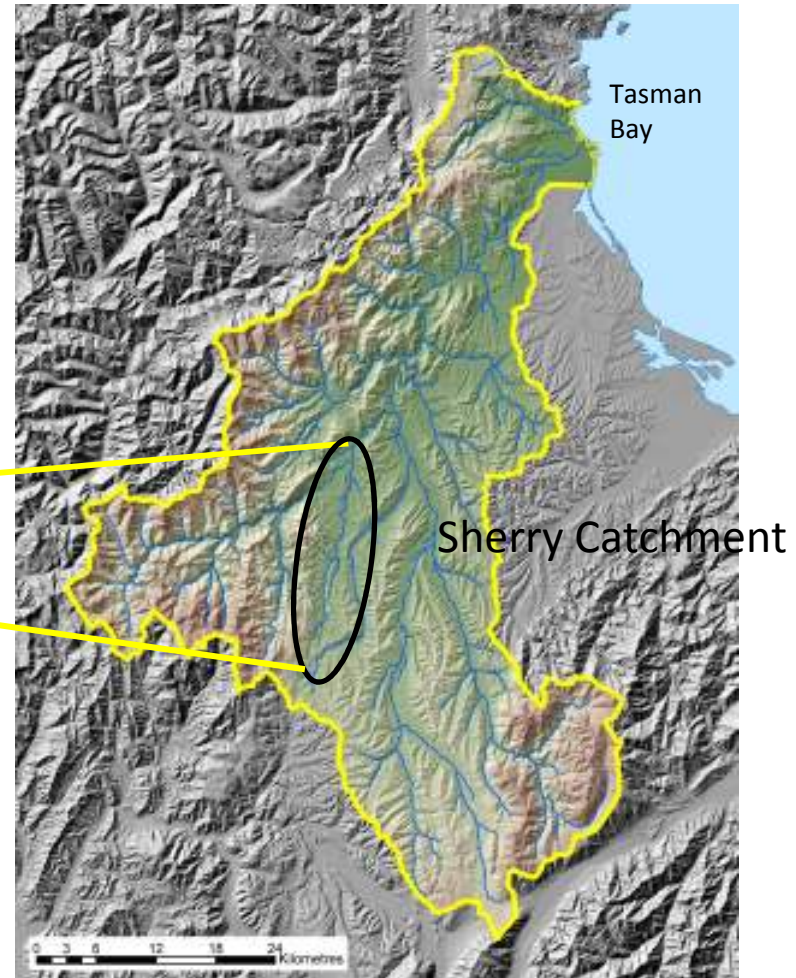
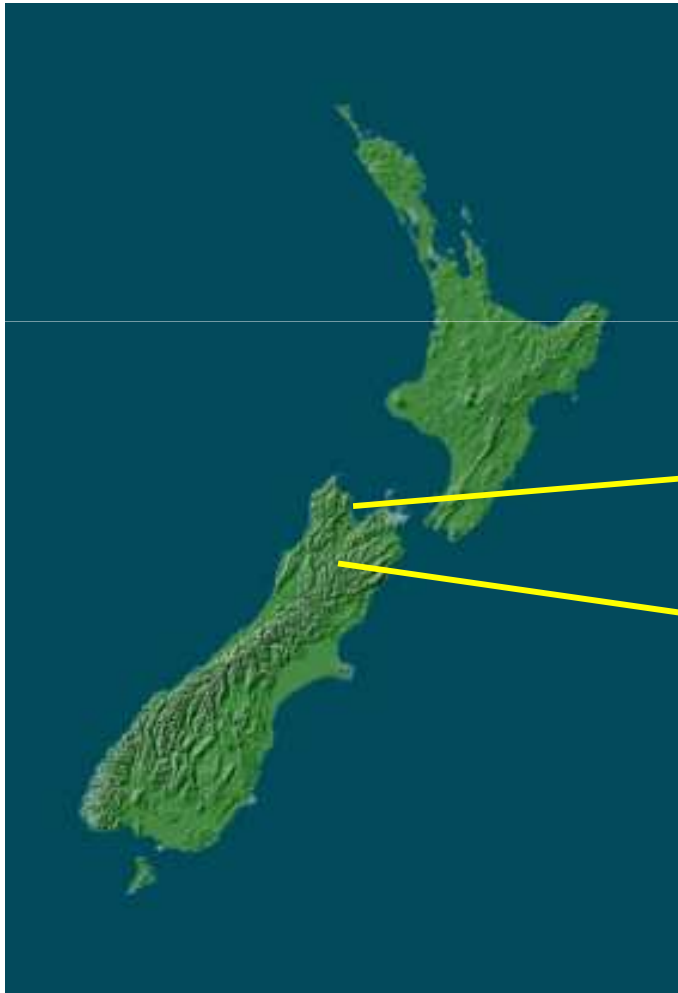
Pansophy Ltd



