Welcome to the first edition of Wetland Dreamings (WeDs), the newsletter by the NSW Murray Wetlands Working Group Inc.

The newsletter is aimed at keeping all members, and interested parties, informed with the various projects that the Group is involved with, highlighting any media coverage, up-coming events, and other relevant information towards the Group and wetlands.

Why have we called this WeDs? For most of us, to see our wetlands as healthy, productive, and functioning ecosystems would be a dream come true. This is what we’re working towards and this is our aim. The name’s anagram also represents the marrying of the community’s involvement with government and non-government agencies; individuals who come from differing angles all working towards the same aim, and to establish a balance between the natural environment and our use and management of it as a resource.

So if you would like to contribute an article, or have worn your MWWG hat in the media somewhere we’d love to include it in the next newsletter. Contact Paula (pd’santos@dlwc.nsw.gov.au).

**Special points of interest:**

- The Australian Wetland Forum is on the 27th Sept., 2001, Moama, NSW. For more info contact Max Finlayson maxf@eriss.erin.gov.au
- The Australian Society for Limnology is having its 40th Annual Congress is on from the 27th-1st October, 2001, Moama, NSW. For more information contact Margaret Hart margaret.hart@sci.monash.edu.au
Thanks & Farewell!
In January this year the MWWG said farewell to its senior Project Officer, Paul Lloyd.
Paul worked for the Group for more than 6 years and was one of the main driving forces behind most of the projects and initiatives set up by the Group.
His phenomenal knowledge and expertise of the wetland systems, stretching from Albury to Mildura, will be sorely missed, as well as his commitment and invaluable contributions.
Thanks and Goodluck Paul!

Message from the Chairman
Howard Jones, has been the MWWG’s Chairman since mid-1996. Prior to his nomination as Chairman he was a member of the Group representing the Lower Murray-Darling CMC.

"My main occupation is as a viticulturist - which takes up too much of my time. Having spent most of my leisure time on or near the water, over the years it has been obvious to me the decline of life associated with the waterways, especially on the floodplains. This prompted me to become involved with future management issues of these areas.

"My vision for the Group is to make a difference! We need to use the considerable assets that are at our disposal to create the climate for change and with the 'Team' having such a broad skills base I believe this is achievable.

"For the year ahead I would like to see the MWWG focus on how we are to achieve our aims, and to consider what our strengths and assets are. Within the wider community we have a good profile and with the aid of the water entrusted to us we can strive towards making that difference. Let’s challenge ourselves!"... Howard.

Major Projects Round-up
The MWWG is currently involved in a number of differing projects. Listed below are a few of the major projects and information on their progress:
Commence-to-Flow Project:

- majority of field work for the Edward-Wakool System and the Murray River between Hume Dam and the Barmah-Millewa Forest has been completed;
- information on over 1000 of the 7000 wetlands identified by the MDBC River Murray Mapping, has been recorded on the database;
- satellite image analysis of various floods in the Hume Dam to Tocumwal reach is nearly completed;
- field assessments near Torrumbarry Weir Pool, Koondrook/Perricoota Forests, Boundary Bend region, Euston Weir Pool, Gol Gol State Forests, downstream of Wentworth and the Bengalow Creek area in the Mallee Cliffs State Forest is currently being conducted, and
- collaboration between NSW and Vic. agencies have been initiated to establish a wetland database.

Moira Lake Project:

- a business plan for water savings from Moira Lake rehabilitation (in the Moira Forest) has been completed; and
- initial designs and text for interpretative signs for the wetlands have been completed. They will eventually enhance a walking trail.

Weir Pool Manipulation Project:

- Euston Weir pool has been decided upon as the site to conduct a weir pool manipulation study funded by the MDBC;
- this is a collaborative project with a large number of groups involved. MWWG will be working closely with the MDFRC CRC Freshwater Ecology Laboratory assisting with community liasing, field data collection etc.
- a commencement date for the project has yet to be finalised.

