

Barrie Dunning

24 February 2011

Submission to Queensland Floods Commission of Inquiry

Dear Commission,

I am the owner of [REDACTED] This property is located downstream of Harlin township.

The December- January 2011 floods have caused massive erosion in the Brisbane River. The floods of 1974, 1982, and 1989 were of equal or greater magnitude than the 2011 floods, yet these floods did not cause massive slumping of the high banks along the River. The difference this time has been gravel extraction.

Riparian landholders along the Upper Brisbane River, whose farms have been washed away in the December 2010 and January 2011 floods believe that gravel extraction should be stopped as part of land use planning to minimise infrastructure and property impacts from future floods. We also believe that gravel extraction should be banned above the Wivenhoe and Somerset Dams as part of the systems operations of the dams, in order to significantly reduce the amount of silt that washes into these dams in a flood event.

The bed and high banks of the Brisbane River are destroyed for 3km below Harlin township. This has been the biggest devastation the Brisbane Valley above Wivenhoe Dam has ever seen. All infrastructure along the banks of the river, and the land itself, has been washed away. This land has been washed into the Brisbane River, ending up in Wivenhoe Dam, in people's houses and in Moreton Bay. This includes private power poles, underground mains, irrigation pipes, bores and hectares of prime farming land. Our prime irrigation paddocks are now worthless according to the official Department of Environment and Resource Management (DERM) valuer. DERM has previously been known as the Department of Primary Industries; Department of Natural Resources; and the Department of Natural Resources and Mines.

We realise that our problems are not a high priority at a time when others have lost their homes. But they still have the land on which to rebuild their homes. We cannot rebuild our farms because the land has washed away. It no longer exists. Our property will never recover from this damage.

We realise that the land lost is not recoverable and that we have to move on. We are trying to move forward and overcome our loss and anger, but this is difficult to do when the gravel extraction continues.

Gravel extraction has been carried out immediately below our section of the river since 1994 [REDACTED] DERM has acknowledged, verbally and in writing, that [REDACTED] breached the terms of the extraction permits to the Ombudsman, the President of Kilcoy-Brisbane Valley Landcare, riparian landholders and me. Jim Dale and the Hon Stephen Robertson have also confirmed verbally and in writing, more than once, that it is unlikely further permits for extraction of materials from this site would be issued.

However, gravel extraction from this site has not ceased since it began in 1994. Extraction still continues from this site as we speak, despite the devastation in the river. Officers of DERM are unable to return our phone calls to confirm whether or not a permit for this extraction exists and that they have inspected the river to see its condition

In 1994, riparian landholders, including myself, objected to the initial gravel extraction permit being issued (see enclosed letter). I objected to gravel extraction on the grounds that there would be:

- Devastation of the Brisbane River
- Lowering of irrigation water in the Brisbane River and Neara Creek.
- Destruction of the bank of the Brisbane River
- Destruction of the trees
- Destruction of the platypus habitat
- Devaluation of properties which are sold as irrigation farms.

Unfortunately all these predictions have been fulfilled. Enclosed are photos of one section of the river which in 2001, was considered to be the worst eroded section of the Upper Brisbane River by the Kilcoy-Brisbane Valley Landcare group which they undertook to repair by constructing a log wall and planting trees.

Photo 1 shows the erosion which existed in 2001. This erosion is minor compared to the erosion of the 2010/11 floods.

Photo 2 shows a log wall which has been constructed to prevent further erosion, with trees planted in the background to stabilize the bank.

Photo 3 shows the same section of river after the December 2010 floodwater receded. Notice the gap between the bank and the log wall.

Photo 4 shows the same bank after the January 2011 floodwaters. The log wall has washed away, as has 30 Acres (12 Ha) of irrigated farm land.

My concern is that because the Brisbane River is now unstable, the next rainfall event will see further destruction of the river and more silting of Wivenhoe Dam.

The report *Sand and Gravel Resources of the Upper Brisbane River and Lockyer Valley Streams* commissioned by DERM (previously the Department of Primary Industries) in 1995 recommended that gravel extraction cease in the upper Brisbane River because economic profit was outweighed by the environmental potential for bed and bank degradation.

