

Presentation by Malcolm Lumsden

The Lumsden Family have been farming at Ohinewai since 1912 – 114 years

I believe we have a good understanding of the lake, river, historical flooding,
and land utilization

Involved in -- several Council committees attempting to find solutions to the
issues impacting Lake Waikare.

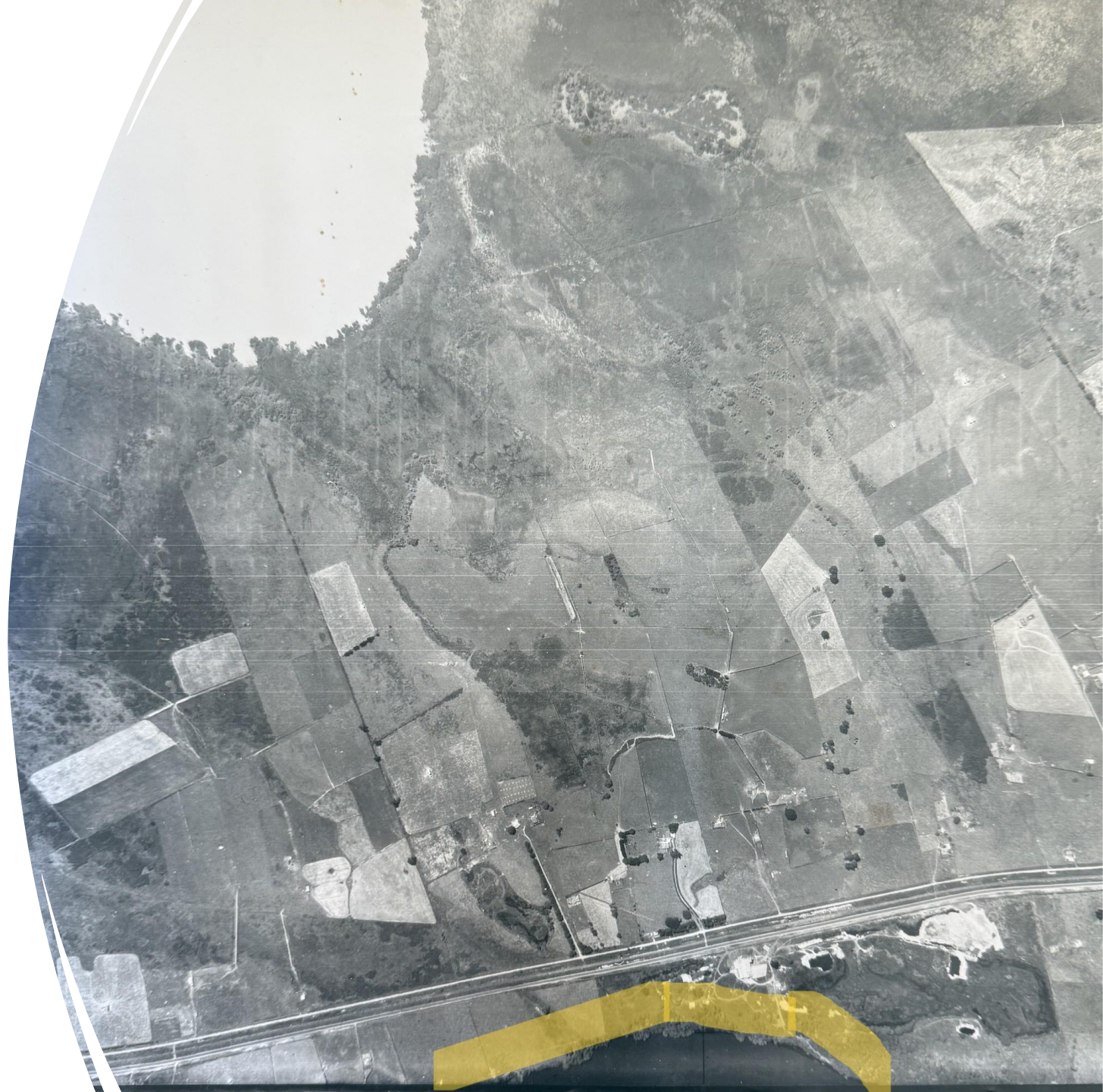
- - lake Level settings, and all other consents regarding the Lake,