Thegoa Lagoon:

- an assessment for the hydrologic rehabilitation of the lagoon has been completed. It included a bathymetry survey, an aquatic fauna assessment, the installation of piezometers and a review of the hydrogeology;
- protection of Aboriginal heritage and cultural sites as part of the rehabilitation of the lagoon was managed by the CARNMA Wentworth Aboriginal Corporation; and
- the MWWG coordinated the development of a management plan for the lagoon and the surrounding reserve.

Lake Gol Gol and Gol Gol Swamp Project:

- the Gol Gol Community Reference Group, of which the MWWG has representation, is currently considering the management options outlined in the latest draft;
- a decision is hoped to be reached soon.

Who are the MWWG’s Project Officers?
**Deborah Nias** is the most recent Project Officer to join, replacing Paul Lloyd. Previous to this role, Deb was the co-ordinator for the Darling Anabranch Management Plan, based in the Buronga DLWC office.

Deb is a wetland ecologist with a PhD that examined the ecology and carbon dynamics of temporary wetland systems near Shepparton, Victoria. She has been employed as an Aquatic Ecologist for the former South Australian Fisheries Department, as well as a Biological Sciences Technician at different universities.

Deb is looking forward to working with the MWWG. "The group is entering a new and exciting phase - it's getting bigger and there are increased responsibilities associated with the water we have custodianship over. We have great potential to achieve some positive ecological outcomes such as the recent Barmah Forest flooding. Paul Lloyd and the previous staff have done a fantastic job and I hope we will continue just as strongly".

**Damian Green** joined the MWWG in January 2001 as the Project Officer for the Murray River Wetland Commence-to-Flow Project based in Albury.

"One of my main interests," said Damian "is in determining the causes for the decline of aquatic plants in our rivers and wetland systems, and my PhD (currently being assessed) has provided me with a good understanding and interest in phytoplankton ecology."

Prior to joining the MWWG Damian completed a study that determined the impact of river regulation on the river flows and wetlands of the Edward-Wakool System. The information and methods developed by that study will provide a foundation on which the new MWWG Wetland Commence-to-Flow database will be developed.

The Western Project Officer, based in Buronga, is **Paula D’Santos**. With the Group since February, Paula is involved in a number of projects including the Commence-to-Flow project, the Euston weir pool manipulation trials, as well as promotion of wetland rehabilitation and demonstration sites on properties within the region.

Paula completed a science degree majoring in zoology and botany and for her Honours year she conducted a study focussing on stream invertebrate ecology.

"There is so much we can do within this region to promote wetland rehabilitation. One of the most important steps is educating the community and industry of the vital role that wetlands play. We already have a good support network and we need to build on this to have a greater influence and impact in the future," said Paula.
Trish Alexander (left) is one of the two Albury-based Project Officers currently working on the Commence-to-Flow project, concentrating on the area between Hume Dam and Tocumwal. Trish is employed for 12 months, on a part-time basis, and began working with the MWWG in August 1999.

Apart from working Trish is also in the last stages of completing her Honours year at Charles Sturt University, and is due to finish in early June. Her Honours project focuses on waterbird ecology, based on data collected from the Wonga Wetlands (near Albury). The project looks at the relationship between waterbird abundance and diversity and water levels. Outcomes from the project will aid in the management of the Wonga Wetlands, and could be applied to other wetland areas.

After completing her Honours and working for the MWWG, Trish would like to stay in the field of wetlands research, or some form of natural resource management.

Rejuvenating the Barmah-Millewa Forests

In November - December of last year the River Murray flooded into the Barmah-Millewa Forest, rejuvenating its wetlands and attracting approximately 30,000 birds.

An article by Sarah Chester in 'The Bush Telegraph' (Feb. - April, 2001), highlights the success of the flooding of the wetlands and the effects of river flow regulation on these systems.

