Professor Jacqueline Rowarth, Chief Scientist for Environmental Protection, recently wrote an article titled 'Evidence based science crucial in decision making '.

In reading your proposed Water and Land Plan 'Physiographic Zone Policies', references to field trials to support the 'theory' are completely absent.

Clint Risman, previously your head scientist, recently addressed a group of Southland farmers and said he believed this application of Physiographic Zones was not 'fit for purpose' as applied by Environment Southland

Physiographic Zones may sound grandiose, but in practical terms, the key transport pathways for contaminants are repeatedly the same with each zone. Good farming practice is exactly the same irrespective of which zone they farm, which begs the question why leave the evolving 'good farming practice model.' I understand Environment Southland will not be liable should evolving science prove Physiographic zones is poor applied science. Surely Southlanders deserve a thorough evidenced based study. Professor McConachie from Otago University told a meeting in Gore three years ago that the highest Nitrate reading he has measured in a stream was at the edge of native bush. I'm sure you are not going to ban native bush on the back of Science.

For Environment Southland to enforce physiographic zones on rural ratepayers, yet consent urban point of source contaminants with relaxed environmental thresholds, is surely a breach of natural justice and of your responsibility to those you serve. On 31st July, 2016, when these submissions were due, the E.coli in the Mataura River measured at the Gore bridge was 250 (ref E.S Website) yet the measurement downstream from Gore (at north Mataura) was 1700.

In page 14 of the document you state "point source discharges have been reduced largely through consent processes for urban activities, which gives the inference pollution has been reduced. I suggest in this statement you have "swallowed a rat". You go on to state "non-point discharges from agricultural land are the most significant contributors of contaminants." Again, there are no references to rural field trials and you completely ignore reference to high E. coli point source urban discharges. Had you continued

Your staff test water courses emitting from farms at the farm boundary. It is noted on your web site urban point source discharges are tested further downstream, in some cases kilometres downstream to allow for dilution I suspect. A couple of years ago the Mayor of Dunedin stated in the Otago Daily Times - "we need to be mindful not to expect our country neighbours to have to adhere to environmental standards we can't perform ourselves." A very honest assessment.

My point here is if rural ratepayers are to have confidence in the integrity of Environment Southland's stewardship then there needs to be policy that treats rural and urban ratepayers with the same standards. I find it incredible that in the same breath as expecting rural ratepayers to swallow physiographic zones, without evidence based environmental science, let alone reference to financial, cultural or community effects, you give consent to a new dairy factory to discharge its effluent into the Gore township septic ponds which then discharge directly into the Mataura river. I'm sure Fonterra will be delighted to see their biggest problem at Edendale has such a simple solution.

Physiographic zones are experimental science. The Southland Times quoted an Environment Southland staff member on 19th June saying the concept has been "peer reviewed". What academic dribble. Disaffected outside opinion on conceptual theory will not unite this province to effect change. If E.S does not engage rural and urban citizens alike, those that have to affect their environmental obligations, and get united agreement on thresholds that treat rural and urban equally, then you will continue to escalate the widening divide you have caused between town and country.Good farming practise with common sense guide lines will be supported by Southlanders....experimental theoretical science will not.

Submitter No: 519

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Date Received: 76/17