



Working to Revive, Renew and Protect the Ecology of Lake Macquarie NSW

## The Access Issue

### Monitoring Of Channel Traffic To Guide Future Dredging Plans

Swansea Channel is one of the most dynamic and changing sections of the Lake. It is also one of the most hotly debated in the community, particularly on the issue of dredging and boating access.

It is commonly believed that dredging is an important part of water quality control in the Lake environment, increasing tidal flushing to prevent outbreaks of algal blooms that can damage the complex ecosystem.

However, Lake Macquarie and Catchment Coordinator Jeff Jansson explains that dredging procedures in the channel provide little benefit to the tidal flushing of the Lake.

“Any dredging of the Lake entrance is primarily for boating access and does little to improve the balance of nutrients and sediments.”

Recent dredging of trouble spots around Marks Point has yielded only short-term success, with the displaced sand returning as a result of accelerated water flow through other minor entrance channels.

Jeff Jansson points out that it is important to balance the economic benefit to the community with the issue of environmental degradation.

“In the past it has been suggested that an artificial opening should be constructed to improve the flushing of the Lake. While this might have



**Peter Nelson,  
Chairman  
Lake Macquarie  
Project  
Management  
Committee**

Welcome to the first edition of Living Lake Macquarie. This new publication will bring you the very latest on what is being done to revive Lake Macquarie.

The project is a joint initiative of the NSW Government, Lake Macquarie City Council and Wyong Shire Council.

The Lake Macquarie Project Management Committee was formed to implement the recommendations of the Premier's Taskforce Report published in 1999. The Committee consists of community representatives, Regional Directors of the relevant State Government Departments, one Councillor from both Lake Macquarie and Wyong Council and ex-officio members including Professor Bruce Thom, Mr. Bob Wilson and Mr. Ian Kiernan. This committee works in conjunction with the Lake Macquarie Estuary and Coastal Management Committee.

It is important to realise that there is no quick fix solution to the problems facing Lake Macquarie. Indeed, restoration is a long-term project. We must remember that the Lake is a dynamic, living thing that is constantly changing.

We cannot expect to restore the lake to the pristine state of the early 1900's. Instead, we should set ourselves the goal of restoring a healthy ecosystem and provide a Lake and Catchment that balances and sustains the social and economic needs of the community.

I hope you find this first edition of Living Lake Macquarie informative.

Peter Nelson



**Aerial view of Marks Point up to Swansea**

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some limited benefits for nearby areas, it does not help the enclosed bays and in other estuaries has caused significant problems.

The use of the channel by boats across a range of sizes is being monitored by Swansea Bridge operators on behalf of the Waterways Authority of New South Wales.

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# Appointment for Fennell & Edmunds Bay Remediation Works Announced

WBM Oceanics Australia was recently appointed to undertake stage one of the Fennell and Edmunds Bay remediation works.

WBM Oceanics demonstrated experience in similar projects and their local base at Broadmeadow provided an ideal grounding for a project which is vital to the three-year plan to revive Lake Macquarie. Lake Macquarie & Catchment Coordinator, Jeff Jansson, said the tender submitted by WBM Oceanics for \$117,930 also includes provision for community consultation. "Stage one is to conduct scientific investigations including measurements of water quality, sediments, nutrient release, seagrasses, benthic

fauna and hydrographic survey," Mr. Jansson said.

"This data will enable modelling to be prepared and a full understanding of the ecological processes to be developed, in order to prepare conceptual plans for remediation."

"Stage two of the project, which will come later this year, will involve final design with community consultation and preparation of an Environmental Impact Statement."

"This will be followed by Stage three, which comprises the physical works with a budget of \$2.5 million," he said. 🌿



# Coconut Fibres To Prevent Foreshore Erosion At South Creek

Recently completed works at South Creek, Warners Bay have seen a revolutionary strategy to prevent foreshore erosion.



Jeff Jansson inspects coconut fibres near South Creek

The project, which was completed at a cost of \$18,000 involved the installation of coconut fibre logs along the shoreline.

Foreshore erosion to the lake was among the key issues identified by the Premier's Taskforce Report, tabled in 1999. The problem is felt particularly during the stormy weather conditions experienced in late winter. During 1999 some areas on the western side of Lake Macquarie experienced a massive loss of 1.5 metres of land over 2 months.

In recent years the foreshore near South Creek has been seriously affected by erosion. The use of coconut fibre logs has been introduced here to assist with the problem. The fibre logs are said to last around five years before they break down naturally and allow plants to actually grow in the fibre material as it breaks down.

Lake Macquarie and Catchment Coordinator

Jeff Jansson explains that the cause, apart from the storms, is the result of a combination of factors.

"The absence of natural vegetation to help bind the soil, the use on many reserves of introduced grasses which are mown right up to the foreshore and the over zealous removal of seagrass wrack can also contribute to the problem," he said.

"Part of the solution is in providing natural vegetation ranging from shrubs to trees along the foreshore, but these plantings need to be carefully balanced within reserve areas to allow the community to gain access and enjoy the waters edge."

The long term aim for the foreshore is to have sloping beaches which absorb the wave energy, allowing dead seagrass to be washed out of the lake naturally while maintaining good binding vegetation in the upper beach area. 🌿

# Catchment Coordinator Launches Into Lake Plan

Lake Macquarie and Catchment Coordinator Jeff Jansson heads the team charged with breathing new life into the ailing Lake environment, with a comprehensive Three-Year Action Plan designed to resolve a number of key issues.



