

Saving The Lower Lakes: **A local perspective.**

Snapshot
January 2009

Is nature our best chance?

Lake Albert - December 2008

**Lake Albert (same location
as above) - February 2008**

Photographs supplied by the Fischer family

In a nutshell: The Problem Facing the Lower Lakes

The amount of water reaching the Lower Lakes is declining.

As the water levels in Lake Alexandrina and Lake Albert recede, soils in the lake beds are turning acidic when exposed to air.

As the lakes continue to dry out, the water is becoming increasingly saline and more acidic hot spots are emerging on exposed lake beds.

How to address the dangers associated with this natural phenomenon is the subject of much debate and anxiety. The South Australian Government is proposing to open sections of the 7.6km of barrages that block the Lower Lakes from the Southern Ocean and flood the Lakes with sea water to keep the soils submerged.

The Government is also proposing to construct a series of weirs to cordon off areas within the lakes.

The large majority of Lower Lakes residents do not want sea water used and claim the use of weirs would hinder the recovery from the current drought. Action groups on both sides of the lakes have scientific proof that the Lower Lakes have not been a sea water environment for more than 5,000 years. They know that freshwater tributaries like the Finniss, Bremer and Angas rivers and Currency Creek inject much needed freshwater into Lake Alexandrina during the winter.

They believe a man-made sea water flood would trigger an environmental disaster. Thousands of tonnes of freshwater fish would die, while some areas of the lake would become hyper-saline.

The people of the Lower Lakes acknowledge the dangers associated with acid sulfate soils, but are frustrated that Government is not listening to their solutions.

This document hopes to highlight the united resolve within the lakes community and the extensive local knowledge that has helped develop ecologically-based strategies that can rescue this internationally significant environment.

Diagram 1: Normal conditions

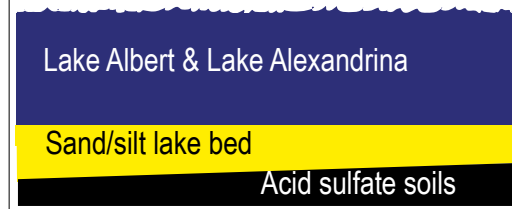


Diagram 2: Drought conditions

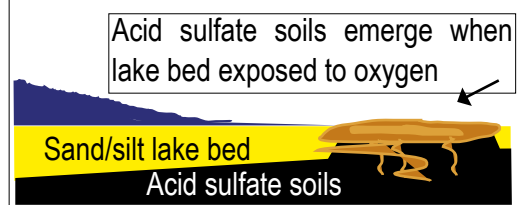
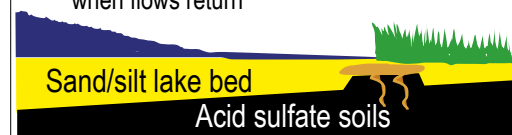


Diagram 3: How to manage acid soils

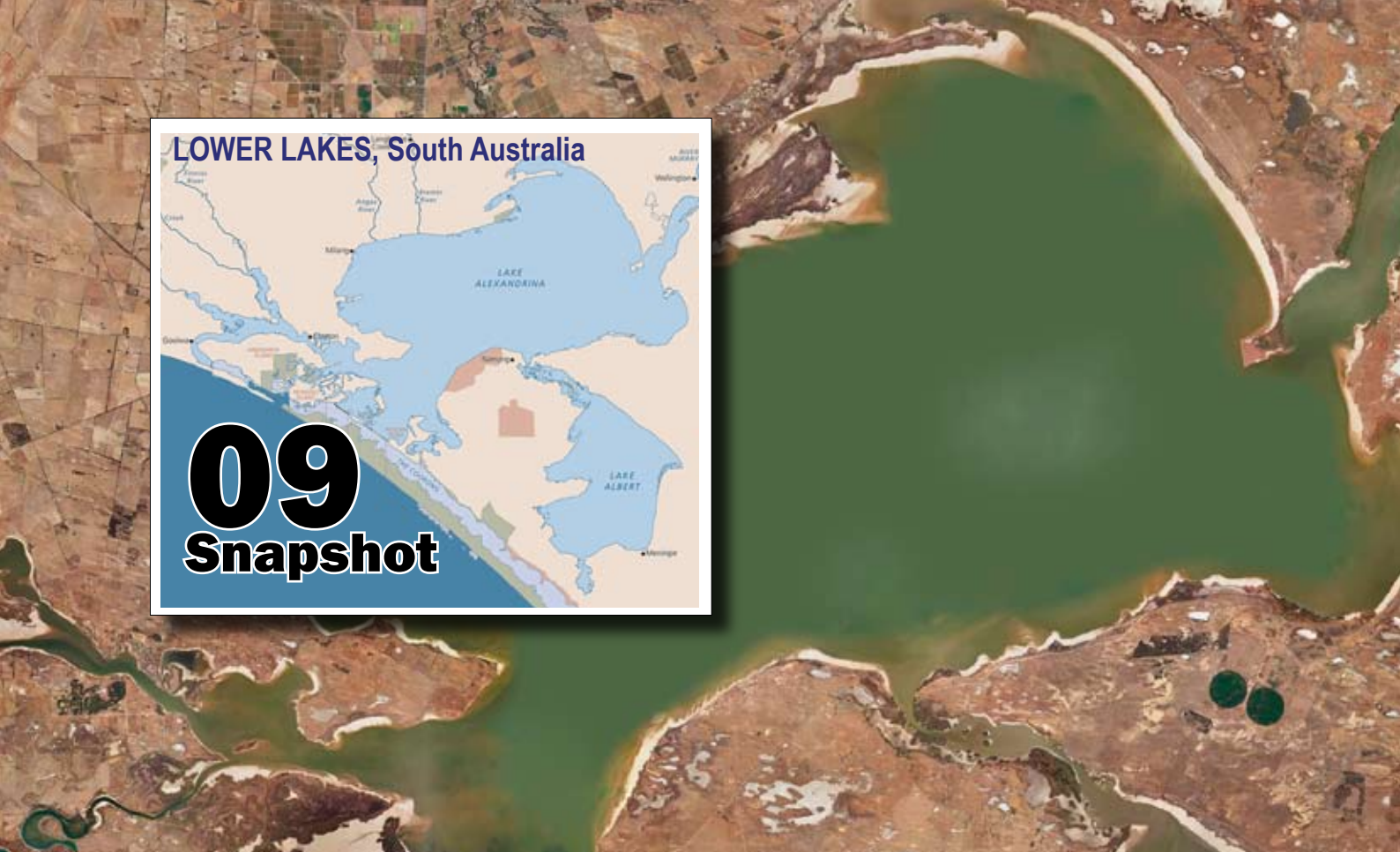
1. Revegetation
2. Apply lime & mulch
3. Slowly re-cover with water - using wind tides when flows return



The lakes currently receive a minimum of 350 gigalitres a year. This water is part of the State's dilution flow, an agreed volume to maintain water quality at levels acceptable for Adelaide's drinking water. South Australia receives 696 gigalitres a year in dilution flow. It is estimated that if this flow was increased marginally, enough water would reach the lakes during summer to maintain them at levels that would minimise acidification.

