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

Andrew Fenemor, Landcare Research, Nelson
with Roger Young, Chris Phillips, Rob Davies-Colley,
Barbara Stuart, Will Allen, Trevor James, Andrew Burton
& the Sherry River Catchment Group
Motueka Catchment ICM research 2000-2010
Sherry catchment 7800ha

Sheep & beef
Dairy
Forestry
Poultry
Smallholdings
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%
.. 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.”
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:
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