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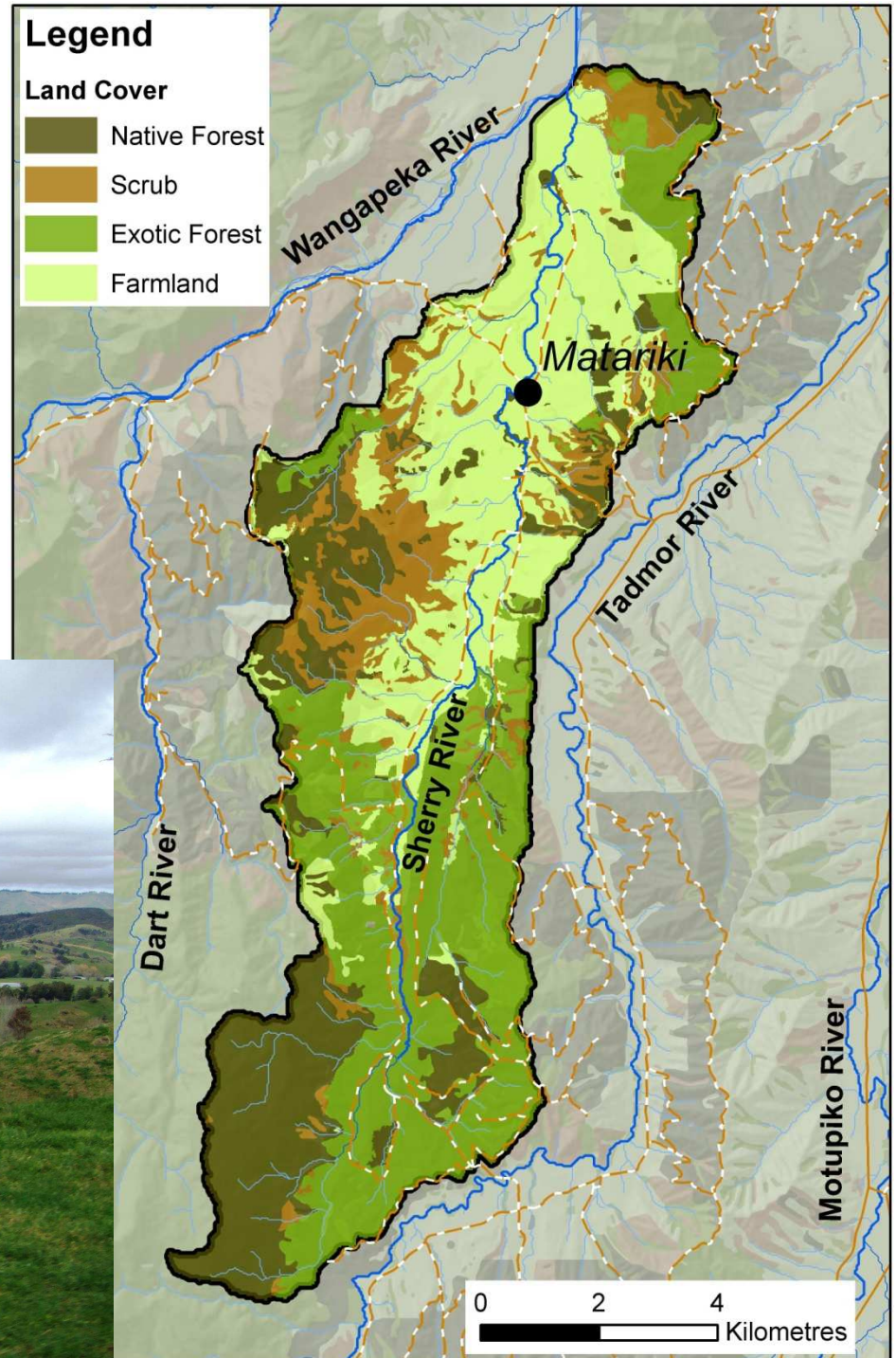
Integrated Catchment Management