Meanwhile locals are encouraged by the revegetation that has already occurred on exposed lake beds after the winter rains. This growth has helped neutralise the acidification process.

There is a strong belief that the management of Lower Lakes wind tides, a comprehensive revegetation program on exposed beds, and applying lime and mulch to acid hot spots would keep the threat of acidification in check long enough to give nature a chance to save the Lower Lakes.



LOWER LAKES, South Australia

09
Snapshot

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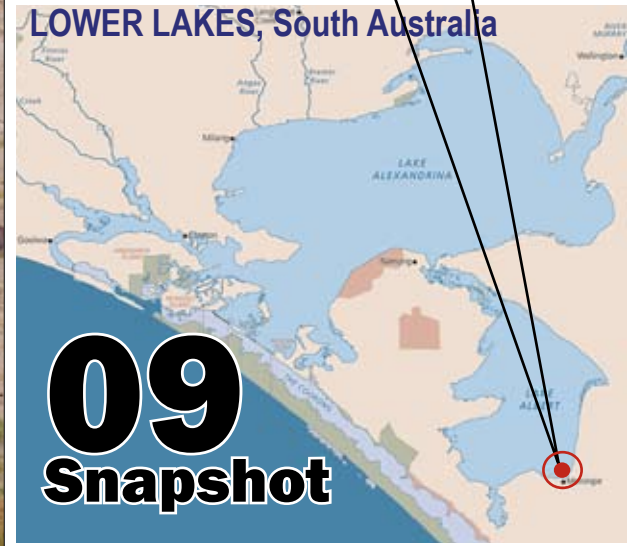
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Local knowledge the key

Neil Shillabeer - Community leader

LOWER LAKES, South Australia



Lower Lakes and Coorong Infrastructure Committee Chairman Neil Shillabeer was an irrigator on the Narrung Peninsula until March, 2007 when he had to abandon the potato, carrot and lucerne growing business he and son Ben had developed over many years. Water access and quality became major barriers to their business.

It was the climatic character of the area that attracted them to the area from the Adelaide Hills: not too hot in the summer and quite temperate in the winter, which provided ideal growing conditions. Neil is also a board member of the SA Murray Irrigators and sits on the SA Murray Darling Basin Natural Resource Management Board's River Murray Advisory Committee.

The Narrung Peninsula has not suffered from seasonal drought in my time in the district. The drought has come from upriver, with successive years of low flows causing the problems in our region.

However, it is the Lower Lakes that are suffering most. It is distressing to most residents in the region that a proposal to flood the lakes with sea water remains an option.

Letting sea water into the Lakes creates two major problems:

1. It is virtually impossible to get out again (without a 1956 type flood event) creating a compounding effect on salinity levels. Whilst it initially covers and ameliorates acid sulfate soils it soon changes and exacerbates the situation enhancing the manifestation of sulphidic ooze. So without being able to freshen the sea water we're back to where we started from and aquatic and plant life will die.
2. It immediately negates other options to save the Lakes. Nature's successful bid to regenerate vegetation on exposed lake bed areas would be killed off. Small fresh water volumes to maintain levels above the critical acidification threshold would be rendered useless. Last year direct rainfall over the lakes and local tributary inflows provided significant recovery to the environment. Bio-

remediation programs also would no longer be an option because of hyper-saline conditions.

People around the Lakes are witnessing significant regrowth of vegetation on exposed lakebed areas, even where acid sulfate soils are visible.

We urge the Government to immediately release funds already set aside for the long term management of the Lower Lakes, so bio-remediation can be implemented, to further the work that nature has already started.

Local LAP and community groups are "bursting at the seams" to get involved with seed collection, propagation, planting, mulching, applying lime and other activities that could prove useful. By working in conjunction with Government agencies, a great deal could be achieved before any environmentally disastrous decisions are taken.

Acidification of the water body in the Lakes is a major concern so recovery in Lake levels will need to be managed very carefully.

Continued next page

“Suggestions that an additional 1000 gigalitres of water from upstream would be needed to return the lakes to pre-drought conditions is a gross misrepresentation of what we are asking for...”



Some of the members of the Lower Lakes and Coorong Infrastructure Committee, from left, Tracy Hill, Clem Mason, Neil Shillabeer, Dr Michael Kerrigan, Sharon Bland, Andrew Dawes, Michelle Ousley and Lesley Fischer.

Continued from previous page

If some exposed lake bed areas turn to acid then re-wetting needs to happen slowly so pH levels in the water body aren't affected by rising water levels and associated wind tides dragging the acids back into the main body of water.

Fortunately it is more than likely that when improved flows return they won't be of any great magnitude initially, because the whole system is so parched, that they can be managed accordingly.

Suggestions that an additional 1000 gigalitres of water from upstream would be needed to return the lakes to pre-drought conditions is a gross misrepresentation of what we are asking for. Much lower volumes over and above the 350 gigalitres of dilution flow that passes Wellington are all that is required to get through to the winter of 2010.

There is no need to fill the Lakes up again right now. Many Lower Lakes residents believe that it is only the lack of political

will that is preventing the lake from receiving small, but critical inflows to survive.

Building weirs and structures in the Lakes and Lower River, breaks down the linkages in the ecology of the system. For every engineering solution there is another impact that has to be dealt with.

Each structure built leaves a damaging environmental footprint which can never be restored to its former status.

Generations of local knowledge exists in the Lower Lakes region. Local people work closely with and understand their environment better than outsiders.

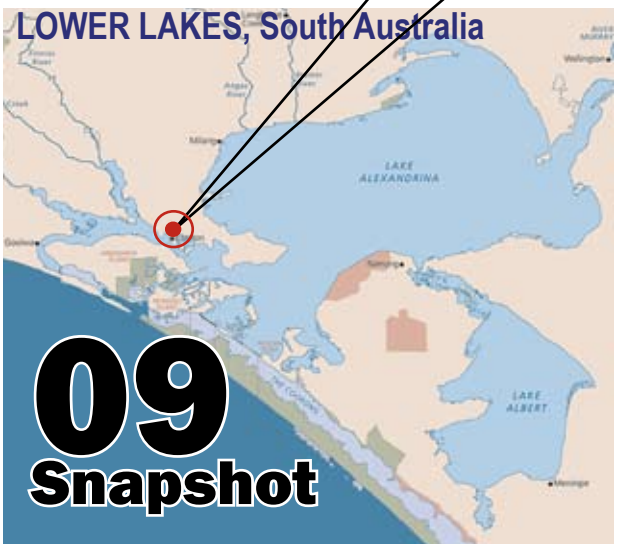
I hope the Government is listening to them.

