

SUBMISSION ON AMENDMENT TO NATIONAL POLICY STATEMENT ON FRESHWATER,
2014

FROM

DOUGLAS WISHART



SUMMARY

The proposed amendment is a poorly thought-out, and poorly presented document. I concur with the Professor of Freshwater Science at Massey University, Dr. Russell D'eath, [National Radio, 26/4/17] that even after 5 or 6 readings, its meaning is unclear. I would like to make some suggestions as to how to make it [1] more meaningful, [2] easier for Councils and public to understand and put structure to, and set up as an iterative, and evolving framework for policy and action. [3] more scientifically valid.

1. Rewrite the Amendment in a way that utilizes the PRESSURE-STATE [*OBJECTIVES*]-RESPONSE framework [for narrative and numerical indicator/attribute conditions] that is utilized in other mfe policy. You could subdivide each of those 3 categories into several sub-categories around the proximal-distal axis. For example:

PRESSURE VARIABLES: [i] land-use [ii] cows per hec [iii] nitrogen in [iv] nitrogen out measured [v] nitrogen diffuse presumed, [vi] forestry chemical load [vii] waste-water input general, etc etc

STATE VARIABLES: 1. PROXIMAL: [i] sediment narrative/numerical/bottom-line [ii] N and P nutrient narr and numerical/bottom-line [iii] pathogens-E coli- narr and numerical/bottom-line [iv] toxic chemicals narr and numerical/bottom-line

STATE VARIABLES: MID POINT: [i] oxygen depletion, photosynthesis, DO, narrative and numerical/bottom-line [ii] ph, temp., periphyton., MCI., cyanobacteria etc etc

STATE VARIABLES: DISTAL [i] native fish habitat [ii] native fish spp [iii] trout habitat [v] weed growth , all narrative only

STATE VARIABLES: VALUES; [i] national values of ecosystem and human health, waitapu, amenity for community, irrigation potential, drinking water potential, surplus for industrial use [Iii] regional agreed values

RESPONSE: this becomes the Issues/Objectives/Policy/Methods/Rules for local government focusing on where there were incongruencies in the previous data.

2. SWIMMABILITY ISSUE:

- A. Your bottom-line of 550//litre E coli is inappropriate. There is international agreement that 260-550 is the ALERT level and below 260 is the SAFE level for swimming. With your bottom-line you say it is OK for 10% of our rivers to have a 20% chance of causing an infection to humans in year 2040. This is NOT OK. Thus your NPS is not even internally consistent in that it does not meet the HUMAN HEALTH PROTECTION NATIONAL VALUE.

- B. There is confusion in understanding the differentiation between [i] 90% of rivers[is this about length of rivers or rivers in totum] being in line with having a “reduced”[ie below20%] chance of having high E coli, and [ii] 80% of samples will have a below threshold level of E coli. People simply DO NOT GET IT. CAN YOU THINK OF A BETTER MEASURE WHERE CONFUSION IS “NUDGED” OUT OF CONTENTION
3. Your Amendment avoids confronting the NITROGEN issue, despite nitrate being one Attribute. You simply CANNOT proclaim a bottom-line of 6.9mg/l when ecosystem health is being negatively impacted at above 0.61 mg/l. At this level, excess algal growth will cause oxygen overload. Again, your NPS is internally inconsistent in not maintaining the national compulsory value of EcoSystem Health. Yes, true, 6.9mg/l will not kill us but it will leave 20% of nature a little maimed.
 4. Can you make it a requirement that all Councils use the same measures and the same metrics. For example, for nitrogen, decide whether DIN, SIN, total N, NH4, or nitrate, is the best indicator and stick to it. ALSO either ug/litre, mg/litre or gm/m3 [even though the conversion is simple] but not all, unless the biological reason is clearly given. Yes, we can figure all this out, but the public cannot.
 5. Provide a PSR matrix for Councils to use as an UNDERLAY for their data. I have 4 Council Plans in front of me and they are all ALL OVER THE PLACE with their freshwater indicators, bottom-lines, and objectives. The public should be able to make comparisons between ALL COUNCILS’ data.
 6. Relate your metrics and attributes to those used in other mfe documents such as[i] Environmental Reporting Act SOE reports, [ii] National Environmental Indicator Reporting, [iii] proposed National Env Standards on Ecol Flows, [iv] Conservation and Environmental Roadmaps 2016, and the non mfe NEMS reporting.
 7. Remove any reference to REQUIRING SOME SORT OF “BALANCE” BETWEEN ECONOMIC WELL BEING AND ENVIRONMENTAL PROTECTION. This is outdated thinking and it is completely outrageous that the New Zealand Ministry for the Environment thinks this way. Yes, you may have to doff your cap at the RMA Section 5 [2], but you have gone way overboard in your Amendment.

THANK YOU

DOUGLAS WISHART