Motueka Catchment ICM research 2000-2010



Sherry catchment 7800ha

Sheep & beef
Dairy
Forestry
Poultry
Smallholdings

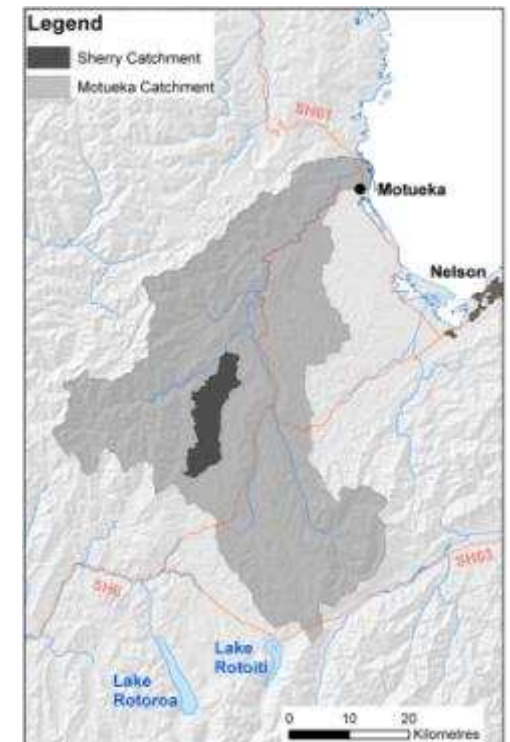


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Now for the Story...

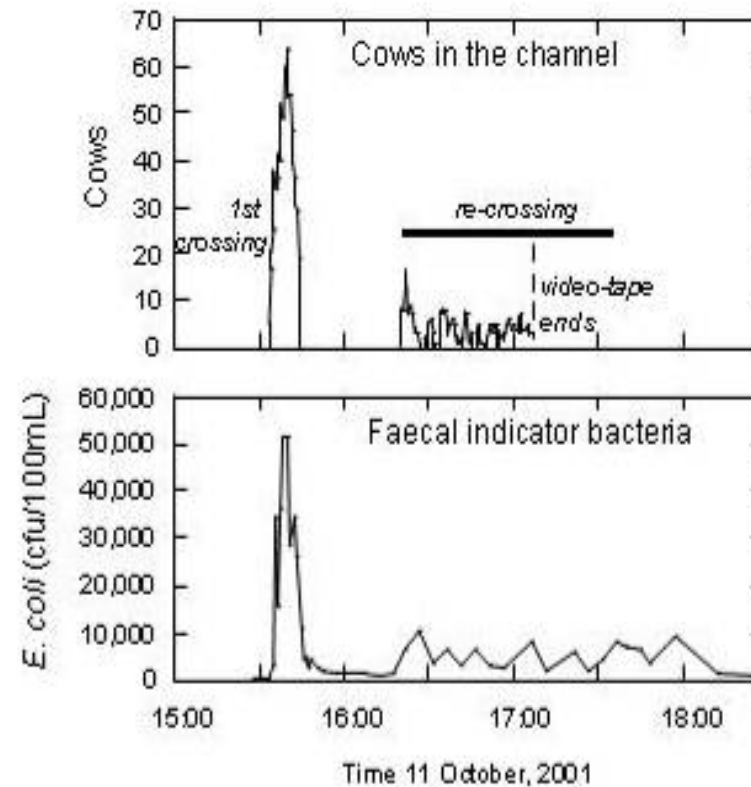
Collaboration & Science
encourage farmers to improve
water quality



Cows crossing streams



- **400% increase in *E.Coli* during cow crossings**
- **Cows 50x more likely to defecate in water**



Bridges replace cow crossings & reduce E.Coli by ~50%



Bridge over troubled waters
 Fish and Game Dept. has spent \$250,000 to build this bridge across the Sherry River.
 By Steve Burrows
 A concrete bridge of 1.5 kilometres long spans the Sherry River, which was once a troubled waterway. Fish and Game Dept. spent \$250,000 to build the bridge.
 Fish and Game Dept. and the Sherry River Trust have worked together to improve the river's health.
 The bridge was built to replace a wooden crossing that was in poor condition and was a source of E. coli contamination. The bridge is now a permanent feature of the river and has helped to reduce the amount of E. coli in the water.