It is their future at stake. I fully understand the pain and hardship communities are experiencing along the whole of the Murray and that there is limited water in the system, but I also understand that if we don't look after the health and well being of the whole river, then none of us will have it.



Henry Jones - Pro fisherman

LOWER LAKES, South Australia



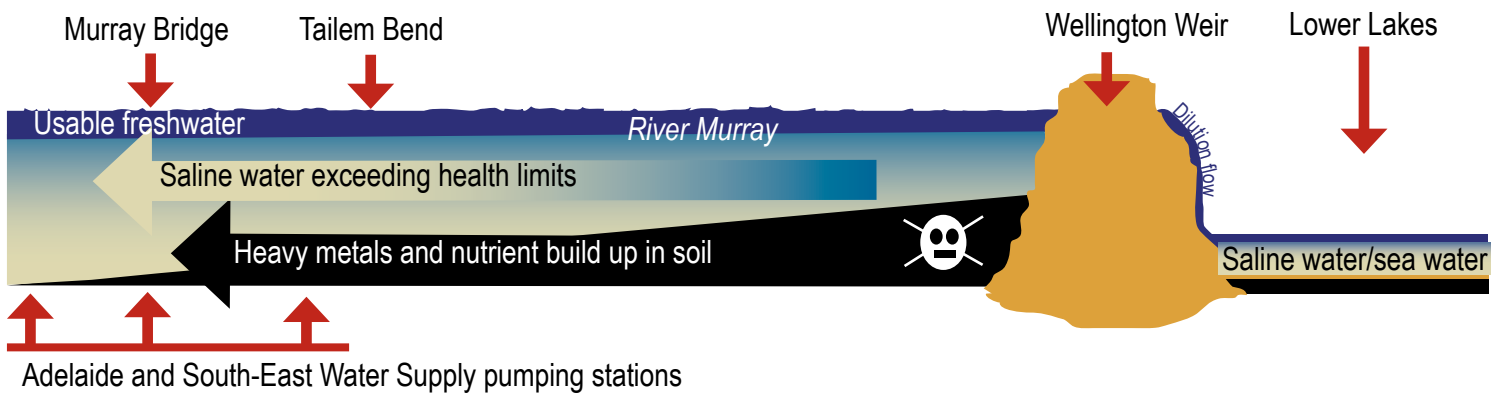
09
Snapshot

Neil Shillabeer and Henry Jones are two of the driving forces behind the fight to save the Lower Lakes.

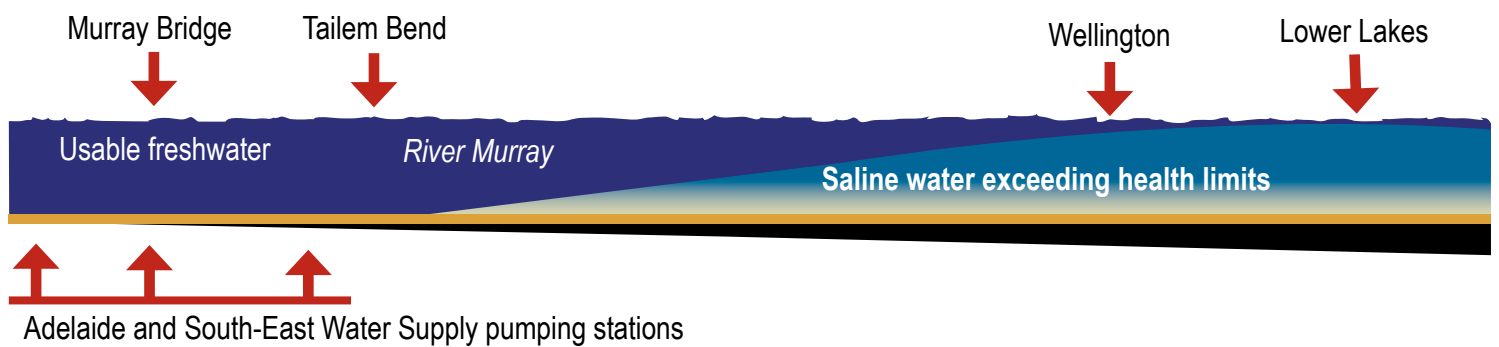
They are regarded as two of the most knowledgeable locals on the issue and both sit on the State's River Murray Advisory Committee. They are adamant that Government could achieve much more by working with locals to save the Lower Lakes.

What a weir could do to Adelaide's drinking water

Wellington Weir's Saline Backwash



No Weir - Murray flushes salt & nutrient load into lakes



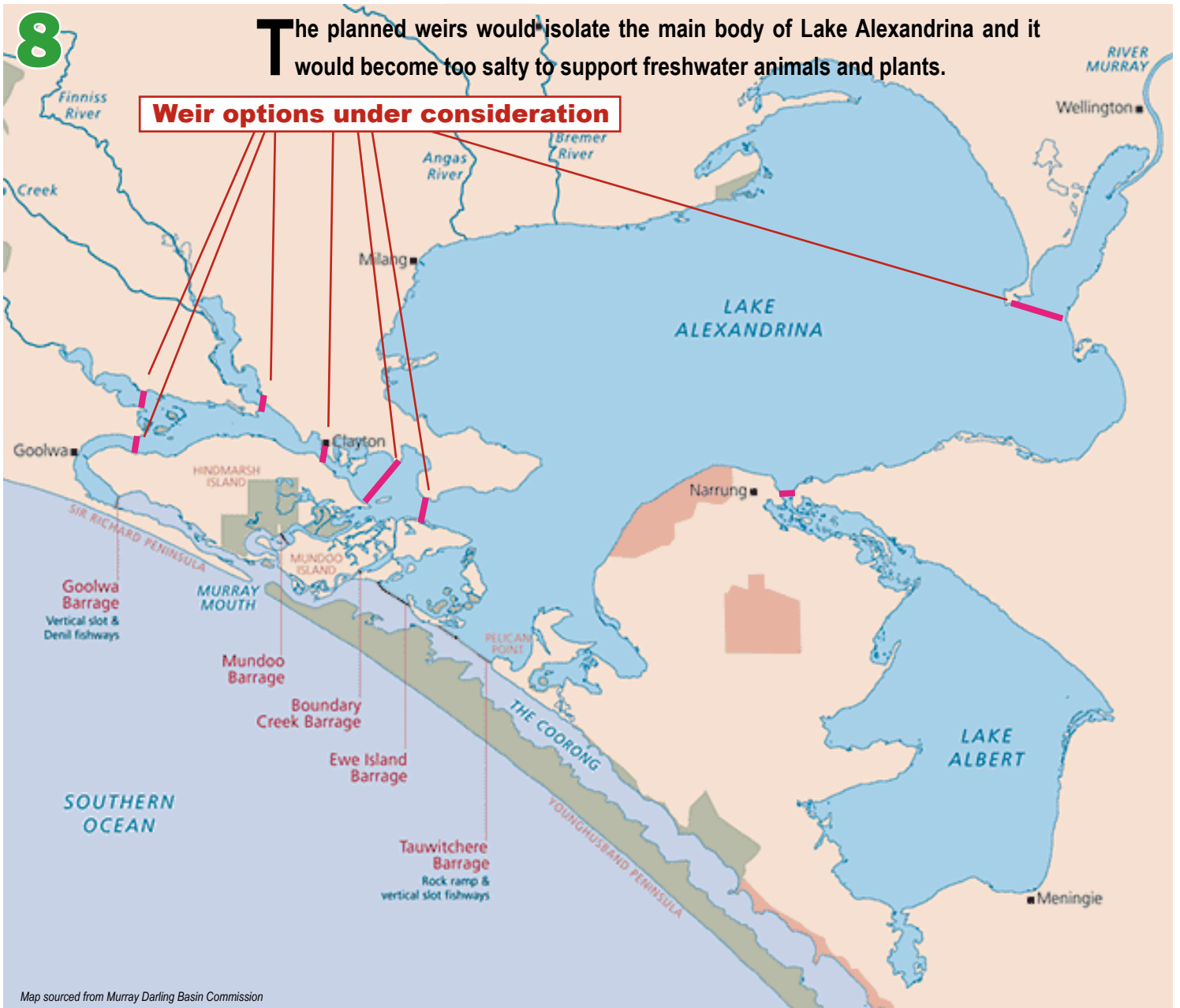
Facts about the Murray and Salinity levels