The *Riverine Quarry Material Management Plan for the Upper Brisbane River, Lockyer Creek and Buaraba Creek* states in *Section 2A: Management Framework, Principles for Riverine Quarry Material Management* that:

- Stream integrity and stability are to be maintained and enhanced.
- Extraction of material from hard rock quarries and flood plains is generally preferable over extraction from dynamic environments such as watercourses and lakes.

In the same *Quarry Materials Management Plan in section 3: Allocation Strategies 3.2 Stream Condition Assessment* quotes from research by Brizga and Finlayson (1996):

“Brizga and Finlayson found that the Brisbane River is currently incised” (the river has lowered its bed creating high banks, thereby causing restriction of the river). “They noted that extraction in the channel or its associated bars is very likely to cause detrimental impacts on channel stability involving local bed and bank erosion and disruptions to sediment transportation processes which may lead to changes (degradation) in both the upstream and downstream directions.”

On the same page Dr Brierley also notes significant problems in the management practices as at 1999. He comments “the channel is now deeper and wider than previously, and so retains more erosive energy within the channel.

*A Fluvial Audit of the Upper Brisbane River: A Basis for Assessing Catchment Disturbance, Sediment Production, and Rehabilitation Potential.* (p6), commissioned by SEQ catchments states that:

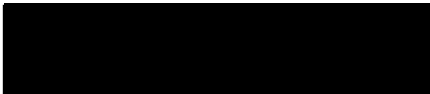
“Sand and gravel extraction in the Upper Brisbane River is currently unsustainable from the perspectives of total sediment supply, bed stability, suspended sediment and nutrient production, riparian corridor function and ecosystem integrity... It is recommended that all commercial sand and gravel extraction be eliminated within the Upper Brisbane River above the full water-supply level of Lake Wivenhoe.”

On p86, it states that “Due to low levels of juvenile bed material load generation in the Brisbane catchment, the sustainable” (gravel extraction) “rate is effectively zero”. The gravel extraction of the Brisbane River, is not sustainable, and therefore should be stopped.

All reports commissioned by DERM and SEQ Catchments stated support that gravel extraction should not be carried out in the Brisbane River, yet gravel extraction is still occurring.

Also, DERM has previously issued gravel extraction permits, and has failed in their monitoring of these permits. For these reasons, in the interests of minimising damage to infrastructure and property from future floods, gravel extraction should be stopped. Stopping gravel extraction will also increase the effectiveness of Wivenhoe dam though reducing the amount of silt washed into the dam.

Yours faithfully



Barrie Dunning

## References

Department of Primary Industries. *Sand and Gravel Resources of the Upper Brisbane River and Lockyer Valley Streams*, Information Paper, May 1995.

Shellberg, J and Brooks, A. *A Fluvial Audit of the Upper Brisbane River: A Basis for Assessing Catchment Disturbance, Sediment Production, and Rehabilitation Potential*, Australian Rivers Institute, Griffith University, August 2007.

Department of Natural Resources and Mines, *Upper Brisbane River Riverine Quarry Material*, Version 2.0, November 2004.

Department of Natural Resources. *Water & Catchment Management Guideline: Management of Riverine Quarry Materials*, Doc No RM02, August 2007.

Department of Natural Resources and Mines. *Upper Brisbane River Riverine Quarry Material Management Plan*, Version 2.0, November 2004.

Department of Natural Resources and Mines. *Riverine Quarry Material Management Plan for the Upper Brisbane River, Lockyer Creek and Buranbu Creek*.

[REDACTED]  
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[REDACTED]

The Chief Executive  
Water Resources, Gatton Office  
PO Box 321, Gatton 4343

Dear Sir

We, as riparian land holders, wish to object to application number 57044 by Benowen Pty Ltd for sand & gravel extraction.

Our property description is L54, 87 RP 28542, Parish Neara, County Canning. Our property is on the other side of the Brisbane River to Robenlea Stud, Harlin.

