

## The Sad Saga of Lake Allom

*Fraser Island's perched dune lakes are critical to the World Heritage values of this wonderful island. Unfortunately though, many of the lakes have become seriously degraded in the relatively short time that Fraser Island has been a major tourist destination. This has been through accelerated infilling mainly from road erosion, loss of water quality and from some insensitive management practices. This short history of Lake Allom epitomises the serious issues which can impact on these very sensitive and very beautiful island icons.*

For probably 40,000 years or since Lake Allom was created by one of the many episodes of sand accretion on the huge sandmass that is now Fraser Island it has nestled in the dunes hidden away by a wall of rainforest. Aborigines doubtless visited the lake and drank its water. The number of gonyah trees near the lake is testimony to that. Doubtless it was exposed to some natural disasters including drought and flood and fire. The number of Melaleucas lining the shores of the lake are testimony to the former and the huge hoop pine concentration beside the lake is evidence of the probability of the latter. However through the millennia of its existence little changed. Apart from those gonyah trees there is little evidence of Aboriginal use of the lake. Unfortunately though unlike other Fraser Island lakes we do not even know the traditional Aboriginal name for it.

Even when in the late 1920s, Surveyor Noel Allom working for the Lands Department came across the Lake while surveying the island and its timber potential nothing changed for another 80 years. Noel Allom encountered the lake while doing the "AB" traverse in the northern end of the island's tall forests resulting in it being known for years as "A.B. Lake". His eyes were possibly the first non-Aboriginal to sight this beautiful and then pristine lake. He was there about 20 years after the Bogimbah Creek mission was closed and when there were virtually no Aboriginal residents left on the island.

So while many Fraser Island lakes retained their Aboriginal names, alas Lake Allom's Aboriginal name was lost forever. It was only when the Queensland Place Names Board appointed a sub committee to review place names on Fraser Island in 1978 that it was decided that, in the absence of any known Aboriginal name, it should be named after the surveyor who first mapped it. There was already a precedent for that with the prior naming of White Lake after Surveyor White.



Lake Allom 1974 on FIDO's first safari there

In the early 1970s the Forestry Department opened up a new road into Lake Allom. It was part of the push to exploit the forests in the northern end of Fraser Island which had until then largely escaped the worst impacts of the axe and saw. The road ran right down to the western shore of the lake. Unfortunately this was a steep slope and the road soon eroded with its use even by a very small volume of traffic. FIDO camped here on about three occasions during our Top End Safaris in the late 1970s. The erosion continued resulting in a small alluvial plume at the bottom of the road.

In 1978, following the Queensland Government allowing the establishment of the Cathedral Beach Resort the Forestry Department extended the Woralie Track and some of its former logging tracks right through to the eastern beach midway between the "Maheno" and Cathedral Beach. This passed just to the south of Lake Allom. As soon as the word got out Lake Allom began to receive an ever-increasing number of visitors.

That visitation increased rapidly once the new picnic area/campground was established on the south eastern end of the lake in 1985. Initially the new camp ground appeared to be a wonderful advance because it was in a pristine environment. The Forestry Department which had a better budget for managing recreation than the National Parks and Wildlife Service even constructed a toilet to service the area. They provided a water tap at the site and barracks near the lake for staff who may be working in the area. To provide the water for the barracks and the campground the Forestry established a pumping shed on the shores of the lake and drew water from the lake.

The road, campground and picnic area was well away from the lake shores. It was assumed that the problem of the alluvial plume at the initial access point to the lake could soon heal and there would be no recurrence because of the distance of the road from the lake. We were wrong on both points.

Once the word of the picnic area got out Lake Allom began attracting an ever-increasing volume of visitors and campers. The campground was rapidly stripped of its vegetation and impacted by fire rings occurring randomly all over the site.

FIDO continued to monitor the initial plume but the Government only started to address the initial plume in about 1999 when the walking track around the lake (established in 1985) was being upgraded. Unfortunately the silt which had been deposited remains in the lake. Having established the silt traps nothing further was done to maintain them and for the past three years they have trapped no silt.

In March 2002 John Sinclair was surprised to observe another more serious alluvial plume immediately below the campground. He reported the development to the Joint Fraser Island Management Committee Meetings in April even producing and showing photos. Despite this absolutely nothing was done to stop the flow apart from nominating it as one of the projects which the Queensland Government would like the Commonwealth Government to fund with a Natural Heritage Fund Grant. The Commonwealth refused to provide any funds for projects on Fraser Island and the Environmental Protection Agency still didn't do anything. They even spent \$60,000 of Commonwealth money constructing a viewing

platform at Lake Allom only 10 metres from the plume and didn't even investigate or least of all address for the new plume and try to stop it from growing.