- Salinity levels in the Lower Lakes currently range between 7000 and 10,000 EC units - it cannot be used for stock or domestic purposes but remains a freshwater environment.
- Up to 1200 tonnes of salt flows past Wellington into the Lower Lakes on average every day. A weir at Wellington is likely to increase salinity upstream in the Murray to levels that are deemed unsafe for human consumption by the World Health Organisation.
- Salinity levels must remain below 1400 EC units to be safe for drinking.
- Most of Adelaide's water supply is pumped from the River Murray in these dry times.
- The Lower Lakes **have not been a sea water environment** for more than 5000 years. While the salt levels in the lakes have varied depending on tides and weather conditions during that time, they have remained a freshwater ecosystem.
- The salt content in sea water is about 50,000 EC units.

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The planned weirs would isolate the main body of Lake Alexandrina and it would become too salty to support freshwater animals and plants.

Weir options under consideration



Map sourced from Murray Darling Basin Commission

Temporary weirs to be a disaster

Buying fresh water, instead of building temporary dams is the best investment the State and Federal Governments can make in the Lower Lakes, according to Henry Jones.

“If we can get some water back into the wetlands, not all of them, but something, it would have an enormous benefit,” Henry said.

“It has to be the cheapest way out instead of wasting a whole heap of money on weirs that we know are going to do enormous damage and are going to take us a lot longer to recover from when the rains do come. Instead of spending money on new committees, on a whole heap of new bureaucrats on enormous wages, for Christ sake spend that money getting some water into the system.”

“They want to do a lot of work to save Currency Creek and the Finniss River wetlands by building weirs and the like. I don’t believe it is as big a problem as they are saying.

“Sure some of the ponds may go acidic if the streams are

left as part of the greater Lower Lakes but the Finniss and Currency creek are the best set up to survive because they are spring fed.

“Above where the lakes levels are, they have got fresh water coming in, so Yarra pigmy perch, Murray hardy heads, parrots and emu wrens can all go up to these spring environments and survive.

“It’s not going to be good for them, but they will survive.

“So it is far more important to look after the rest of the lake.

“If they put a weir to block off these wetlands from the rest of the lakes system you are going to bottle up that water - there won’t be any flows and that is not how to manage water in the Lower Lakes.”

Mr Jones said water that may be in the lower reaches of the system one day, could be blown to the upper reaches the next day. “Life giving wind tides are integral to the ecology of the lakes and weirs will ruin their effectiveness.”

United to save the lakes

Action Group members - standing: John Yelland, Trevor Giles, Chris Bagley and Henry Jones. Sitting: Anne Hartnett, Bruce Allnut and Professor Diane Bell.



River, Lakes & Coorong Action Group

LOWER LAKES, South Australia



Members of the River, Lakes and Coorong Action Group come from all walks of life, but march to the beat of one drum.

The group has been calling for a Common Sense Community Action Plan to save the Lower Lakes.

Their pledge is a simple one:

“We advocate the return of fresh water end-of-river flows. Until this occurs, we propose a low intervention strategy to reduce the acidification of soils and allow nature to recover. The looming crisis requires a rapid response, but not one that destroys the ecosystem recognised as a Wetland of International Significance under the Ramsar Convention.”

Their 10-point Low Intervention Plan is -

1. Work with local communities.
2. Respect local knowledge of the Ngarrindjeri people, local fishers, farmers and environmentalists.
3. No weirs, no sea water.
4. Invest in mitigation, especially in high risk areas, by planting, mulching and liming and by limiting access to ensure minimal soil disturbance.
5. Maintain sanctuaries for freshwater and terrestrial flora and fauna.
6. Protect endangered species.

7. Reduce diversions from tributary catchments.
8. Urge Adelaide to accept more water restrictions.
9. Bring water from the northern Basin.
10. Protect the Coorong and Lake Albert.

Group member Professor Di Bell is frustrated that there is \$200 million Federal Funding for long term measures, but none is being spent resourcing remediation work.

“We propose a softly-softly approach where high risk areas would be targeted for planting, liming, mulching and other treatment to ensure minimal disturbance of acid sulfate soils. That could start tomorrow if we had the funds. Let’s not wait for last resort strategies, let’s act now.”

More weirs, will mean more devastation

There are few more qualified to speak on the Lower Lakes and acid sulfate soils that threaten them than Adelaide University Earth and Environment Sciences Adjunct Associate Professor Keith Walker.

Professor Walker, who has assisted locals develop their Low Intervention Action Plan and has conducted research on the Murray for more than 35 years, writes....



Professor Keith Walker

LOWER LAKES, South Australia



Weirs store water, but that is not all they do. They also create pools that trap sediment and restrict currents, creating still-water conditions. In our region, there is a risk of algal blooms, even toxic blooms, as the water warms in summer and autumn.

In fact, Lake Alexandrina is one of the first places in the world where toxic algae were recorded. A bloom reported in the scientific journal Nature caused the death of cattle and sheep around the lake in 1878.

Weir pools are home to different plants and animals from those living in rivers or lakes. The Carp and Willows now so common in the Lower Murray are alien species, better adapted to regulated rivers than their native counterparts.

Weirs on the Murray have changed the river in ways that many of us will only really come to understand in years to come.

They have alienated the river and floodplain and driven a deep wedge into an ecosystem that depends on the connections maintained by floods. They have caused erosion and deposition, changing the bed profile of the river. They have caused salt to accumulate in the floodplain soil, rather than be flushed down river, leaving an escalating salinity problem for the future.