"Extensive natural flooding and careful management of environmental water flows brought about an explosion of fauna and flora in the area not experienced since the 1970s" said David Leslie, State Forests' Riverine ecologist and manager of the wildlife on the NSW-side of the Millewa. "Indeed, the whole ecosystem from the bugs to the birds is thriving, which means all augers well for the health of the wetlands and the Murray River."

Some of the birds that had reappeared in the area included the threatened brown bittern, great and intermediate egrets, black swan, nankeen night heron, carp-eating cormorants and locust-eating ibis. Even the flora such as water primrose, wavy marshwart, milfoil and moira grass also responded positively to the flood.

Due to river flow regulations many wetlands have suffered greatly. The natural wetting and drying cycles, essential for providing fauna and flora with breeding cues, have been so badly interrupted that the wetlands can no longer support many native plants and animals.

Locust-eating White Ibis (Threskiornis aethiopica). One of the species of birds which flocked back to the re-flooded Barmah-Millewa Forest late last year. Photo courtesy of D. Leslie.
To ensure that the Murray’s flood levels remained high and long enough for many species to complete their breeding cycles, additional environmental water flows were released into the forest. Environmental water flows are part of a rehabilitation plan that was developed in the early 1990s and aims to restore environmental values to wetlands. The NSW Murray Wetlands Working Group is the group that has been given the responsibility to implement and oversee the rehabilitation plan.

To date stages of the plan have included the investment of half-a-million dollars of civil engineering works, such as regulators, to help reinstate a more natural water regime for flooding and drying. In 1998 Moira Lake was dried for 3 months - the first time in 60 years - resulting in an improved environment. This drying phase was again repeated in 1999. The final stage of the rehabilitation plan is to create an artificial creek that will aid fish passage between the river and the wetlands.

In the future it is hoped that vehicle access to the Lake will be restricted, to leave tracks free for walkers and cyclists. The MWWG is also developing interpretative signs that will be installed at specific interest points around the Lake, as well as producing some information pamphlets for visitors.

"This is an exciting time. It is the culmination of many years of hard work for numerous government agencies and community groups." said David. "It's a time when we can reflect on how our ecosystems can be rejuvenated by good management and community involvement."

"Some of these birds which nested last November or December had not been seen in the area for seven years or more."

A 'Rabbits of the River' Harvest Down at Moira Lake

After the successful flooding of Moira Lake, the waters are now starting to drain and it is a prime opportunity to have a Carp harvest.

David Leslie, NSW State Forests' ecologist said carp fishermen Mr. Keith Bell and State Forests' Wetlands supervisor Mr. Paul Childs have designed a special net to capture the carp and remove them from the lake.

"The water is being drained out of the lake through a regulator with a mesh grid at the front so the carp can't escape into the River Murray." said David. "With the carp congregated at the front of the regulator it is easy to remove them by net. The benefit of this technique is that native fish can be released unharmed back into the Murray."

The mesh is large enough for the smaller native fish, such as Australian smelt, to pass through freely and there has been no evidence of it injuring the larger species such as Murray cod.

Mr. Bell's company K & C Fishery supplies European carp to Charlie Carp at Deniliquin, who produce high-quality liquid fertiliser that is distributed throughout Australia.

In 1998, during the first drying stage, the carp died in their thousands on the drying lake bed. The following year Mr. Bell was approached to harvest the carp, which not only provided humane disposal for the pest species but regional employment opportunities as well.

The harvesting project has also involved the NSW Fisheries and the Murray Wetlands Working Group (MWWG).

Ms. Deb Nias, Project Officer for the MWWG, said that the carp fishing is another benefit of environmental restoration of Moira Lake.

"We are actually going to cull approximately 25 tonnes of carp, so the 'rabbits of the river' won't be able to get back into the River Murray again to breed." she said.

