

Presentation “ Lake Bolac - Where to Now?” - By John Malin

LAKE BOLAC EEL FESTIVAL

Our Beautiful Lake at Lake Bolac is dying!!

Salinity, Sedimentation, Climate Change, Water Diversion, Community and Government indifferences and the Overflow Construction are the key players in this tragedy.

At the present rate of decline we will see the death of our Lake by the year 2020!

This MUST be stopped at all costs!

Water will be one of the 21st century’s most important issues. “Good water management” will be the key to environmental health, social equity and economic success. We cannot underestimate the importance of this issue whether our reference is global or local, water is vital to life and we have a right to enjoy clean water and have healthy rivers, creeks, lakes, estuaries and wetlands.

I would like to briefly outline some of Lake Bolac’s history:

- **As a small child I can remember how “disillusioned” I felt when my sister Lesley did not have to attend school due to the lake road being impassable from heavy flooding, I was never this lucky! Or that Lesley was able to travel with the horse and gig, a huge adventure when flooding occurred and I had to stay at home!**

I will always remember our excitement if the lake was unusually low and we could see the tip of the rocks positioned directly in front of our home at the south beach. Today these rocks can be reached by foot and are always visible.

The lake is 600mm lower than it was then.

- From 1800 onward the expansion of weather information was directly related to the exploration of Australia. In 1841 Mr. George Augustus Robinson, the Government appointed “aboriginal protector”, commented in his diary that Lake Bolac was “almost dry”. It is apparent from this observation, that the sill level of the natural overflow at that time was similar to the level of water here today, and that during summer and autumn it reduced to just waterholes.**

- In the 1920s it was decided between the then State Rivers and Water Supply Commission, the two local Shires (Mortlake and Ararat) and local Landowners (particularly along the Salt Creek) to raise the water level of the Lake for stock watering purposes.**

There was an abundance of water available and after discussion and due consideration of environmental issues; in 1928 the construction of an overflow took place. A sill was constructed with adjustable boards to enable water stored from the winter to be released in late summer and autumn for the watering of stock.

In time it was agreed by the committee that the Lake rose too high in flood and with the outlet being “restrictive” caused erosion to the south east corner of the lake.

In 1972 the present sill was constructed and the floodway widened to further reduce flood levels of Lake Bolac, again with priority given to minimising erosion to the south east corner of the lake.

With hindsight our forebears would certainly have taken a different direction in their decisions to protect this valuable natural asset. We have the luxury of this hindsight and must ensure that the lake’s protection is guaranteed.

The degradation of our Lake primarily falls under three key issues; Starvation, Salinity and Sediment. It is these issues I would like to discuss.

STARVATION:

- **Climate Change has seen less annual rainfall. Also, there is less winter and spring rainfall, the crucial periods for stream flow. There is an increase in summer and autumn rainfall with little or no runoff due to evaporation. This change has hugely impacted on water catchments. A Western Australia study concludes that a 10% decrease in winter rainfall decreases catchment flow up to 50%.**
- **Changing agricultural uses have seen increased cropping, with some impact on water flows.**
- **The conversion of large areas of farming land to Blue Gum plantations has significantly impacted on water catchment as the trees maximise available water usage leaving no runoff. Unmonitored use of chemicals during a blue gum plantation's initial planting may increase pollutants reaching our waterways.**
- **Excessive water diversions along the creek systems have resulted in less water reaching the lake. Catchment Management Authority and Southern Rural Water have now taken steps to address these issues and are implementing policies ensuring excessive water diversions do not take place. The needs downstream, the Salt Creek and other connected water ecosystems must also be taken into account. Due recognition by the Governing entities recognise the right of all property owners to adequate stock and domestic water.**

SALINITY:

- **The salt level in our lake is now three times what it was in the 1950's and is nearly a quarter as salty as the sea.**

- **The salt in Lake Bolac has mostly been imported via the Fiery Creek. Historically this has not been an issue as the higher rainfall allowed much of the salt to escape with flooding. The water was clean and fresh to drink and the creek was healthy. Now, we are unable to use the water for livestock purposes, irrigation or domestic gardens due to the high salt content.**