The acid sulfate soil problems we face today are made worse by the weirs and barrages because they've caused the river and lakes to accumulate sediments. It's ironic that we should be considering more weirs to control problems that are caused partly by weirs in the first place.

The weir proposed for the river at Pomanda Island, near Wellington, would become the eleventh below the Murray-Darling junction, and add to the effects of the levees and barrages.

The weir(s) on the Goolwa channel are planned to create a freshwater refuge near the mouths of the Finnis River and Currency Creek, although there is no evidence that the resident species need a weir to survive. The endangered fish can be secured in other ways. Most of the local species are able to withstand drought, and the remainder would survive in other areas and recolonise the area once fresh water returns. There is no need to speak of 'extinction'.

What are the chances for long-term recovery if weirs are put in place and Lake Alexandrina is allowed to become more saline? And what of Lake Albert and the Coorong?

Nature has an amazing capacity for recovery and will make repairs if we lend a helping hand. Weirs will not aid the process. Weirs could be in place for 5-10 years, perhaps longer, and then would begin a long, slow period of recovery, in whatever remains of the river and lakes.

This is certainly not to say that we should do nothing. There are practical ways to mitigate acid sulfate soils, and the Low Intervention Strategy is a step in that direction.

Silt displacement bi-product of weirs

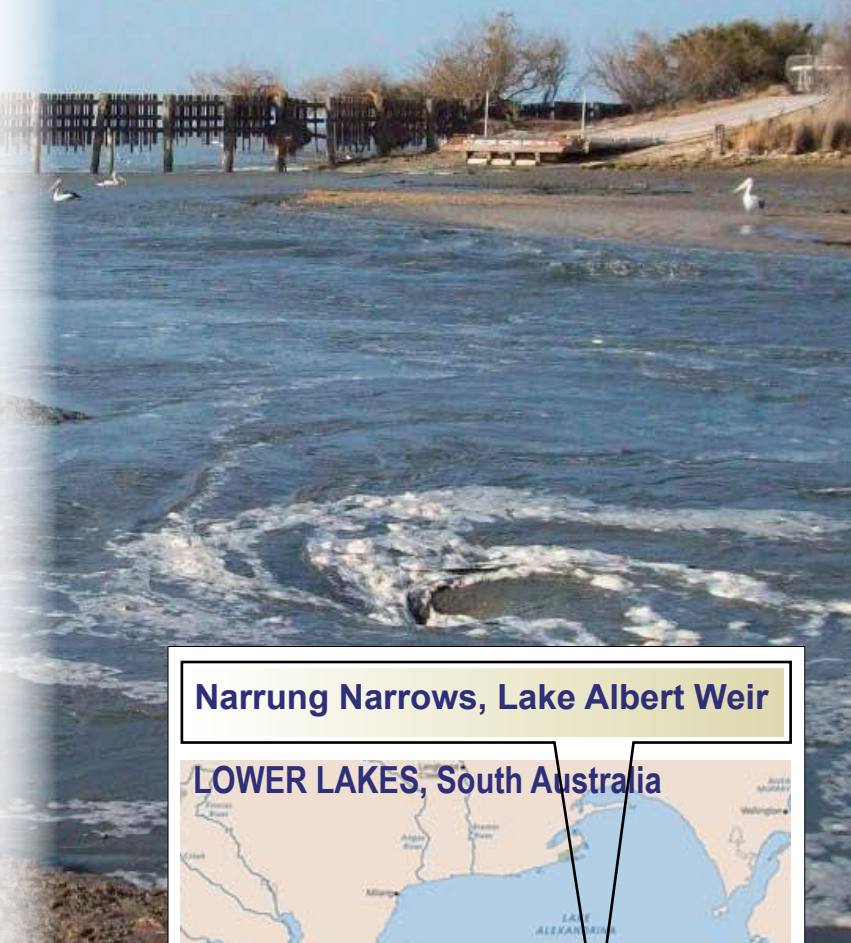
Silt displacement is an inevitable bi-product of structures or embankments built anywhere in the Lower Lakes or Murray. Silt displacement becomes very evident when water levels drop as the wind tides shift volumes of water around the lakes.

The embankment constructed at the Narrung Narrows, whilst it has met its short term objectives of maintaining Lake Albert above acidification levels, highlights what would happen if a much larger weir were to be built at Pomanda Point near Wellington.

38,000 tonnes of material was used at Narrung for a 300 metre long embankment in silt depths of 7 to 9 metres. Significant silt displacement resulted, creating a huge dredging job if the area is to be restored after its removal.

Imagine what 700,000 tonnes of material dumped into approx 30 metres of silt over 2600 metres of weir at Pomanda would do. The silt displacement would be massive. Environmental recovery on removal of the weir has never been discussed or costed at this stage.

The construction of the causeway leading to the eastern side of the Narrung Ferry in 1967 caused significant change to flow patterns through the Narrows between Albert and Alexandrina resulting in the silting of huge areas along the eastern side of the Narrows. Surely these are obvious examples of some of the damaging environmental effects resulting from engineering solutions.



Narrung Narrows, Lake Albert Weir

LOWER LAKES, South Australia



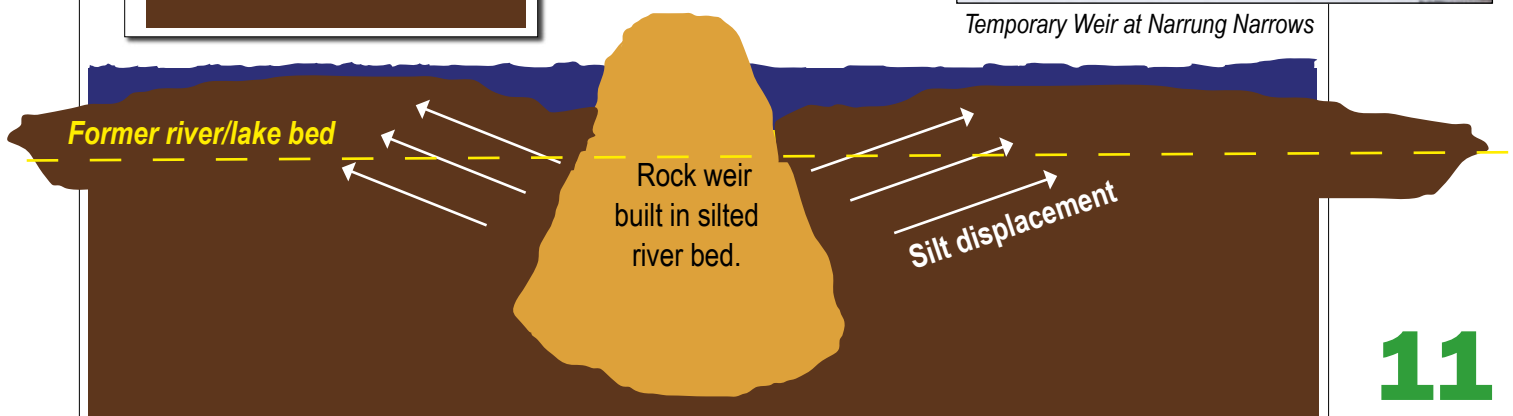
Silt displacement caused by weir construction



Lake bed after weir construction



Temporary Weir at Narrung Narrows



Working with nature does work

Dennis Chandler - Grazier

LOWER LAKES, South Australia



Dennis Chandler has some of the best beef cattle on the Lower Lakes.

