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Te Whare Wānaka o Aoraki

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New Zealand's specialist land-based university

An aerial photograph of a river delta and a large lake. The river flows from the left, branching into several channels that empty into the lake on the right. The surrounding landscape is a mix of green grasslands and brownish-grey sediment deposits. In the background, there are large, forested mountains under a clear sky.

Having your cake and eating it too: balancing different land uses and their impacts

(Or: Having your river & swimming in it too)

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My outline, I mean recipe for today

- Your favourite cake might not be mine – some lessons over time from the Hurunui-Waiaiu Zone Committee
- Who decides what the balance is and are we all using the same scales and same measures?
- What process is used to decide balance?
- Can we have the perfect cake, with the perfect ingredients, within the context of a balanced diet?

My idea of a nice cake is often different from yours: experience from the Zone Ctte

- In the social sciences we talk about Social Construction Theory: we each have our own views of the world informed by different values, contexts etc, & these views inform our policy ideas
- Practically, this means ideas about the perfect (cake) river will be different within and between groups of white water kayakers, jet boaters, dryland farmers, tangata whenua, irrigated farmers etc
- More practically, a grade 2 kayaker will have a different view of a perfect river and its flow and water quality than a grade 5 river kayaker etc, or a fly fisher vs a spin fisher for trout etc, or sometimes a farmer cf a fly fisher for trout
- So, what is the bottom or top line we should be aiming for and how should we define it?

Lesson: be clear on what the cake should look and taste like and thus what its key ingredients are

- So, not all rivers are born equal and certainly all river users have different, if sometimes overlapping, needs
- This means we need to define our desired outcomes – within the CWMS context this means 1st order priorities: environmental
- In Hurunui-Waiau as part of our ZIP, and now within the HW Regional Plan, we have clearly defined these outcomes - they identify:
 - key values and desired outcomes for these,
 - required flows,
 - water quality needs
- We then work to sustain those requirements while trying to meet the other aims of the CWMS – economic, social etc

Lesson: a diverse group working together is more likely to get the outcome mix right than a single sector group alone

- Zone Cttes by defined criteria are diverse: community interests including farming and environmental, tangata whenua and council reps
- ZCs identify the values, discuss their needs and define what is required to protect them so that where they are important the environmental needs are provided for
- Farmers alone could not do this because they do not represent the diverse value set.

Now that we know what we want the river to look and taste like, how do we mix the land use ingredients together to produce the desired outcome?

- This is literally the \$B question – the easy bit, really, is defining the desired outcome(s), or what we want the cake to look and taste like: we have done that
- So how do we get the recipe (the N and P ingredients) right so that all the desired outcomes are met?
 - We could just throw all the land users into a room and let them sort it out (with some support) – arguably this is what the South Canterbury Coastal farmers have done
 - But, as we have seen with Hurunui Waiau there are some enormous challenges in this space ...

Challenge 1 – using your grand parents' recipe as a starting position

- This sounds simple and right: basically let the highly developed (generally irrigated land users) retain the right to discharge large amounts of N and P while over time allowing others to intensify slowly as your grand parents, through best practice, improve their performance
 - Advantage – protects the status quo and existing investment
 - Disadvantage(s) – limits others' opportunities to develop and therefore seen as inequitable; even worse – as the grandparents improve they seek to make their cake even bigger on their existing property thus using up gains made elsewhere
- Hmm ... isn't this is the situation we have found ourselves in in Hurunui Waiau?

Challenge 2 – how to deal with the cake ingredients equitably, so everyone gets a slice of the cake, and your grandparents don't go bankrupt!

- While it seemed hard for those involved, in South Canterbury Coastal streams, I think it was easy: they still had ‘head room’ or nutrient space to allocate and they had clean (new, Waitaki River) water they could throw into the mix to dilute the flavour – we do not have those advantages in Hurunui Waiau
- Hmm – what can be done?
 - the grandparents have to give up some of their nest egg;
 - All dryland farmers have to understand there are limits;
 - We all have to understand that we have to farm within limits!

So, can we have the perfect cake, with the perfect mix of ingredients, and eat it too: a balanced diet?

- My short answer is – NO!
- My longer answer is – YES:
 - But, no one will be perfectly satisfied: not the river (or its instream inhabitants or users (unless they are totally in the upper catchments)), not the irrigated farmers, not the dryland farmers ...
 - But, there will have been a net gain overall to the four well beings: environmental, cultural, economic and social
 - And as a community, we will be in a far better position, overall, than we would have been under the much more litigious pre CWMS approach.

So, my take home message(s)

- Cooking a good cake takes practice, commitment and the right ingredients
- Getting the rivers the way ‘we’ want them takes practice, commitment and the right ingredients