From: <u>ECInfo</u>

To: <u>Mailroom Mailbox</u>

Subject: FW: exDScott Submission 10yr Plan EMAIL:04932645

Date: Friday, 27 March 2015 12:45:48 p.m.

Attachments: {cid121721F1BAD33F46941A61C45F8DEB2F@ecan.govt.nz}ECAN.docx

Hello Team

This email came in through our Customer Services email. Can you please workflow? It is a submission to the LTP.

Ngā mihi

Christine

Customer Services

----- Original Message -----

From: Federated Farmers of New Zealand Inc, MacKenzie Branch.

Received: 27/03/2015 10:02 a.m.

To: ECInfo; Environment Canterbury; Services Customer; Services Customer

Subject: exDScott Submission 10yr Plan

Attached

(ECAN)

Submission on ECAN 10year Plan

David Scott

Retired

I make the following points and recommendations:

Land & soil issues

My understanding is that one of the main functions of a regional council is the management of the physical environment. In that, the outline of ECAN's long term plan has sections on water management, air quality, natural hazards, natural habitats and other topics.

From my perspective as a rural person with agricultural interests, the main deficiency is a lack of a similar section on land and soil issues. The plan gives emphasis water issues with land issues mainly given as adjuncts to those, and often in the negative.

There is somewhat a dilemma in environmental management in relation to nutrients – levels which are 'good' on land, are regarded as 'bad' in water - and with the emphasis that ECAN gives to water rather than land – the latter view prevails.

Regional councils came from land soil and water concerns several decades ago and in one sense have lost their roots (grass roots).

You say you will be a repository of land use, soils, weed and pest data – among other things.

Recommendation: An equivalent land and soil section.

Nutrient disposal – urban & residential

ECAN's discussions and policies place great emphasis on agriculture and agricultural animals in terms of fertiliser use, rates, types, dispersion, outputs and ultimate dispersal in terms of water quality issues. But there is not a similar emphasis on the human animal in residential and urban concentrations.

'pollution is a matter of dilution'

It is almost criminal that urban area sewage (=nutrients), albeit after some treatment, is dumped into the water-ways.

With most of the human population concentrated in coastal urban areas, this is a great concentration of nutrients, with point source discharge when dumped into the sea, with very few water quality restraints. 'Out of sight, out of mind'

In many of the inland settlement and habitations there tends to be similar initial consolidation and concentration, at least partial treatment, before again point source direct dumping into river systems – directly affecting their water quality (e.g. Tekapo, Twizel, Omaroma).

There are two issues involved:

- the direct effect on water quality in the discharged streams (requiring mitigation)
- The loss of land nutrients

There is somewhat a dilemma in environmental management in relation to nutrients – levels which are 'good' on land, are regarded as 'bad' in water - and with the emphasis that ECAN gives to water rather than land – the latter view prevails.

Nutrient harvesting – urban & residential

In terms of environmental management I believe ECAN should be advocating and demonstrating on nutrient harvesting through land application of sewage out-flow.

Such land application is already part of the regulated dairying and food processing industry

The land application of human sewage outflow has to overcome a 'yuck' factor and wider spread adoption may be unpopular in the first instance – but nutrients are nutrients – and could limit fertiliser imports. After all human sewage outflow has been one of the bases of Hans Chinese agriculture for a millennium!

The probable priority from a river and stream perspective would for the non-coastal towns and settlements e.g. Tekapo, Twizel, Omaroma.

Direct land application of untreated sewage from holding tanks would be possible from remote settlements e.g. Lake Alexandrina.

Land application is also an avenue for developing 'wetlands'

Recommendation: That ECAN be advocating for nutrient harvesting through land application of sewage treatment out-flow.

Nutrient harvesting – farming systems

Concern is expressed at nutrient discharge below fertilised dryland and irrigated agricultural systems and is one of the reasons given for fencing off and vegetating adjacent water-ways.

Such vegetation has only a medium term effect on nutrient and sediment capture. In the longer term concentration will build up so that outputs will equal inputs. If that vegetation is some form of harvestable product (e.g. conserved feed, timber), then the nutrients can be collected and moved back up-hill! Waterways vegetated –yes, but this is why I object to the emphasis given that they be only natives.

Recommendation: Advocate that water-way vegetation be of harvestable, nutrient transferable species.

'Biodiversity'

Many of the present ECAN's use of the word are inconsistent and false. The definition of 'biological diversity' in the RMA, and 'biodiversity' in the glossary of many ECAN documents, do not make any distinction as to the origin of a species.

In terms of environmental management it is the function of a species that is important – not their origin.

The vast proportion of the NZ economic species are exotic – including us.

If statements or policies only relate to indigenous native species, then the term should always be so qualified i.e. 'indigenous biodiversity'

For example, there is no particular functional advantage in terms of sediment capture, nutrient capture, water storage and release of using 'native' as compared with adventive species (other than they may already be there). After all your main water 'engineering' species is exotic willows.

Recommendation: Caution in use of the word, and if it relates to only indigenous species that it is so qualified.

Braided rivers

We have many in Canterbury and they are part of our 'home'. We have them because the rivers are carrying large bed-loads under varying rainfall events, and with the mountains going up fast and eroding fast.

But on a world scale they are not necessary unique and more commonly regarded as indicating a rapidly degrading system.

A few years ago I handed over to ECAN a North American manual on their rating of river systems. Braided rivers with gravel inter-flues were the lowest grade and undesirable. Braided rivers with grass/herb inter-flues were somewhat better, forested inter-flues better still, meandering streams in forest land better still, and the ultimate best quality were such meandering streams with beaver dams every few hundred yards!

In the short term we are attempting to control their flooding risk impact by stop-banks etc. But perhaps in the longer term, for soil and water conservation, we should not be averse to allowing 'development' of their waters, sediments and flood-plains to some of the 'higher' forms of river systems.

Recommendation: Lessening the emphasis on braided rivers.

Soil conservation

It is said that soils only form once (within the usual human time frame), and that for present and future agricultural use, that at least the best soils are protected.

Recommendation: That ECAN advocate for retention of rural/agricultural zoning of better soils in any city/town/area consultations.

Soil formation/harvesting

There is a certain dilemma in the management of our agricultural soil resource – they mostly originated from erosion. Much was from river flooding which we now stop with river control features, and loess from wind erosion.

Lowland wind erosion is controllable by shelter belts and non-tillage methods.

A case could be made for direct soil formation by the use of flood waters and raceway cleanings. There are Canterbury examples from previous decades of taking flood-water irrigation onto stony soils which now have reasonable soil depths. Soil material is likely to become a feature of on-farm water storage systems.

Recommendation: That sediment harvesting be considered part of water allocation and river protection works.

Farm-plans

I am all for farm-plans as a management tool and for any ECAN's help in forming them.

But they should remain the property of the land-holder, not another layer of 'landlords' (LINZ, DoC, local councils), and not a legal contract. (Ever one seems to claim more knowledge of farming than the farmer!).

Recommendation: Assistance but not legal contract.