Lismore Dale Co Pty Ltd ATF Miller Family Settlement

Level 5, Gregory Court,
370 George Street,
Brisbane Qld 4000

26 January 2013

Major Projects Assessment,
Department of Planning and Infrastructure
GPO Box 39
Sydney NSW 2001

Dear Sir/Madam,

Re: WOOLGOOGA TO BALLINA PACIFIC HIGHWAY UPGRADE, SSI-4963 : COMMENT AND SUBMISSIONSENVIRONMENTAL CONCERNS

I am generally in favour of the project but have some concerns that some of the flood methodology is flawed, that our dwelling and property will be negatively impacted and that mitigation strategies insufficient to mitigate those negative impacts.

Background

The Miller Family Settlement has owned about 220 acres of land at Uralba (Lot 1 DP 501685, L1/530628, L25/712026, L308/755745, L356/755745, L367/755745, L400/755718) near Ballina since 1973 with about 100 acres in sugar cane cultivation and the balance, mostly hilly, for cattle grazing.

The property is bounded by the Pacific and Bruxner Highways. Duck Creek is a tidal creek which runs through the middle of of property. The creek makes a sharp turn to the right and follows the Bruxner Highway to under the Duck Creek Bridge.

Uralba Road generally follows Duck Creek and is low lying such that parts of the road flood during high and more particularly during king tides. The sugarcane is grown on paddocks lower than the road..

The house is low set between some 1.51km along Uralba Road between the road and Duck Creek. The house has flooded in recent years. I note that table4-8 at 4.15.3 does not appear to show any low set dwellings.

The Uralba Valley is a catchment bounded by steep hills dropping to a floodplain suffering inundation when when heavy rain falls in the local area.

The Bruxner Highway between Uralba Road and the Pacific Highway has been built up over the years through road works and routine maintenance. The latest works raising levels were completed the year before last in conjunction with the Pacific Highway upgrade bridge works over Emigrant Creek.

In the early to mid 1970's works were done on L1/501685 such that a canal was constructed from Duck Creek in a southerly direction which after some 700m distance runs adjacent to the western side of the Pacific Highway. I understand that it goes at least to Whytes Lane. The canal is managed by the Richmond River County Council.

There are floodgates about 700 metres from the junction of the canal with Duck Creek. These floodgates stops water flowing under the Pacific Highway.

A small creek "Saltwater Creek' meanders through the property but where it once crossed under the Pacific Highway near to the floodgates it can now no longer do so due to the works associated with the canal.

A waterway, possibly being the continuation of "Saltwater Creek" flows from the floodgates in an easterly direction where it meets another watercourse, goes under Pimlico Road and then into Emigrant Creek

Our property has been negatively impacted by decisions of the RMS in the past and I am deeply concerned that the upgrade which requires the purchase or resumption of some of our property will further impact upon our property and the neighbouring environment.

Un addressed present concerns

The Bruxner Highway along with the Pacific Highway now acts as a dam wall with our cane and grazing paddocks and dwellings suffering inundation in recent times.

I am seriously concerned that flooding to the dwelling and the loss of production due to flooding and drainage issues relating to our cane and cattle which have not been addressed by the RMS will only get worse with the new Highway being built unless mitigation strategies are put in place.

Concerns/Submissions related to the EIS

Hydrology and Flooding

The objectives are laudable including minimal changes to and impact on dwellings, property roads and drainage (1.2.1) with maximum 50mm increase in height to houses, other premises and cane area and a not more than 5% increase in duration(2.1.3)

I agree that factors affecting damage to cane due to flooding involve: the time of year, height; duration, velocity and debris. Of these, I believe that duration is probably the most critical and note that even a small variation in height of a paddock can have an extreme effect on a crop.

I agree that cane diversions need to be designed(Main Paper) 8.54

2.2.4 and 4.15 Flood Assessments

The EIS in its flood assessments includes within Richmond River North, Duck Creek and Emigrant creek.

I believe a fundamental error has occurred by putting the Duck Creek catchment in with the Richmond River.

Duck Creek catchment is 14.2 sq km and has sheer walls, some of which are shale or heavy clay which shed water and allow little infiltration.