NEWS EXTRA

Farmers and scientists join up to sweeten the Sherry River

While farmers are frequently criticised for the effects of dairying on the environment, positive developments are often ignored. **Simon Towle** reports on work along the Sherry River in Tasman District, where farmers have joined forces with scientists and the district council.

Dairy farmers have traditionally packed farms both with local cattle and fish and Game Dept. District for constructing the country's natural waterways. However, compelling evidence has now persuaded farmers in Tasman District to invest considerable effort and money to clean up the Sherry River in a way that could prove a model example for the rest of the country.



Seeing their dirty-dairying counterpart Bryan Johnson, director of Fish and Game, enthusiastically approves the project as "a great success".

new information in December 2005, "the Sherry River watershed to take action. In a short period of time, the crossing on the road and the White's property where the experiment was carried out has now been built. In addition, another success, Red (1) is using a bridge instead of taking through the river."
 He says two other bridges are being stages and scheduled to keep stock out of the water."
 Simon Towle
 (1) author

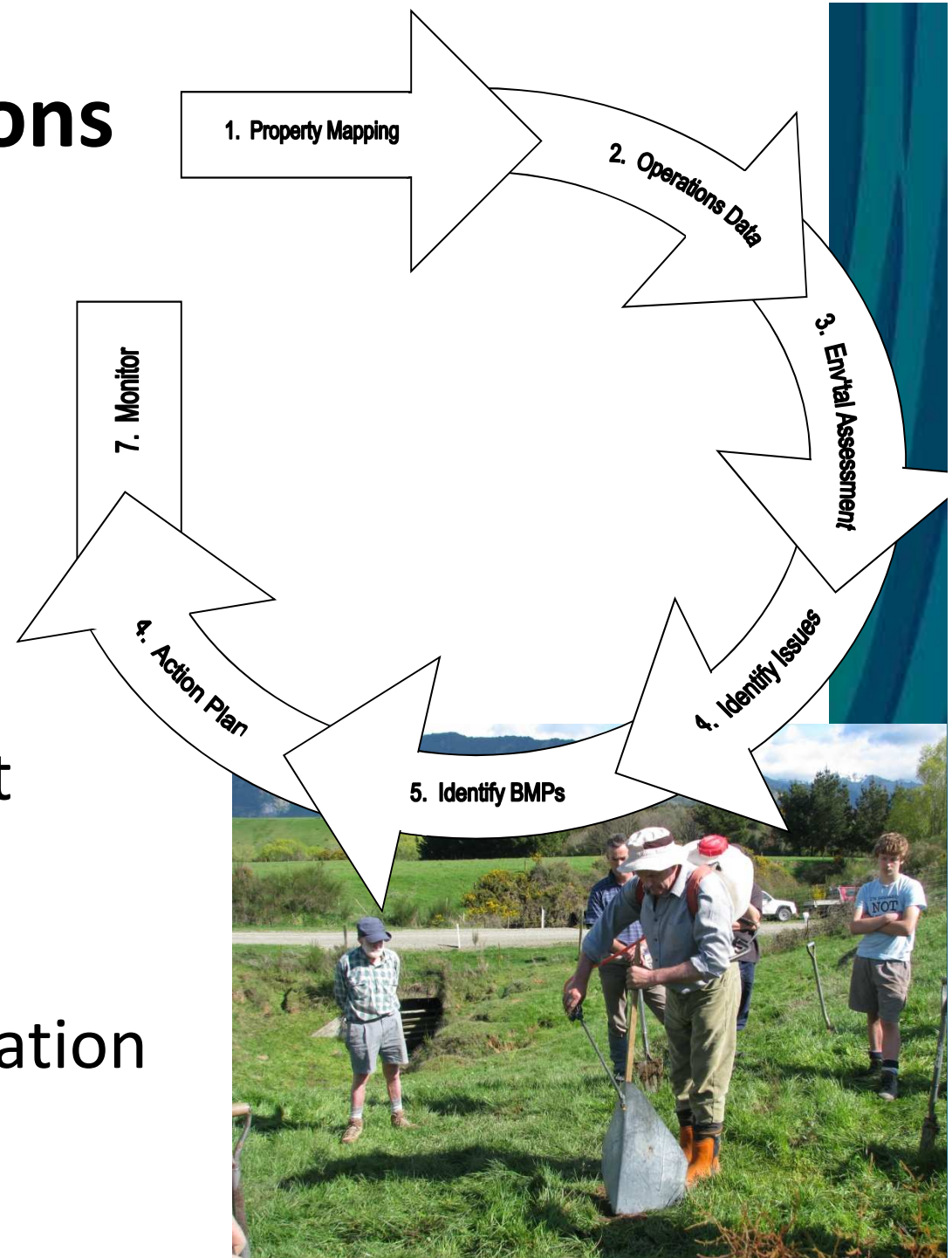


.. and Landowner Environmental Plans aim to reduce contamination by 80% ..



Example LEP actions

- Stream fencing
- Riparian planting
- Stream culverts
- Wetland protection
- Stock Troughs
- Nutrient Management
- Erosion plantings
- Stormwater control
- Deferred effluent irrigation



So why did landowners participate?

7 ingredients for collaborative success

1. Institutional encouragement & support (incl \$\$)

“We need support from Council and science to reach our goal”

“The independent facilitation by NZ Landcare Trust kept us on track”



7 ingredients for collaborative success

2. Good relationships between stakeholders

“Working together shares the load and helps to keep everyone focused.”

“The landowners here regard this valley as our place and our home.”

“ICM works with landowners; offending farmers doesn’t.”



7 ingredients for collaborative success

3. Clear roles and goals

“We want our children to be able to swim in the river again.”

“We want to minimise farming’s impact on the environment. I want our farming business, in the dairy industry 50 years from now.”



7 ingredients for collaborative success

4. Quality of leadership

“Leadership emerged from the landowners rather than being dictated by any formal election process.”

“Council rules need to be in place to pull up major transgressions.”