We are objecting to this application on the grounds that it will cause the:

1. devastation of the Brisbane River
2. lowering of irrigation water in the Brisbane River & Neara Creek.
3. destruction of the banks of the Brisbane River
4. destruction of the trees
5. destruction of the platypus habitat
6. devaluation of properties which are sold as irrigation farms.

The extraction of gravel will devastate the river by the removal of natural water holes along the River & creating an open drain with just a few shallow ponds, steep eroded banks & few trees, if any. When a major flood, like the 1983 flood with a flood level of more than 60 feet, occurs there will be devastation to all property & banks along the River of immense proportions & on a scale never seen before on this River.

This extraction will cause the River to flow faster in flooded times (it already flows with a great deal of force) with no restrictions what-so-ever & create an extra suction one kilometer upstream thereby washing all gravel & trees away & releasing all the water from our irrigation holes.

Whatever waterholes are left will be too shallow for the platypus to live in.

.../2.

2.

The value of properties joining the River will devalue as they are valued with access to irrigation water & they rely on this water to maintain a high standard of production. We have a legal entitlement to irrigation water under 1.002 on the "Schedule of Terms for Licence". We cannot shift to another hole along the River as there are no other holes. Neither the Water Resources nor Extractive Companies have the right to cause damage or devaluation of freehold properties. The commissioner should investigate what damage will be done to the River & surrounding properties before this application goes ahead.

I have taken levels of the fall in the river starting from our irrigation hole, which is on the upstream boundary of the proposed extraction & reaches to the mouth of Maronghi Creek. The River has already lost approx. 3 feet of depth because the last couple of floods have washed away gravel holding this water back. The fall to the next hole is 16 ins. From this point the next hole is approx 650 yds long & is held back by an island approx 300 yds long at the junction of Neara Creek & the Brisbane River. This Island also holds back the water in Neara Creek. The River then runs down a channel beside this island on R. Sinnamon's side with another fall of 20 ins before the dividing fence. After this it runs in a series of falls to the next hole with approx 3 feet of fall.

This totals 6 feet of fall (approx) in 950 yds (approx). If this excavation is 10 metres below water level at this point then it will cause an even greater fall in the River & this will cause the River to flow faster, the Island to be destroyed & our irrigation holes to be lowered even further; remembering that previous floods have already lowered the fall by 3 feet.

The width of the banks at the upstream of the Island is approx 70 metres wide, the extraction applied for is a width of 150 metres.

There needs to be an Environmental Impact Study taken of this project to ascertain the damage it will do & to ensure that there is :

1. no removal of any natural water holes & water tables
2. no removal of the Island at the mouth of Neara Creek & the Brisbane River
3. no removal of trees on this Island
4. control so as not to damage the banks & a buffer zone left
5. control over removal of sand & gravel above the water level
6. control over the depth of extraction below the water level
7. some reconstruction & repairs along the River.

.../3.

3.

We feel that we have proved how this extraction will affect our property.

We would now like the Water Resources to prove that the extraction of sand & gravel will not damage the environment of the Brisbane River.

Yours faithfully

A solid black rectangular box used to redact the signature of the sender.