Thank you, Mr. Chairman for allowing me time to make this presentation

The great clarity myth

Taken on 22 January 1942 by Air Force for Army Top a dirty colored lake - bottom normal color of Waikato River

- Lake Waikare was an ash pit left over from an earlier Taupo eruption.
- It has mineral springs along the eastern side dumping toxic minerals across about one third of the lakebed.
- It is not a normal waterbody



- **Lake levels -Reality and Myths**

- The Lower Waikato Flood Protection scheme could not have been constructed without the flood diversion into Waikare and the Whangamarino
- There are no records of lake Waikare water levels pre-1960? River levels records exist back to the 1900s and these would confirm the natural lake levels and fluctuations which went in tandem with the river.
- Proposed tinkering with the design of the scheme could put at risk the integrity of the scheme which has been the most successful in NZ to date



the 98 flood level 6.23m

- false to claim that the natural lake level was 1m higher
- at 1m higher level would put water on the edge of the Tahuna road
- Any change to levels would require a new consent
 - while we have koy - silt resuspension will remain constant irrespective of lake depth will continue



Increases in lake levels above the consented levels of 5.5 to 5.65 will compromise the flood storage –

If lake increased to 6.2 [just below the 98 flood level]

reduce design flood storage by **43%** - increase area from **35 to 44 sq k**

increasing the operating lake levels from 5.5 to 6.5 M would reduce design flood storage by **52%**. - increase the area from **35 to 49sq k**

Have we learned nothing

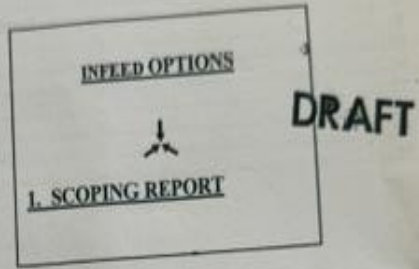
- no one seems to want to learn from the mistake of artificially maintaining high water levels in the Whangamarino in summer.
- This action was the direct cause of the black water events, not the sediment or nutrients
- Expanding Lake Waikare's area will increase the areas of shallow water around the lake fringes and on farmland which will create the very same blackwater events
- The lake is a stagnate pond and if no engineering solution is exercised, will continue to remain the mess that it is
- This is not considered in this proposal and I see nothing that will create an essential flushing situation
- I suggest the Action Plan has missed the mark

Blackwater event Whangamarino



790802
Lake Waikare Cave
Group

LAKE WAIKARE

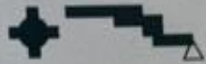


Prepared on behalf of
Environment Waikato
For
Lower Waikato/Waipā Flood Protection Scheme
Consultative Forum