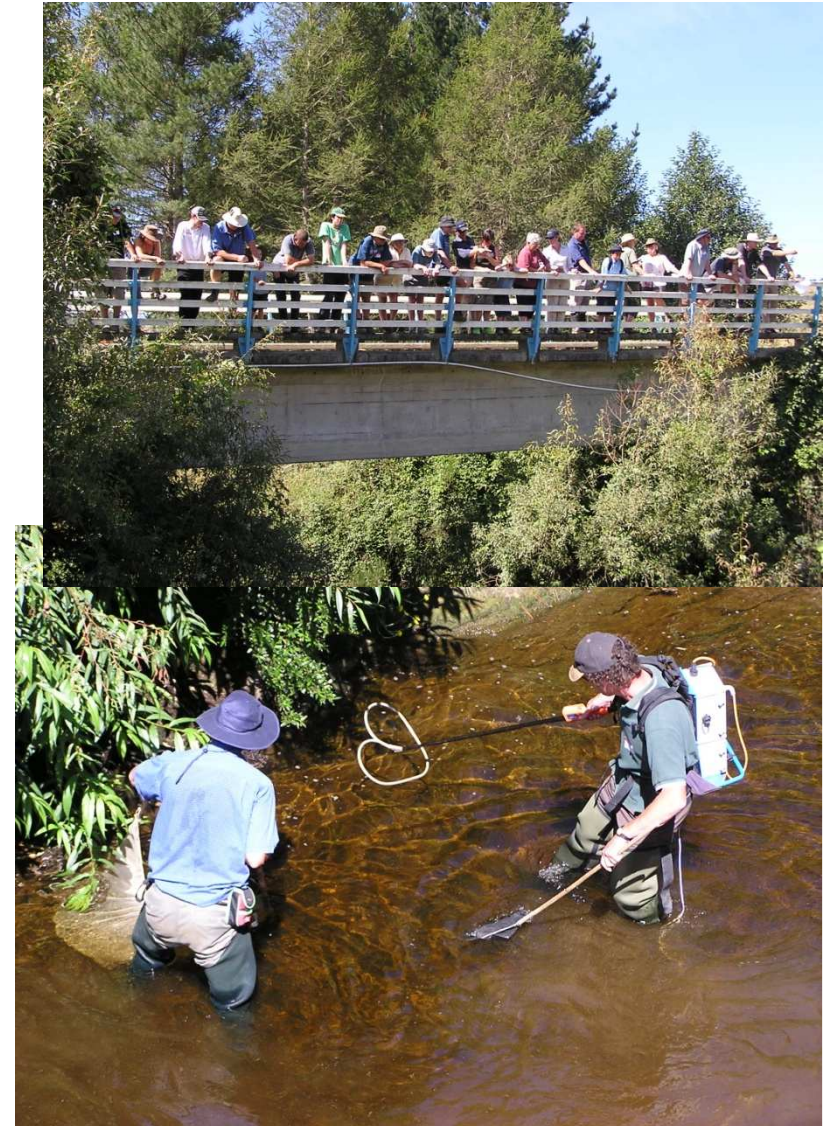
7 ingredients for collaborative success

5. Good information & communication

“The information on existing water quality and where it was worst, surprised some landowners”

“The objectivity and non-judgemental nature of the advice was appreciated”

“having a field day or meeting meant we discussed a wide range of issues beyond those for which the event was organised.”



7 ingredients for collaborative success

6. Opportunities to develop common understanding, and share knowledge and skills



“Field days were opportunities to see what the neighbours are doing, to talk about environmental issues among different land-use types, and to air differences.”

“Best Practices can only minimise adverse environmental effects, not remove them entirely.”



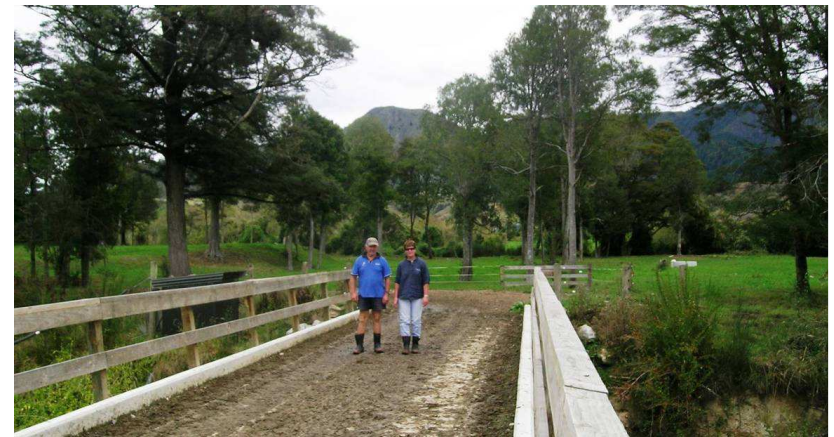
7 ingredients for collaborative success

7. Measure and celebrate success

“Our community has seen measurable results from the efforts of the local catchment group and I think that inspires us to keep working at it.”

“This project has helped lessen our environmental impact – and many have also been practical business investments.”

“Expenditure (without labour) over the past five years totalled \$270,000, plus ‘thousands of dollars’ by forestry landowners. For the next two years, planned expenditure is about \$150,000.”





Watershed Talk

...some observations for resource managers

- Use creative process design sensitive to social and cultural context

- Allow participants to (re)interpret the issue – science and policy are just 2 of many voices

- Emphasis on learning and participation, not just extraction of participants' knowledge or specifying the answer

- Contextualise people's actions and their sense of place within the big catchment picture

- Design principles:

Respect – Diversity of voices – Empowerment – Generosity – Active cultivation – Reflection & Evaluation

ICM – worth the effort

- Managing multiple issues in an integrated way
- Ridge tops to the sea
- Economic benefit while maintaining environmental, social and cultural values
- Working with communities





icm.landcareresearch.co.nz