Barrie Dunning

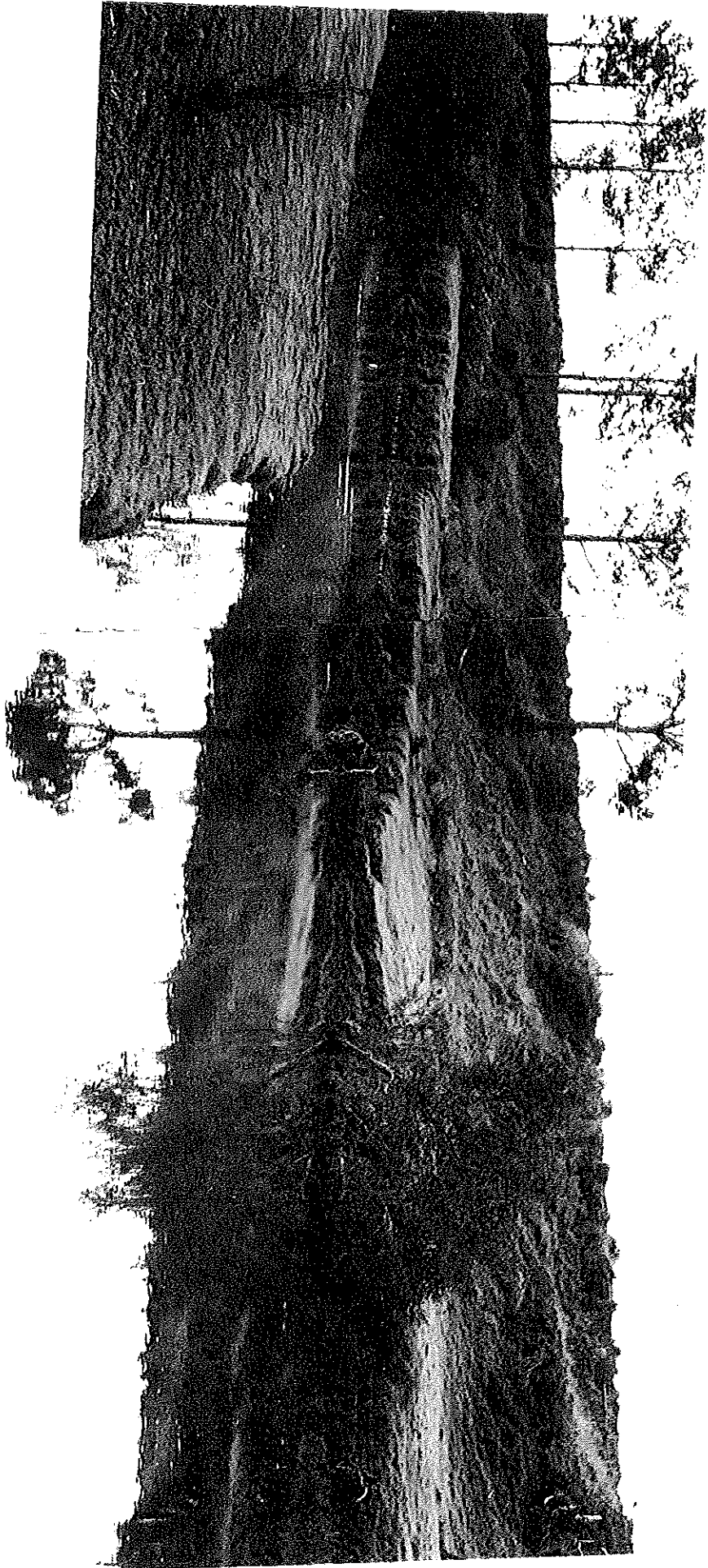


Photo 1: 2004 Erosion



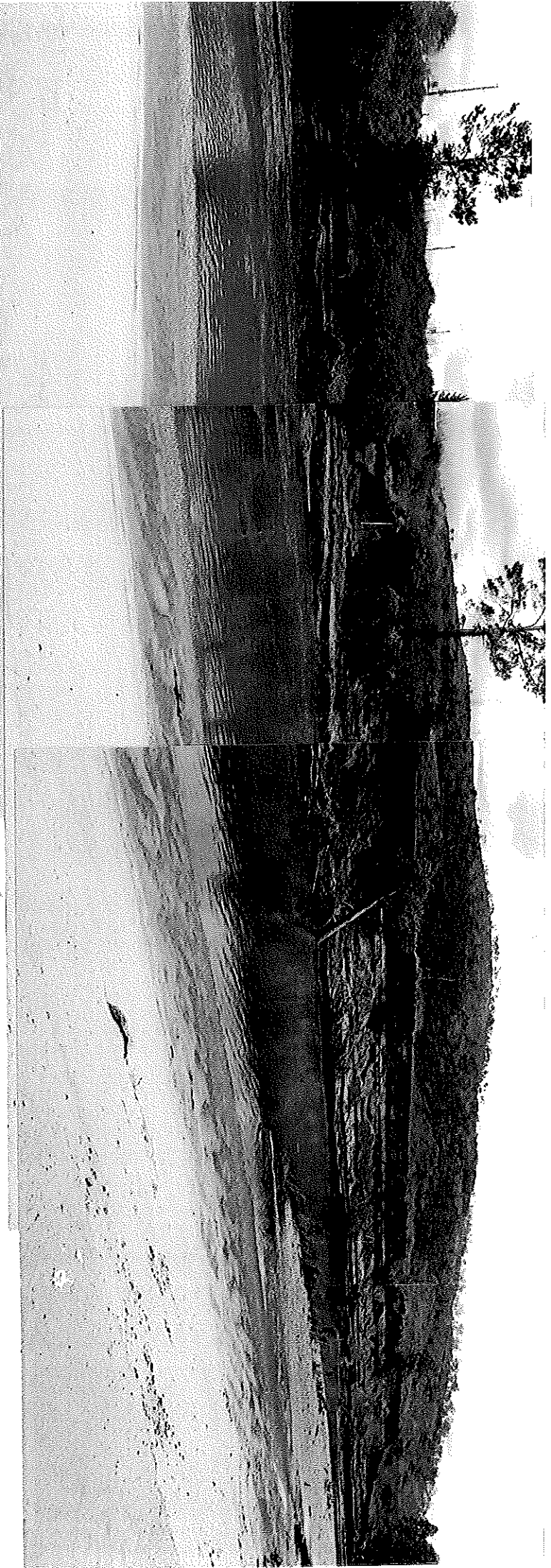
Photo 2. Log Wall