In August 2002 during an El Nino year John Sinclair observed the impact of some light rain. During a lunch time shower less than 6 mm of rain caused water to start running down the road from both the barracks and the Woralie Track ends as well as the campground and into Lake Allom. It was an illuminating observation and a report and photos were published in MOONBI 103 (but unfortunately the B&W photos were not as clearly as the coloured originals). Still nothing was done for another 12 months.

In August 2003 John Sinclair observed the lake at the lowest level he has ever seen it at. The water had the distinctive green colour resulting from an algal bloom. This was or should have been the most oligotrophic of lakes and to see an algal bloom indicates something is very seriously amiss and the lake has an unnaturally higher level of nutrients. The possible source of those nutrients still has not been established but it could have come from the nutrients carried in the wash from the road and campground and/or the nutrients added by people feeding turtles near the lake. Whatever the source it has to be addressed. In response to an urgent plea by FIDO QPWS initiated measures to try to stop any more alluvium reaching the lake. FIDO has also facilitated a study to establish the volume of the lake and how long it would take to fill. FIDO is also keen to see the silt which has already flowed into the lake removed.

The other matter which needs to be urgently addressed is stooping any water being taken from the lake. In another Federally funded project carried out at Lake Allom the old long drop toilets, which used no water and were constructed in 1985, were replaced with new hybrid system toilets. These toilets have accelerated the volume of water which is being taken from the lake. (See article elsewhere on this page).



### When Rangers Should Walk

For some time FIDO has been concerned that Fraser Island Rangers are so automated that they can't walk down to start the engine on the water pumps. This occurs at both Lake Boomanjin and Lake McKenzie. While in the latter case it isn't so obvious to ordinary visitors to the lake at Lake Boomanjin the impact is very visual. Although the pump is less than 60 metres from the picnic area rangers have been driving 500 metres back to the locked gate and then 500 metres along the lake shores to reach the pump. On 23<sup>rd</sup> October we were advised by the Ranger in Charge of the Southern part of the island that a new bore had been installed and that water was therefore no longer being taken from Lake Boomanjin. However on 24<sup>th</sup> October we saw that Rangers are still driving along the shores of Lake Boomanjin and that that there was no evidence that anyone walked from the picnic area to the pump for at least six months.

Walking to start a pump would save time, set a better example for Fraser Island visitors, help make rangers fitter and be much better for the Lake Boomanjin environment. It would also be better for Lake McKenzie if vehicle were only driven to the pump when some significant load needed to be carried to or from the pump-site.

**So in just 80 years from the time the first non-Aboriginal set eyes on the Lake Allom to the present the almost everything done to manage Lake Allom has led to its degradation.**



### The new viewing platform at Lake Allom

*In former times water would have lapped the bottom step. The extremely low water level now leaves this platform high and dry. FIDO is concerned that water levels are relatively lower in Lake Allom than other lakes.*

**Lake Allom is located at latitude 25°14' south and a longitude of 153°12' east. It is just 500 metres north of the Woralie Track. It covers an area of 6.418 hectares with a maximum length of 573 metres and 2007 metres wide at its maximum width. It has a perimeter of 1,203 metres. The EPA would not approve a FIDO supported project to measure the lake's depth and volume.**

### Maintaining an Equilibrium

FIDO's concern is that because Research done by Dr Maureen Longmore at Hidden Lake demonstrated that most perched dune lakes have catchment areas no greater than the surface area of the lakes themselves. She drilled 50 metres of from the lake all the way round and didn't reach water at lake level. She also found that the amount of radioactive cesium in the lake had not significantly declined more than three decades after the last atmospheric nuclear test. Her first finding has been confirmed by exploratory bores by the EPA since at a number of lakes. The second shows there is no leaching and any pollution added to the lake water will remain indefinitely and be cumulative.

There are several important points which emerge from this:

- Perched lakes on Fraser Island have established an equilibrium between precipitation and evaporation. If water is taken out of the system by pumping then the equilibrium of eons will be changed and the lakes may eventually dry up. For years the QPWS has pumped water from Lakes McKenzie, Boomanjin and Allom. This can't continue. Apart from the environmental impacts there are also matters of public health to be considered and FIDO is urging that no water is pumped from any perched lake on Fraser Island.
- The water levels cannot be adjusted by pumping into the lakes without disturbing the chemical balance of the lake.
- Every effort has to be made to stop any additional nutrients getting into any of Fraser Island's perched lakes.

It is important that there should be no further pumping from any of Fraser Island's perched dune lakes and the consequences this might have for fighting fires with aerial bombing.