The flooding is heavily dependant upon local falls of rain and rises swiftly(much quicker than the Richmond River) and has a very high velocity scouring out land and depositing a large volume of debris. Given the tidal nature of Duck creek, flooding can take some time to dissipate.

I have noted severe floods affecting Duck Creek in circumstances where the flooding on the Richmond River and Emigrant Creek was much less severe by comparison.

I do not believe the modelling used for the Richmond River can apply to Duck Creek, hence I have grave fears that the effects on our property will be greater than as outlined at 6.17.3 particularly in relation to the duration of flooding.

Even on the data contained within the EIS, our property seems to suffer far more than most, especially when climate change is taken into account (6.17.3):

- the raised road between Whytes Lane to Duck Creek;
- Duck Creek Crossing(7.4.16)
- floodplain south west of Duck Creek (162-164)
- increases in impact south of the Bruxner Highway and west of the project;
- increase due to culvert blockages;
- increase due to tidal inundation(7.2.2)

Figure 7-59 shows that our property suffers the most under a 20 year ARI climate change scenario.

Figure 6-54 shows velocity increases on our farm

Given that the height of the proposed highway is lowest in the vicinity of our property(at 1.76AHD) and this is far higher than it is currently, I welcome the culverts and piping proposed at 162.68 and 163.00 and 163.60 and 163.84, however(6.17.2 and Table 6-30). I think consideration should be given to bigger pipes particularly at 163.00 ad to the north from viewing Figure 7-59.

There is no indication of how the large volume of water going under the highway will be dealt with.

Also with the large predicted sea level rises of .4m by 2050, .9m by 2100 and 1.1m by 2020 (Main Paper 8.51) and (7.2.1), these must be placed deeper and the concept of a bund (7.6) could effectively turn our property into a lake. Again I note that Uralba Road is partly inundated at high tides as it stands today and that the cane is well below the road level.

Great care must be exercised in mitigating the effect of flooding since the land immediately adjacent to the Pacific Highway between Whytes Lane and the Bruxner Highway has an extremely minimal fall and an inch or two in fall means all the difference between viable and non-viable farm land.

Environmental concerns

We have maintained a treed strip of land between our cane and the Pacific Highway which will be purchased or resumed by the RMS for its works. That strip of land contains a lot of wetland species such as casuarinas and tea trees.

The treed strip provides a visible barrier to the traffic and mitigates some of the noise as well and also acts as a corridor for wild life.

The native vegetation will have to be destroyed for the upgrade works. I am concerned that destruction of native trees screening the farm will cause visual pollution and increased noise and possibly facilitate unauthorised access to our farm. These issues will not only affect farm operations but also wildlife which on our property.

The raising of the Highway levels and the location of the highway carriageways closer to our farm will exacerbate these negative impacts.

Summary of Issues

1. I reject the flood modelling as Duck Creek flooding is a unique system which differs to the Richmond River. On this basis the findings relating to predicted changes in height and velocity of flooding are in doubt.

   Proposed solution- Flooding models must be scrutinised and any drainage and flood mitigation issues be carefully investigated so that the best outcome can be achieved not only for our farm but the local area as well.

2. Previous works on the Bruxner Highway and the Pacific Highway have raised the level of those roads effectively acting like levees to our low lying land. Proposed works will only make things worse particularly when sea level rises are taken into account. The dwelling and house are affected.

   Proposed solution : Large culverts and pipes under the Bruxner Highway at a reasonable depth. Consider if the action as per 6.17.2 is sufficient(and increase pipe size at 163.00 and sites north) AND put them in deeper so that water flows under the highway quicker so the duration of flooding is less. Do not proceed with the Bund proposal.

3. Floodgates at about 700m from Duck Creek on canal restrict flow under the highway.

   Proposed solution: Remove them.

4. No indication of how large volumes of water will be dealt with once they go to the east of the highway.

   Proposed solution: Undertake a survey of the land to the east of the highway and a review of the cane drains and canals there and then design and build sufficient drainage works to send the large volumes of water in a generally northerly direction working in with the fall of the land. I have penned in some suggestions on Figure 6-54 enclosed.

5. Destruction of native trees, consequent visual and noise pollution and possible trespass of persons on our property.

   Proposed solution: Replanting of vegetation if possible, provision of fencing and noise barriers.

