Mr. Brian Edmonds

Assistant Director Operations and Resources

Flood Review Team

2nd November 2016

Submission to Independent Review of Flood Events June 2016

Dear Sir,

I manage a large family dairy farm at Merseylea which was severely impacted by the June 2016 floods. Farm infrastructure, soil, pasture and irrigation systems were washed away. Some 180 prime dairy cows were drowned and nearly 300 bales of silage lost. Although insurance will cover some losses it is estimated that the overall cost to the farm operation was in the order of $880,000. As you are no doubt aware, farms downstream on the Mersey River also suffered similar devastation.

Therefore, I would be pleased if the flood review team would investigate the following aspects which I believe contributed to the severity of the flooding.

* The causes of the floods which were active in Tasmania over the period 4 – 7 June 2016 including cloud-seeding, State-wide water storage management and debris management.

The Kimberley Railway Bridge.

I believe that this bridge design had a significant influence on the severity and rate of flooding during the June event. The design is such that it acts essentially as a dam once it is jammed with logs and debris from upstream. When it gave way, the resultant rush of water resulted in a rapid rise in river levels and strength of flow.

It is my understanding that this bridge was also washed out in the 1970 flood and repairs to it were considered as being of a temporary nature. I note that the bridge has been restored to the same design.

An associated issue is the amount of logs and trees washed out by the flood causing the blockage at the railway bridge. I would be pleased if the review team would investigate, to what extent fast growing and shallow rooted plantation trees, established along the Dasher River in particular, contributed to the amount of vegetation washed downstream.

*To what extent did the bridge design have on the severity of the flood?*

*Is it appropriate to locate tree plantations in areas prone to frequent flooding*?

Cloud Seeding and Water Storage Management

Obviously there are some real questions concerning the effect that cloud seeding had during this rain event. I fully appreciate the need for proper management of storage levels in Hydro dams and the necessity for maximising rainfall where possible, especially following such a long dry period.

*However as the low pressure system moved down the East Coast of the Mainland were dam levels reduced in anticipation of a high rainfall event?*

*To what extent did cloud seeding contribute to the overall rainfall in the Mersey Forth Catchment?*

* The use and efficacy of forecasting, community alerts, warnings and public information by authorities in responding to flood events

As a general rule, farmers at Kimberley and Mersey Lea can cope with 100mm of rain without undue concern. Cattle and irrigation infrastructure such as pumps and pivots are moved to higher ground if there is a threat of flooding, as was the case on the 5th June.

At 4:26 pm, that afternoon the Bureau of Meteorology posted a warning on their website, advising that Sheffield and the Fischer River had received 70-80mm of rainfall. Although expecting some inundation of paddocks this amount of rainfall was unlikely to have a major effect on the farm.

I received no SMS warnings from the SES or updates as to rainfall amounts and the likelihood of severe flooding until the flood peak at 9:00am on Monday morning, which was 16 hours too late. We were not advised that bridges upstream at Liena and Dynan’s Bridge Road had been washed out.

As a result we were caught by surprise by the very rapid rise in river levels that isolated livestock and irrigation systems.

I found the warnings issued to local residents to be both inadequate and untimely.

Whilst the use of website warnings may be effective for those accessing their computers, I had little time to monitor updates. I was fully engaged with moving stock, farm machinery and irrigation pumps in pouring rain and knee deep water. This is not a good environment for monitoring electronic devices. I would be pleased if the review team would consider the limitations of electronic media, including SMS, in such situations.

* Consideration of the detrimental environmental effects of the flooding upon the landscape, and what effective mitigation measures may be necessary to avoid similar events.

The amount of prime agricultural land and investment in infrastructure for primary production along the Mersey River necessitates its containment within the normal river banks. Large areas of farmland have been ruined by erosion and the deposition of river shingles. If the climate scientists are to be believed, it is reasonable to expect more frequent devastating weather events. Primary producers have limited capacity to recover from multiple events such as the June floods. Unless some measures, like appropriate levee banks are put in place, it may well be that primary production in these areas will no longer be sustainable. This will be exacerbated if the clean up costs are considered to be the sole responsibility by the land owner.

*Who is responsible, if anyone, for ensuring that the river course is maintained?*

*What containment methods are available to landowners?*

*Is it reasonable for landowners to bear the cost of rejuvenation if they are not permitted any control over river containment?*

Thank you for the opportunity to have some input into the Flood Review and I trust that the questions I have raised will be considered. If you require further information please don’t hesitate to contact me.

Luke Bloomfield