Historically Moira Lake formed the basis of one of the largest commercial fishers in inland Australia. Many native species, such as Murray cod, golden and silver perch, thrived in the lake prior to the arrival of the carp. However, surveys now indicate that carp account for 96% of the lake's fish population.

"We now need to remove the carp which have returned to the lake on a periodic basis," said David. "Through point-source control of carp such as that occurring at Moira Lake, carp numbers will be held in check and may even decline. This will lead to good environmental outcomes for rivers, wetlands and native fish."

Water Allocation Boost for the Environment
Earlier in May, the New South Wales Land and Water Conservation Minister Richard Amery officially presented a 30,000ML water allocation to the NSW Murray Wetlands Working Group’s chairman, Mr Howard Jones.

The water entitlement had been obtained through water savings made by Murray Irrigation Limited’s infrastructure improvements such as a reduction in seepage losses and increases in the efficiency of the water supplied. The Department of Land and Water Conservation provided the funding for the infrastructure improvements.

The 30,000ML, a portion of the water saved, is now owned by the NSW Water Administration Ministerial Corporation (WAMC) and has been specifically targeted for environmental purposes within the Murray Valley.

Acting as custodians for the water allocation, the MWWG will advise as to the best way to utilise the water for wetland rehabilitation along the River Murray, Lower Darling and Darling Anabranch.

Late last year some of the water has been used to supplement floods to the Barmah-Millewa Forests and Wanganella Swamp (north of Deniliquin) by releasing 26,000ML and 1,500ML respectively.

Mr. Amery said "The 26,000ML release for the Barmah-Millewa was part of the largest environmental flow ever released in Australia."

"This has been recognised by the Murray Darling Basin Commission as a major success in environmental management," he said.

**Thousands Breed at Wanganella Swamp.**

Located 30 km north of Deniliquin, NSW, on the Forest Creek is Wanganella Swamp. It is a major breeding ground for several species of Ibis and other waterfowl.

Resulting from a joint effort between the MWWG, NSW State Forests, Murray Irrigation Ltd. and the Department of Land and Water Conservation a significant water bird breeding event occurred at Wanganella Swamp earlier this year.

"Last summer, substantial populations of Straw-necked Ibis, Australian White Ibis, Glossy Ibis and Royal Spoonbills with young were successfully fledged from Wanganella Swamp," said MWWG project officer Damian Green.

"NSW State Forests' ecologists initially identified that a breeding event was occurring at Wanganella Swamp, but that the water level in the swamp was quickly receding, which was causing some Ibis to abandon their nests, and more cryptic species (i.e. bitterns and crakes) to leave the swamp,” explained Damian. To ensure that the breeding cycle reached its completion more water was required.

Wanganella Swamp falls within the Forest Creek Management Plan (FCMP) that proposes an environmental flow be delivered when certain ‘triggers’ are met. The triggers include a >400 ML/day flow at Warriston Weir for more than 40 consecutive days between mid-August and mid-October, and the initiation of waterbird breeding at the swamp.
Although the flow trigger had not been met, a breeding event had begun. Initially 1,500ML environmental flow had been supplied from the MWWG’s water allocation. In addition the Murrumbidgee Environmental Contingency allowance made available an extra 1,000ML (as Forest Creek is supplied by both Murray and Murrumbidgee Rivers).

Although there was an initial drop in the water level prior to the environmental flow reaching the swamp, the majority of the birds remained, resulting in a successful breeding event for thousands of waterbirds.

Our Vin’s Diamond! RiverCare 2000 award winner

Congratulations to Mr. Vin Byrnes on being awarded the highly prestigious RiverCare 2000 Diamond Award earlier this year!

The award, designed to acknowledge an individual’s outstanding contributions towards healthy and productive riverine environments in NSW, is a recognition of Vin’s years of commitment towards community organisations and community/government consultation on riverine management in the Lower Murray Darling region.

"Having lived in the Lower Murray Darling region all my life, and owned and managed a vineyard all my adult life, I have always had a great respect for the beauty of the environment in this part of the State and the value of the natural resources that support the lifestyle we enjoy” said Vin.