He has managed the Yalkuri operation alongside Loveday Bay for the past 16 years and adheres to strict principles of sustainability in all facets of the business.

Dennis believes his secret to success is a personal code. "You have to work with nature, conserve the land, look after the environment and give it to the next generation in some sort of order."

When it comes to revegetation on the Lower Lakes, Dennis is conscious of protecting the shoreline.

Yalkuri does not graze cattle on the foreshore of Lake Alexandrina. Dennis and his staff decided long ago to fence off the waterfront to create an environmental buffer of reeds and grasses right to the lake's edge.

As the photographs above and on the right highlight, Dennis

maintains nature is doing the rest.

"You don't have to be a rocket scientist to see what nature is trying to do. The grasses and reeds have started spreading across the bare lakebed."

Dennis doesn't believe flooding the lower lakes with sea water is a viable option and advocates a pro-active approach that involves broad acre shoreline revegetation and the liming of acid hot spots.

"Let's get in and have a go at revegetation, identify what plants and grasses are already growing and give nature a helping hand."

"I think the best approach would be seeding back and forth, along the contour of the shoreline and just steadily creeping out to the water line."

"There is a strong argument to micro-manage the problems we are facing instead wiping everything out with sea water."

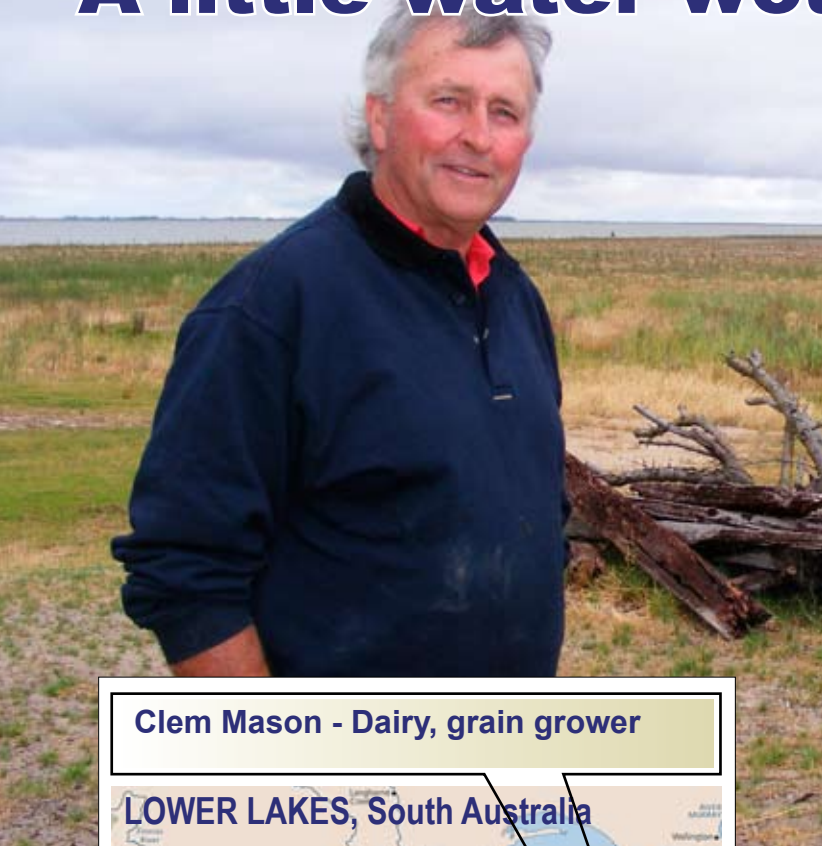
Now...

January 2009

and then.

December 2007

A little water would help a lot



The Mason family farm's summer sleep-out used to be right on the water's edge of Lake Albert.

The Lower Lakes are Clem Mason's life. He and his family run a large dairy and also crop about 6000 acres of grain each year. Most locals on the eastern side of the lakes know Clem and look to him for leadership.

In the past year he has switched to dry land dairying and also enjoyed one of his best grain harvests in recent times: "I can't complain about the farm, it's been a good year all round from that point of view. With freshwater from the new pipeline, we have been able to keep the dairy going.

"But the future of the lakes keeps dragging us all back into limbo." Clem has led the chorus of locals who have been rejecting the proposal to flood the lakes with sea water to cover acid sulfate soils.

"We believe that the size of the lakes can be reduced without impacting on how they function. The revegetation occurring all around the lake is helping to neutralise the threat of acid soils and this regrowth can be sped up with the right support from government.

"I firmly believe that the lakes could get by with a much smaller injection of freshwater than previous estimated. It won't be pretty but it has to be a better option than just killing everything with sea water."

Clem Mason - Dairy, grain grower

LOWER LAKES, South Australia

09 Snapshot

Melanie Treloar - Dairy, horse trainer

'It will be a big disgusting hole within two years'



14 Mel Treloar

Lake Albert couple Mel and Nigel Treloar were spending \$3000 a week last year carting water to keep their dairy business alive.

Mel maintains that while a new pipeline has eased the pressure of water supply to almost all residents on the Narrung Peninsula, they still live in a world of uncertainty.

"There isn't much point having freshwater if we live in a poisoned environment," she said.

"If we kill off the Lower Lakes with salt water the devastation won't stop here. It will be a big disgusting hole within two years and will spread

like a cancer up through the Murray. Before long the quality of the water won't be good enough for anyone to use."

Patches of acid sulfate soils have emerged on exposed lake beds near the Treloars' property, but Mel has been heartened by the revegetation occurring within these patches.

"I would hope these can be contained. We have come through too much to give up on this beautiful part of the world now. We love living here and see it as our duty to save and to protect the environment we live in."

Milang, February 2008



As these two photos highlight, revegetation is already occurring naturally to help to counter the likelihood of acid sulfate soils

Will sea water kill towns?

The River, Lakes and Coorong Action Group believes that if the State Government lets salt water into the Lower Lakes the western side of Lake Alexandrina as well as Lake Albert will become hyper-saline because there is not enough circulation.

Action Group member Henry Jones said the Milang side of the lake, right along to Langhorne Creek, would almost certainly turn hyper-saline.

“It is a recipe for disaster: salt water, no circulation and higher evaporation rate. There is going to be a massive salt build up very quickly. There are going to be vast areas that are completely dead in a very short time. It will be a stinking mess. The example has already been set. Two thirds of Coorong is already dead for the very same reason .”

“What happens to townships like Milang when that happens?”



Milang, January 2009

More listening needed

Alexandrina mayor Kym McHugh hopes the politicians are listening to the large majority he represents.