**Jeff Jansson**  
Lake Macquarie & Catchment Coordinator

The role of the Lake Macquarie Coordinator was established as a result of the 1999 Lake Macquarie Taskforce formed by the Premier of New South Wales, Bob Carr MP. The Taskforce devised a three-year action plan to address issues affecting the health of Lake Macquarie. The primary role of the Lake Macquarie and Catchment Coordinator is to implement the recommendations contained in the Taskforce's report.

Jeff Jansson says his task is defined by the needs of Lake Macquarie itself. "We have

been appointed to action a range of initiatives to improve the Lake. We have a strict agenda and a well defined focus. We are not about to duplicate services already provided by other government agencies and councils," he said. Some of the key issues to be addressed within the three-year strategy include widespread stormwater treatment involving gross pollutants and small constructed wetlands, erosion protection works and vegetation filters along creek banks and foreshores, dredging to improve water quality and the development of community education programs.

The Catchment Coordinator is a position independent of Lake Macquarie City Council, although the office is located in the Council facilities at Speers Point. Jeff Jansson says that the strategy to maintain the Lake is an exciting one that is very important to the quality of life in the area.

"People sometimes tend to take the beautiful Lake surrounds for granted. I grew up in the area myself, so I have seen first-hand how it

has evolved over a number of years. In truth, the Lake is a living thing, constantly changing and developing in tune with the area around it. There are many factors affecting this evolution, both naturally occurring and man-made," said Jeff Jansson.

"Everyone who lives in the Catchment area has a role as a guardian of this great natural resource. I see the role of the Catchment Coordinator as one of education for the local community, to inform them about how their lifestyle affects the Lake and to find means to improve the way we interact with the Lake environment."

Many of the actions to be undertaken are aimed at the Catchment area to address the source of problems, which surround imbalances of sediments and nutrients in the Lake. A website dedicated to the Office of the Lake Macquarie and Catchment Coordinator is currently under construction. It will provide access to information and updates on the Lake Macquarie project. 📄

## Dredging Program to Improve Boating Access

**From page 1-** With the monitoring period still in its early stages, much more analytical work will be required before any conclusions can be drawn from the survey.

Jeff Jansson said the Lake Macquarie Project Management Committee was responsible for implementing the recommendations of the Premier's Lake Macquarie Taskforce. Among these recommendations was that boating traffic should be monitored over a three-year period, to assess how much funding should be committed to keeping the channel open. In the development of the Lake Macquarie Estuary Management Study, which provided recommendations on actions needed to improve the Lake environment, WBM

Oceanics conducted significant research and computer modelling to explore the options available to better manage the Lake.

The study concluded that priority should be given to improving the sediments and nutrients entering the Lake with stormwater run-off.

Few people know that prior to the construction of the ocean breakwalls in the 1890's, the Lake was known to shoal-up and seal off intermittently and that while the breakwalls have provided some economic and social benefits, the price has been the erosion of approximately 400 metres of the foreshore at Salts bay. 📄



# March Survey To Research Catchment Awareness On Lake Issues

Locally based research company Precision Research will conduct a two-week intensive survey of the residents of the Lake Macquarie Catchment area in March.

The telephone survey will research community opinion on a range of Lake issues and collect data that will assist in the planning of further strategies to revive Lake Macquarie.

Lake Macquarie Coordinator Jeff Jansson, said the community research was recommended in the three-year action plan developed by the Premier's Lake Macquarie Taskforce in 1999. "It is vital that we know what the com-

munity-at-large think are the key issues facing Lake Macquarie. The results will be used to help us identify gaps in community awareness and will assist in targeting problem areas throughout the Catchment area," he said.

The research period will begin on 6 March and will continue for two weeks to 18 March. The survey will interview over 600 of the estimated 190,000 people living in the Catchment area and the findings will be published by the

end of April.

"The survey questionnaire will be conducted by professional researchers and will only take about ten minutes to complete. It is a great opportunity for residents of the Lake Macquarie and Catchment area to have an input into the restoration of such an important natural resource," said Jeff Jansson. 📍

## Keep an eye out in the next edition of Living Lake Macquarie for more news on the Lake:



- Meet the Lake Macquarie Project Management Committee
- A Summary of the Annual Report
- Results of the Catchment Survey Project
- More Progress Reports



## What Is Being Done For The Lake

With the aim of providing better and integrated management of the Lake there were 51 actions identified in the Premier's Taskforce Report for a coordination and liaison role between government agencies. All of these recommendations have been actioned and over 80% are now finalised or progressing satisfactorily. In erosion and storm water control works within the Catchment alone, there is currently \$64,208 worth of work either complete or underway.

A full Catchment works program for the remainder of the financial year has been developed and is currently being costed

and scheduled.

Other specific projects being undertaken include:

- Remediation works at Fennell/Edmunds Bay
- Salts Bay stabilisation program
- The appointment of Ford Communication for community education and reporting.

With the assistance of temporary staff, Council has also been engaged to conduct environmental audits on light industrial premises and Septic Tanks at Toronto West.

Planning is also underway for the development of four other key projects in the action plan. 📍



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Website - Coming Soon