Over the years, Vin has strongly represented the interests of the western reaches of the river system through his membership of many local groups and committees. Some of these committees include the

- Riverine Management Board, SunRISE21
- Lower Murray Darling Catchment Management Committee.
- Sunraysia and Riverland Committee on Salinity chairman from 1988 to 1998

Currently he is a member of the NSW Murray Wetlands Working Group, the Riverine sub-committee, as well as the chairman of the of the Murray Darling Water Management Action Plan Steering Committee - a committee focused on the natural resource management and viability for the irrigation farmers of the Lower Murray Darling area.

By addressing both local and big-picture issues Vin aims towards holistic management of the river system. He is a strong advocate for irrigational practices to change for the overall benefit of local and downstream environments and has led by example in the application of best management practices (irrigation) to address local groundwater and salinity problems.

Vin’s vast knowledge and experience in natural resource management includes water quality, riverine systems, wetlands, groundwater movement and best practices for resource management.

"It is my appreciation of these things that has driven me to want to learn about the management of our river systems and its effects on river ecology and the sustainability of local water use industries in the long term."
- Vin Byrnes

MWWG supports a management change for the Great Darling Anabranch
Recently in an article in the Sydney Morning Herald (17/3/01), chairman Howard Jones voiced the MWWG’s support of a management option to implement an Environmental Flow and improve water delivery down the Great Darling Anabranch.

The Anabranch is a natural chain of ephemeral wetlands that would receive flows when the Darling River flooded. In its upper reaches it would flow 2 out of 3 years, and about 8 to 10 years further downstream.

Since European settlement on the Anabranch the flow regime has been altered significantly with the construction of a number of dams, blockbanks etc. The impounding of water is now causing severe environmental degradation such as sedimentation of the deeper pools, increases in salinity, turbidity and occurrence of blue-green algal blooms.

"Currently you have got water impounded from one end of the Anabranch to the other and it's a haven for carp and all of the other problems you have in those sorts of areas, such as salinity," said Howard. "They eventually become muddy cesspools, and fish passage is almost impossible."

The major problem, according to Mr. Keith Forster, local landholder and Darling Anabranch Management Plan (DAMP) Steering Committee chairman, is the amount of water allocated to the farmers compared to the amount used. "There has got to be a better way of using the water," he said.

One of the management options which the DAMP Steering Committee are faced with is putting a pipeline down the Anabranch which will deliver water more efficiently by pumping water from the Murray and the Darling rivers, as well as ensuring an environmental flow that best mimics a natural flow regime. Howard Jones also advocates the need to progressively remove weirs along the system.

Dr. Stuart Blanch of the ACF said "The use of piping has to spread in inland Australia because [in cases like the Anabranch] it's a profligate waste of water. The NSW Government has to support the plan."

NEW INCENTIVE SCHEME
TO ASSIST LANDHOLDERS AND THE ENVIRONMENT

Do you have a wetland on your property?
Do you want to protect and improve it?
Need assistance?

The NSW Murray Wetlands Working Group Inc. has a NHT funded incentives scheme for landholders that will provide funding assistance for wetland rehabilitation and management on private properties between Albury and Buronga in NSW. Grants of up to $2,000 per property are available for fencing, revegetation,
earthworks or other on-ground rehabilitation works that contribute to wetland protection. The scheme is aimed to:

- protect and promote wetland ecosystems on private properties,
- promote integration between farm management and wetland conservation,
- provide demonstration sites,
- establish support networks for participating landholders.

For more information contact:
Paula D’Santos
NSW Murray Wetlands Working Group Inc.
Ph: (03) 5021 9446
Fax: (03) 5021 3328

NSW Murray Wetlands Working Group Inc.
Program Manager Deborah Nias, debnias@iprimus.com.au — info@mwwg.org.au
platypus websites