“This issue has become all-consuming for many residents and the energy and knowledge they possess is quite inspiring,” he said.

“It would be nice to think that all tiers of government have the same respect and trust for these people and listen to what they have to say.

“The vast majority of people in this community do not want sea water flooded into the Lower Lakes and I am not convinced that enough resources are being invested in exploring ecological solutions.

“The worst thing that can happen is the lakes acidifying, but the next worst is they become hyper-saline.

“The end result will be much the same. The uncertainty surrounding the lakes is having a huge impact socially within our community.

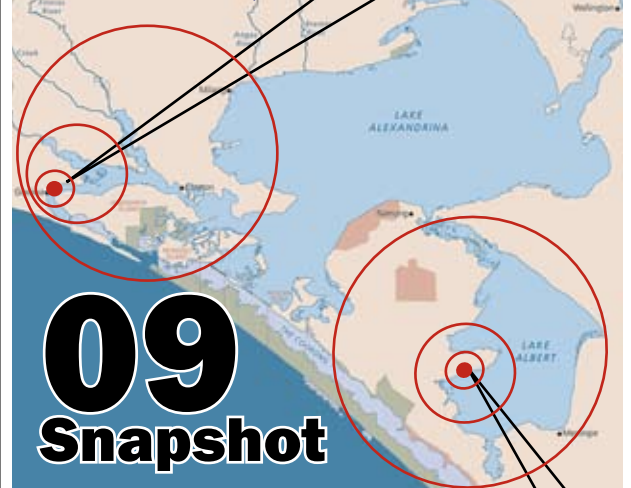
“I can appreciate why the government is taking a lot of time in making the decision and I can understand why many would like to see them speed up the process, but it is bloody important that they make the right decision.”



Kym McHugh

Kym McHugh - Alexandrina mayor

LOWER LAKES, South Australia



Roger Strother - Coorong mayor



Coorong mayor Roger Strother at what used to be shoreline of Lake Albert on his farm.

The lakes must be saved

Coorong mayor Roger Strother strongly supports bio-remediation work across the lakes. Having lived on the edge of Lake Albert almost all his life he has seen the changes in recent times and believes revegetation is a viable course of action to neutralise the dangers of acid sulfate soils.

Roger’s brother Ken advocates aerial seeding large swathes of exposed lake beds in early winter when the ground is moist.

“Based on the vegetation growth we got on the lake beds last year, the idea has a lot of merit. You could certainly cover a lot of ground at the optimum time to spark revegetation,” Roger said.

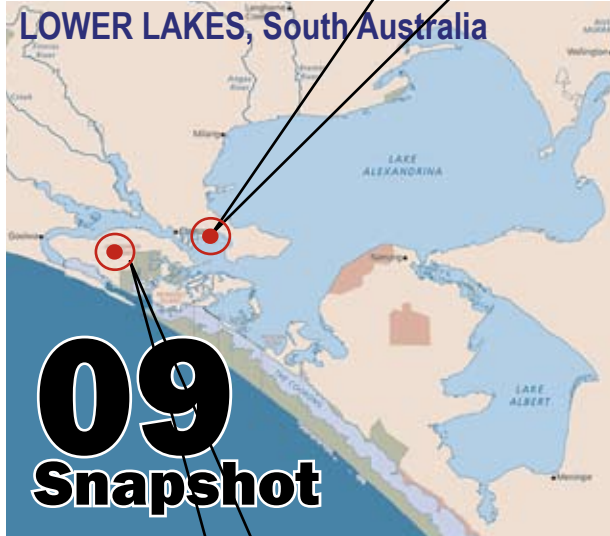
“The uncertainty of Lake Albert is having a significant impact on the community. The stresses caused by living in a destroyed environment are difficult to quantify, but needless to say Meningie and the Narrung Peninsula need a healthy Lower Lakes.” Roger and Ken have fenced off the shoreline and witnessed strong regrowth. Keeping stock off the shoreline to maximise regrowth right around the lakes is an initiative that is gaining widespread support within the community.

Adopt big picture view and micro-manage the threats



Mike South - Grower, Ag-Scientist

LOWER LAKES, South Australia



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Snapshot

Charles Irwin - Boating Industry

Mike South lives at Point Sturt and has a long list of achievements in both private enterprise and the public service as a management consultant. Until recently he has remained undecided on what should be done to save the Lower Lakes.

“But after looking at all the facts and doing plenty of research you have to rule out the sea water option,” he said. “What we need to do is micro-manage this. By my calculations, if we can get through the summer and have the same rainfall and evaporation levels this year as in 2008, we can control the areas that may become acidified.

“I think we adopt the same approach as the CFS does with spotfires. Deal directly with the acidic hot spots and try not to do anything to damage the medium to long term recovery of the Lower Lakes.”

Right: Hindmarsh Island boating businessman Charles Irwin.



Boating man rejects sea water

Charles Irwin runs Alongshore Aquatics at Goolwa. Before the big dry he would berth 64 boats in water and have another 15 stored on land.

This summer he has 2 boats berthed in water and 35 on land. Business revenue is down 65%.

Despite the drop in business, he does not want the government to rush in and lift water levels with sea water.

He says the declining lakes levels have hurt his business, but so has the global economic crisis and the negative publicity surrounding Goolwa's plight.

Charles is an active member of the Goolwa Boating Group, which has been responsible for extending boat ramps in the district, having the Goolwa channel re-surveyed and undertaking a massive clean up of the waterway.

He still races each weekend at the local sailing club although he suspects that will have to be stopped by early March.

He has lived on Hindmarsh Island for the past 11 years and after much research believes government officials are ignoring low intervention strategies based on sound ecological thinking to save the lakes.

Charles insists that flooding the lakes with sea water would be 'bloody stupid'. "It just doesn't make sense."

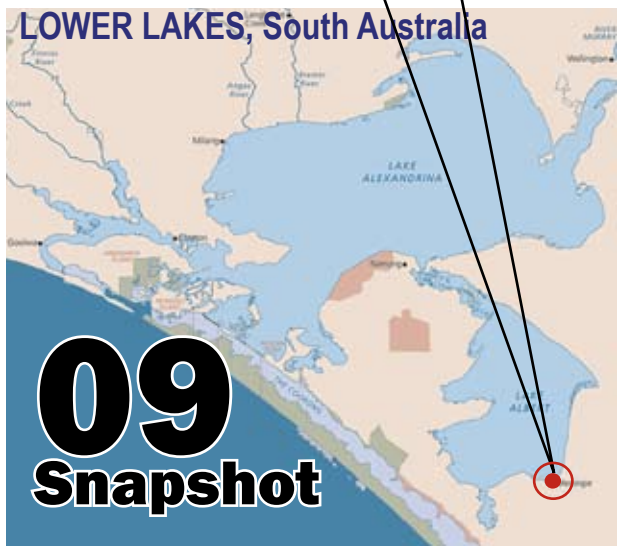
He maintains a modest purchase of water, say 60 gigalitres, would help the lakes maintain a level that removes the immediate risk of acid sulfate soils and gives nature time to remove the problem. “It would not lift the lakes to levels for boating, but it would be enough to give nature time to address the problem.”