← Log wall

Photo 3:  
Dec 2010  
Flood



400 M Erosion  
← 100m long →

← 100m wide  
of canyon →

Log wall - new building  
← 100m long →

Photo 4.6: Jan 2011

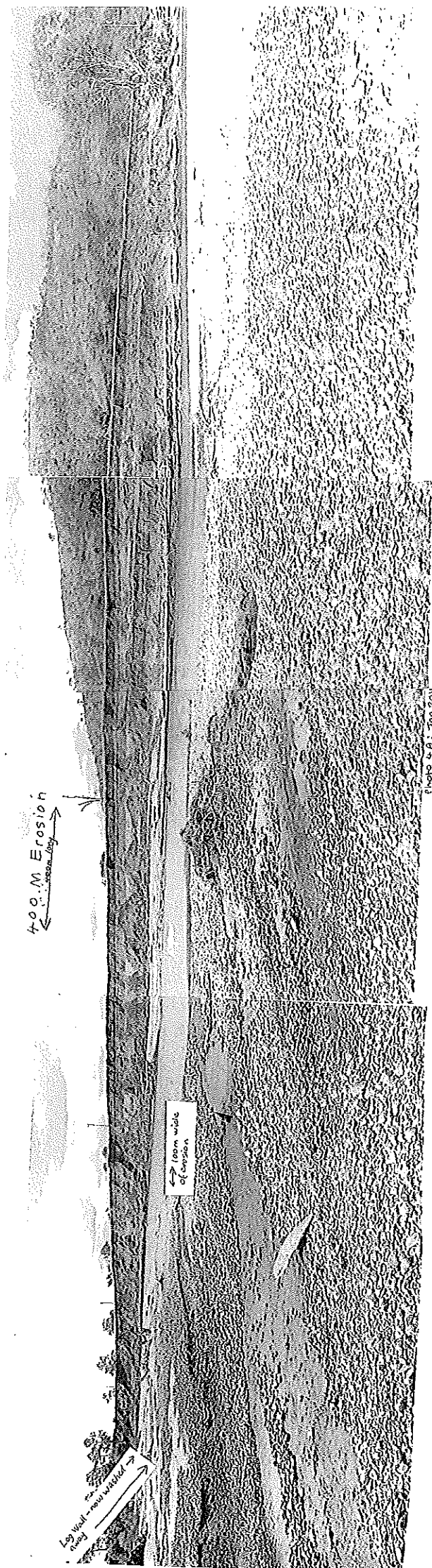




Photo 4B - Jan 2011 Floods

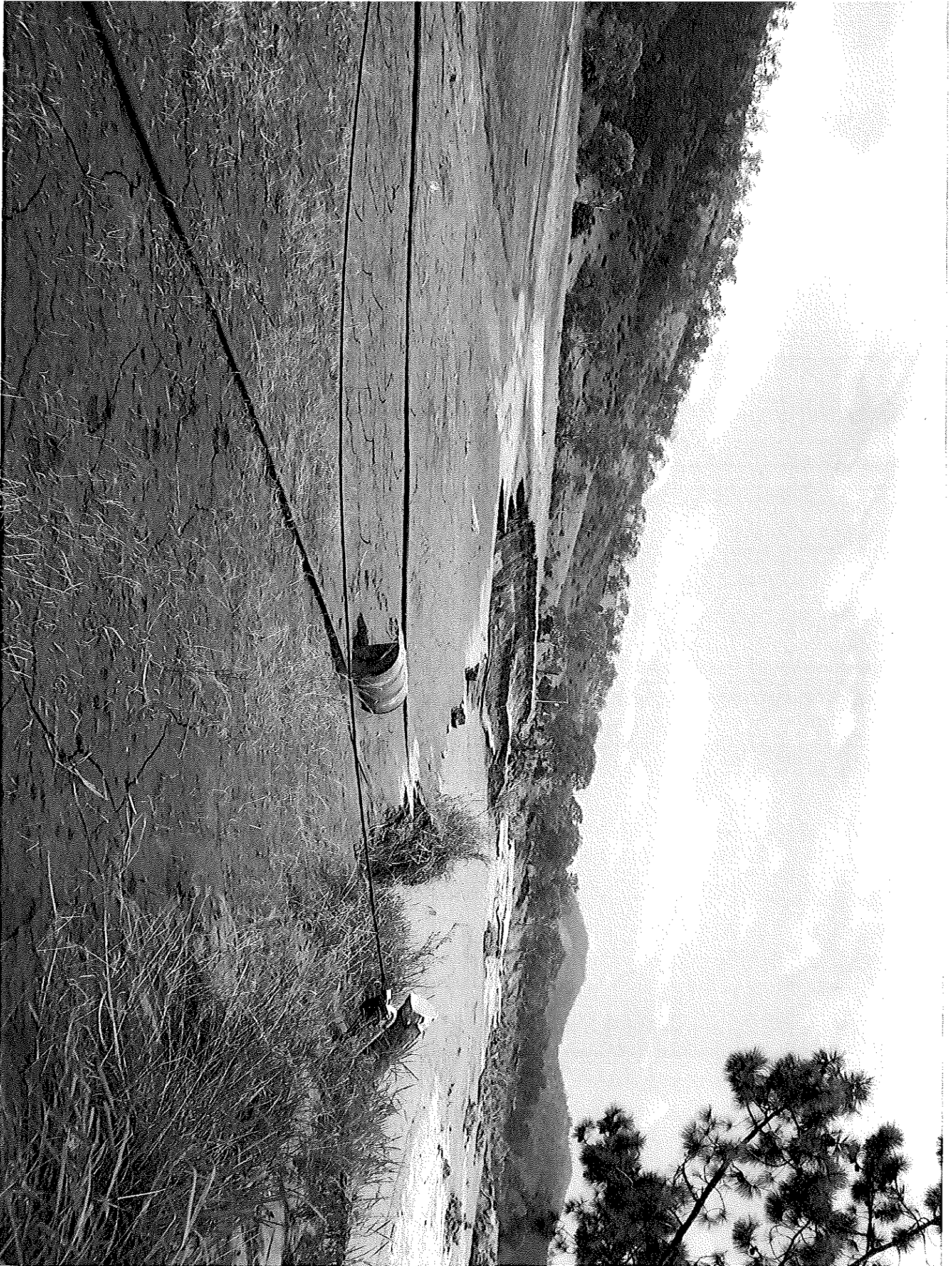


Photo 4c - Jan 2011 Floods