- **A small number of natural salt springs flow into the Fiery Creek.**

- **Salt springs and swamps have been drained into the Fiery Creek to enable farmers to utilise the land.**

SEDIMENT:

- **A repugnant, foul smelling black layer of sediment now covers the lake bed and has increased by a staggering 400mm over the last 15 years. The increase can be attributed to livestock having access to the creek banks and flooding of the south east corner of Lake Bolac, hence causing erosion.**

- **Today, much of this has been addressed by property owners and landcare groups fencing along the creek. The alterations to the overflow have stopped erosion at the SE shore of the lake. A good example of this improvement was recently seen with 100mm of rainfall coming down the Fiery Creek system resulting in clean fresh water arriving at Lake Bolac.**

- **When the lake overflows again, much of the sediment contained in the lake will drain downstream, impacting on that environment.**

***LAKE BOLAC* is the last, large open area of water in the north west region of Western Victoria providing a unique “remote camping experience”. Aquatic**

sports, fishing, tourism and wildlife are just some of the attractions. All the lakes in the Wimmera or Mallee are dry, so these people travel hundreds of kilometres to Lake Bolac to enjoy our lake and use our facilities.

The Lake Bolac management committee, comprising volunteer workers, share a common ideal and work tirelessly for the improvement of the lake and the lake's environs.

The Lake Bolac College and the Education Department have recently purchased and refurbished the boatshed you see behind you for an array of College and community functions. Their investment hosts functions that introduce visitors who in turn witness first hand the plight of the lake.

- The key activity that must take place is the development of a “Streamflow Management Plan” for the catchment of Lake Bolac. This will take into account issues like “reasonable stock and domestic supply” and the impact of plantations in the upper catchment. A Streamflow Management Plan has to be developed in partnership with the local community and there might be some difficult decisions to make. Monitoring progress will be part of implementing the plan.

Last June the Government released its Water policy which, among other things, makes the Catchment Management Authority the manager of environment water. The CMA is also a key player in the development of a Streamflow Management Plan.

The Water policy also commits the Government to identify areas that are suitable for plantations and which do not impact unduly on water flow. The CMA is partway through a major study for the region on the impact of land use change of the water resources of the catchment. A study of the findings to date will be available soon. This report will be very useful in planning for the future of Lake Bolac.

The bottom line is that we are in a very dry period, maybe climate change, and our water resources will be under great pressure. So we all need to work together to find a rational approach to sharing the water.

- Governments have generally neglected restoration of waterways through promoting local “community” ownership. In our case Government stakeholders must recognise and agree upon who is the responsible authority and outline the

boundaries of that responsibility. Accountabilities in all aspects of management should be transparent and clearly defined.

- **We need to quantify statutory terms such as “reasonable stock and domestic supply” What is reasonable?**
- **Revision of policy by Governments on tree plantations in and around water supply catchment areas which are not currently protected; identify the limits on a catchment’s threshold of sustainability and survival and set guidelines in place to ensure the legislation is adhered to.**

We as a community are conscious of the immense damage which is occurring at Lake Bolac and are calling for Governments to recognise and help protect this beautiful water system. The magnitude of the effects of salinity and other pollutants to our waterways must be recognised by all sides of politics as a crucial issue. Government support must be a priority with immediate action taken before any further degradation takes place. Action in 5 years time will be too late. It would not address the habitat for water birds and wildlife, it will not save the recreational and aesthetic values of the lake, it will not aid economic growth and it will not ensure the lake’s survival; we need *ACTION* now!

Information systems for monitoring and reporting data need to be implemented now. The death of the lake would heavily impact on social, economic and environmental outcomes.

Is this a legacy we want to leave our children?

Sustainable water and healthy water systems are among the most important challenges facing all sections of our society.

- ***Education, Awareness, Action and Commitment will be the key to their survival.***