

Eketahuna Hearing 6th April 2017

The profile of the Manawatu Estuary has not been highlighted enough in these considerations.

The Manawatu River has a collective catchment area of 3 ranges, the Tararua, Puketoi, and Ruahine

.2/3 of its catchment area is on the eastern side of the Tararua and Ruahine ranges with runoff from three distinct types of sediment and land formation.

The Estuary is the receiver of nutrients and elements unsurpassed.

Hence the very large populace of marine bio categories and its bird diversification both shoreline and wetland species.

In our original submission from my own personal as well as Manawatu Estuary Trust we stated a land disposal regime consistent with the one plan.

Eketahuna has a population of approximately 400.

Affordability comes under a bracket with no land available for use for land disposal.

It has a rainfall of 1.4 to 1.5 meters per annum.

At mediation, the bland statement was given that land was not available and that was the reason for embarking on the present proposal.

A UV system to suffice. However it is well established that a UV system is only effective to the degree of turbidity. There are times when the runoff most pertinent to the river water quality in times of higher rainfall and associated turbidity.

Within a 24 hour period on normal runoff days, combined water and effects of these discharges reach our estuarine area and is stop banked by the incoming flow of tidal movement 2 times daily, that is 4 hours out of 24 hours. It is then that fine particles of the turbidity content settle and line embankments within the tidal stretch. (centre of gravity) This can be seen simply by walking the banks.

With any water velocity there is an action of eddying from either embankment which reverses the process of flushing to the degree that it is largely responsible for effects of deposits on embankments

The Estuary is approximately 1 square mile

No township or populace living on a river bank should not be made aware of their responsibility for further downstream. In fact it is fundamental to English Law and the total outline and focus of the One Plan.

We have distributed a pamphlet outlining the species which can be seen at the Estuary.

Essentially the Estuary is the natural feeding platform for the species that congregate there and have done so for millenniums. In the last 150 years, the human population density has used the same river

flow to carry its waste and disposals away from its habitation to the Estuary.

Clay sediments have given the ability for aerobic and anaerobic layers to be created within the river bed, literally a library of pollution.

The Manawatu Estuary is an international Ramsar site and is a feeding ground for 3 endangered species.

If we were to set up a commercial operation for the production of dairy or beef, we would term it as having a platform of produce, (grazable area) with a dry matter yield supporting x number of stock units, and an equation with expectation of its performance of what it could produce on an annual basis.

Various areas have various tables Direct correlation to the carrying capacity by productivity.

Our Estuary has a function capacity equating to similar outcomes and its ability to support its total biodiversity is determined by the integrity of its sediments, nutrients versus pollutants eg toxins

We have profiles of our population declining and anecdotal evidence of experience that the decline is dramatic

There has been little or no mention of Estuary effects in these proceedings.

We stand by the Regional One Plan that in the course of update or renewal of any collective discharge that land use should be prioritised notwithstanding the fact that a township with a comparable population eg Shannon (population 4x greater) with rainfall tenure similar to Eketahuna has by public demand and consultation put in a wholly land disposal system now in operation.

Kelvin Lane

Chairperson Manawatu Estuary Trust