Please investigate my concerns on the issues raised and place conditions on the upgrade so that the negative impacts on the dwelling, and our farm, its flora and fauna are properly mitigated.

Yours sincerely,

Scott Miller

Secretary and Director

Figure 6-54 Velocity impacts 20 year ARI event: Lower Richmond River at Pimlico (North)

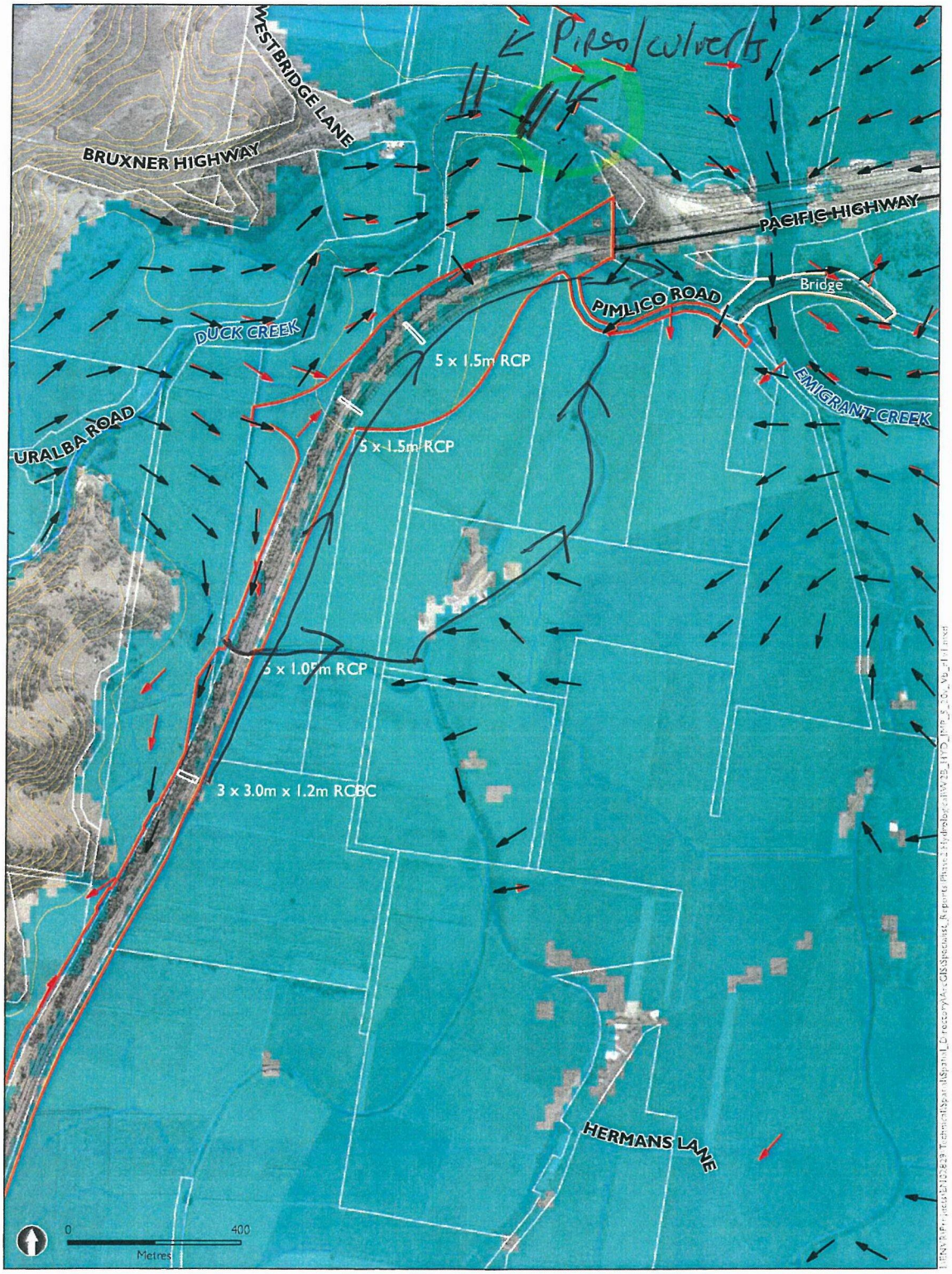
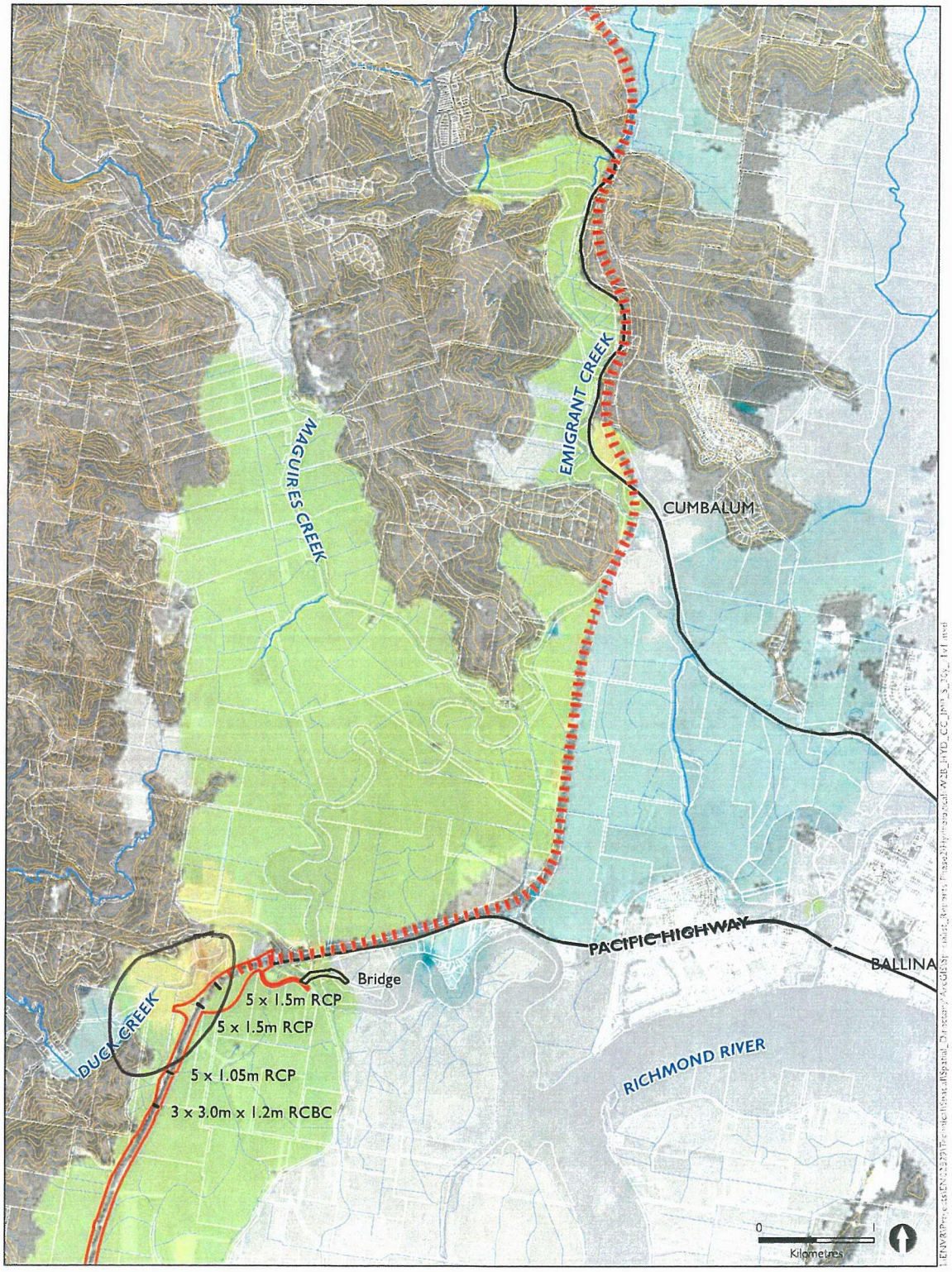


Figure 7-59 Flood impacts under 20 year ARI climate change scenario: Lower Richmond River and Ballina



Major impact on our farm