“There seems to be a lot of conflicting ideas within the scientific community about what's best for the Lower Lakes, but government support for those with engineering solutions seems to be much stronger. I am yet to see those solutions tick all the necessary boxes while the ecologically based solutions seem to have a lot more credence.”



Dr Michael Kerrigan

LOWER LAKES, South Australia



09

Snapshot

GP asks: what really are critical human needs?

Meningie doctor Michael Kerrigan deals with the human cost of the declining health of the Lower Lakes day and night.

He gets angry when he hears Government justify their Murray management decisions on a critical human needs basis.

“Apparently the people of the Lower Lakes don’t have any critical human needs,” he says. “We feel like we’ve been largely ignored.”

Dr Kerrigan and his GP wife Deborah have worked in the region for 13 years. They are in touch with almost every family in the district at some stage or another and hear first hand what he describes as Government inaction is doing to their spirit.

“Everybody hopes it will get better, but they have no faith in Government to do the right thing.

“We have seen them all come down here and say a few nice words about how bad it is, but no-one has said let’s work together to fix the problem. Our hospital is grossly under-resourced despite the increase in after-hours care required, there is no sign of the community receiving economic assistance and some people have lost hope.

“Maybe it would have been different had the Mitsubishi factory been in Meningie.

“By my estimates one in 10 people in the immediate Meningie area have lost their jobs, but there has been no sign of help for these families – they are largely being ignored because the Government says “we can’t make it rain”.

Dr Kerrigan said the workload of the three doctors in the Coorong Medical Centre has soared over the past 12 months.

There has been a significant increase in mental illness cases, particularly depression and compounding effects on chronic diseases as people drink more, smoke more and don’t eat as well as they once did.

“When you’re worried about your future, people let a lot things slide. The health cost of this disaster will be with us long into the future.”

People have said:

Plants could do a better job of cleaning up acid sulfate soils. I have found enormous amount of growth not far from where sulfate soils were first identified by the CSIRO. There are alternatives other than putting sea water in. We can assist the natural process by direct seeding and alleviating acid conditions.

Former Coorong Lakes and Murray Waterkeeper Paul Davis - Advertiser January 5, 2009.

Fish, plants and animals of the Lower Lakes were freshwater species and they would have to move out if sea water came in. “Where will the birds go? There is just nowhere for them to go, not in the sort of numbers we have here. There are very few wetlands that hold the numbers of waterbirds that are here, in the whole of Australia

University of NSW waterbird expert Professor Richard Kingsford - Advertiser January 5, 2009.

“We’ve got a couple hundred million dollars and we’ve said to the State Government we want a lasting solution for the Lower Lakes and Coorong. We are happy to do it in partnership and have to provide a lot money. We need them to come forward with some proposals.”

Federal Water Minister Penny Wong - The Advertiser January 12, 2009.

The preferred option is to maintain the Lower Lakes in a freshwater condition for as long as practically possible, and preferably through the current drought to a full freshwater recovery.

Federal Environment Minister Peter Garrett - The Australian, January 8, 2009.

We have lived in this area for thousands of years and as indigenous people we know the importance of the ecology to our culture and our spiritual connection to country. The Ngarrindjeri will not negotiate or discuss anything to do with a weir from Clayton to Hindmarsh.

Chairman of the Ngarrindjeri Native Title Committee Matt Rigney - The Australian, January 7, 2009

Revegetation taking hold



Lorraine and Joe Leese on the narrows of Lake Albert almost 12 months ago. The top photo is the same location early this year.

In February last year Joe and Lorraine Leese were running temporary poly-pipe hundreds of metres out over dangerously silted mud flats to find water for their cows.

Today they have piped fresh water from SA Water and their mud flats through the Narrows of Lake Albert are now covered in vegetation. On average rainfall, re-growth has been so vigorous previously muddy lake beds are now rich with plant life. The two photos above were taken from the same spot a year apart.

Joe and Lorraine have watched in wonderment as nature tries to repair the damage caused by man.

“Letting sea water in is not the answer,” Mrs Leese said. “It never has been and never will be. Our first hand experience shows explicitly what nature is capable of in a very short time and that is where our solutions must come from.”

Lake Albert and its Narrows

LOWER LAKES, South Australia



This time last year Joe and Lorraine Leese were wading across silted mud flats to find water for their stock. Those same flats are now covered in plant life.



Locals fighting for survival

Almost a year ago the people of the Lower Lakes rallied together to take their plight to the world via the publication *The Lower Lakes: A Snapshot*.

The world's media paid attention.

There has been a steady procession of politicians from the Prime Minister down to visit various parts of the lakes but many locals are fed up repeating their stories to these VIPs. They are frustrated that many of the so called experts come to talk, but do not listen or act.

The locals shake their heads when they hear radical solutions like filling the Lower Lakes with sea water and building a series of dams.

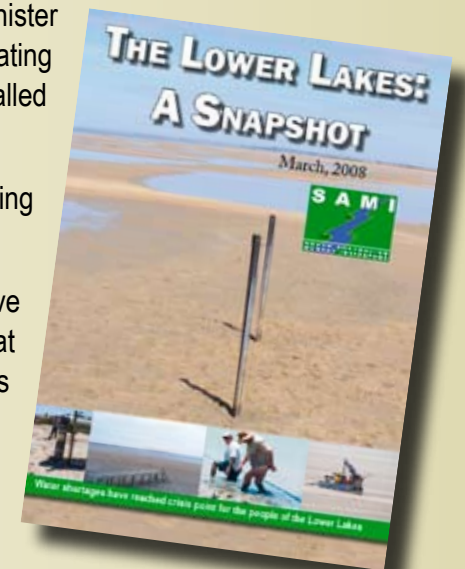
There is a suspicion that behind closed doors the decision-makers have already written off the Lower Lakes as a lost cause. Locals are angry that the critical needs of the River Murray and the people of the Lower Lakes are being ignored and it has galvanized their resolve.

Their plea is a simple one – “work with us to save the River Murray and the Lower Lakes.”

In the words of Coorong fisherman Henry Jones “flooding the lakes with sea water would be like solving the problem with an atomic bomb”.

Locals have developed an ecological rescue plan that is based on commonsense, a vast amount of local knowledge and a respect for the environment.

While many outside the region appear to have given up on Lower Lakes, the locals refuse to accept such prophecies of doom and insist that with sufficient political will and some help from nature their unique environment can be saved.



The first annual Snapshot of the Lower Lakes, published last year.

By **Tim Jackson**

Jackson Media Services



“...the theory behind opening the barrages (and letting sea water into Lake Alexandrina) is akin to trying to feed yourself through your anus.” Dr Kerri Muller.