Report completed June/July 1999 By:-

RICE RESOURCES Limited

Professional Project Management Resource Consents and Consultancy Services



My View

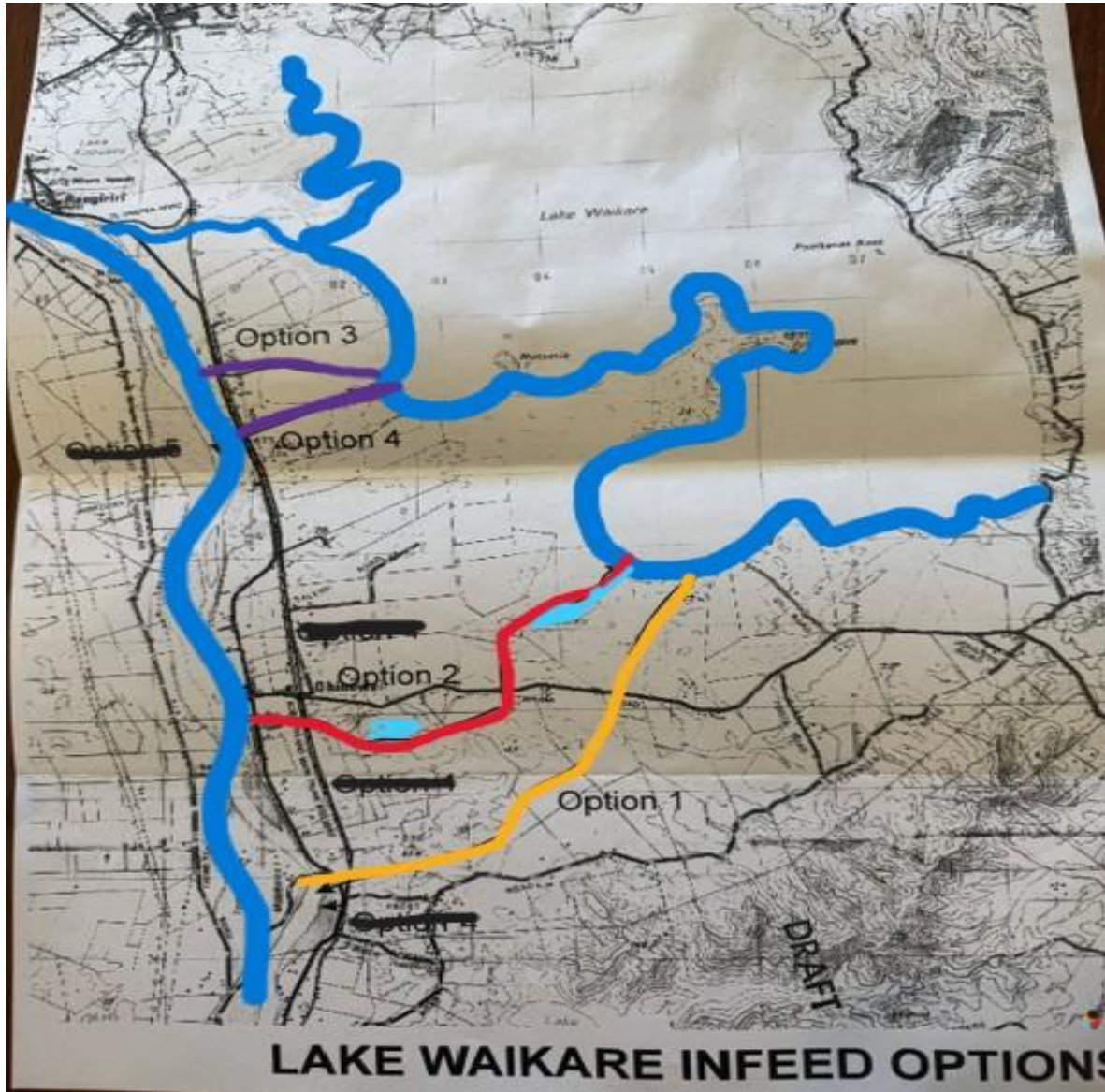
The proposals in the Rice Resources paper should have been given more credence.

Constant throughput rather than some attempt at annual flushing is needed

Removing the weir and putting in controlled gates, to be worked in tandem with the lake gate, would allow water from the lake to be confined in the Whangamarino river as it passes back down into the Waikato

Actions speak louder than words.

It does not matter what else is done, without Flushing, the lake will remain a stagnate pond



Rice report - water diversion

Option 1 [yellow] and 2 [red] both introduce water into the southern end of the lake where the most benefit will occur.

Option 2 [red] is preferred option- expensive but doable.

The lake was healthier when in its natural state water flowed backwards and forwards and overtopped the northern foreshore in the process losing sediment.

Planting the catchment in trees will only reduce sediment intakes - not eliminate them and reduce water flows into the lake.

- Adopting an option from the 1999 Rice resources report is the only way to get fresh water movement into the lake. A simple gravity flow is not possible. The Te Oneta gate is too small and in the wrong place
- This would be **a water diversion not a take**, and it does not create any mixing of waters that didn't historically take place
- Objection to silt going into the river is to overlook the historical natural activity, where silt always entered the lake and some exited both through the Rangiriri and Te Oneta streams and overtopping the Northern foreshore.
- I ask Council to revisit the Rice resource report and get an independent analysis and costing in today's terms. This would be money well spent.

Actions not words

