



Welcome to the third edition of the Central Murray Wetlands Community Advisory Group newsletter. Please note that the newsletter will now be released on a quarterly basis with Edition 4 due in August 2016.

## Environmental watering update

As at 16 May 2016 a total of 6,316 ML of environmental water has been delivered to five wetlands in the Central Murray Wetland Complex in 2015-16. This includes a number of top-ups at Round Lake and Lake Elizabeth to maintain appropriate conditions for Murray hardyhead. Translocation of approximately 50 individuals to Lake Elizabeth occurred in autumn 2016.

Sections of Wirra-Lo Wetland Complex received a second-top between late November and mid-December 2015 to maintain aquatic habitat over the summer period. The majority of the wetland drew down over summer, and an autumn top-up began on 7 April 2016 to refill Duck Creek North, South and Broлга Swamp. A fourth top-up is scheduled to begin on 16 May 2016 to prime conditions for the winter months.

Johnson Swamp received a top-up between 20 November and 3 February 2016 to maintain conditions for nesting waterbirds. Species noted to have successfully bred and fledged included the EPBC listed Australasian bittern; FFG listed broлга and Australian little bittern as well as numerous waterfowl species. The wetland is now receding with its mudflats providing a rich source of food for juvenile waterbirds and migratory species as well as providing ideal conditions for native plant germination. The wetland is thriving with an increase from approximately 4,500 waterbirds in December/January to over 15,000 waterbirds in February/March.

The environmental water fill at Richardson's Lagoon continued through till early November 2015 with a small section of the floodplain receiving a drink. The water has now receded back to the main channel providing excellent conditions for germination on the floodplain. The wetland is scheduled to receive a small top-up in winter 2016, pending a reduction in the concentration of Blue Green Algae in the Murray River.



*Six broлга recorded at Johnson Swamp on 29 March 2016 (D. Cook)*

## EWAG member profile: Dianne Bowles

Dianne Bowles is a passionate full-time dairy farmer, irrigator, wife, mother and grandmother who's property backs on to Johnson Swamp. Di sat down with us to share her passion for the integration of the dairy industry, environment and community.

When I married by husband, Garry, and moved to the

*region 10 years ago I knew nothing about the dairy industry except that milk came from cows. I have since embarked on a huge learning curve not only taking on-farm activities but also many off-farm pursuits including involvement in community, industry and environmental groups. Through this, I have become a member of the North Central CMA Board, the Director of Murray Dairy, deputy chair of Community Leadership Loddon Murray, member of Basin Community Committee of the Murray Darling Basin Authority and chair of the MEWAG. These groups support my aim of seeing irrigators, people and the environment work together to achieve joint outcomes that are sustainable into the future. I'm excited about the progress made in recent years to engage with community and stakeholders and am excited to be involved in this process into the future.'*

## Upcoming events

**Johnson Swamp Environmental Water Management Plans (EWMP)** The North Central CMA is seeking interested community members to be involved in the community consultation phase for Johnson Swamp. Contact Bree asap to express your interest.



## On-ground works project update

The North Central CMA's *Protecting and Enhancing Priority Wetlands* project continues to improve the natural values of the Central Murray Wetland Complex by undertaking a range of on-ground activities. The project is into its final three months after beginning in 2012.

The fox management program continues to be rolled out at Lake Murphy, Lake Elizabeth and Lake Cullen.

There has been some very exciting and extremely important rabbit management works completed at Lake Murphy. The CMA has been working with Traditional Owners and several agencies such as Aboriginal Affairs Victoria, Parks Victoria and Department of Land, Water and Planning to develop a method to treat rabbit warrens in sensitive cultural areas around the wetland. A Traditional Owner worked along side the contractor and the CMA to carefully remove rabbit harbor so that each entrance could be assessed for signs of cultural significance. Each rabbit warren found was individually fumigated before being backfilled. This was a first for the CMA and could potentially pave the way for important works like this to be completed at other wetlands with culturally sensitive areas.

A revegetation program is currently being completed at Johnsons Swamp, which will capitalise on the draw-down phase. The program will plant river red gums, acacias and black box with the aim of improving the upper story canopy which is mostly missing from the system. A small section of the boundary fence on the southern side of Hird Swamp will also be replaced shortly.



## Why is BGA a concern?

Blue Green Algae (BGA) is considered a major concern as it can release toxins harmful to humans, stock and wildlife and reduce the penetration of light through the water column. Sudden collapse of BGA blooms can also lead to very low dissolved oxygen concentrations that can kill fish and other aquatic biota. Research has also shown that BGA can kill some waterbird species both through direct ingestion and through the buildup of toxins in food sources. This is a major concern for the North Central CMA, with waterbirds being a key management objective for many of the wetlands that receive environmental water in the complex.



Bloom in Richardson's Lagoon on 18 February 2016

## How are we monitoring BGA?

Goulburn Murray Water (GMW) has been regularly monitoring BGA levels in the backbone channels and major storages of the irrigation network since the BGA bloom was first announced in February 2016. The CMA has been closely monitoring the results, particularly on the Murray River and the major offtakes on Gunbower Creek, to inform likely conditions in the delivery channels that supply McDonalds Swamp, Wirra-Lo Wetland Complex and Richardson's Lagoon. As the preferred timing for delivery to these wetlands is early to mid-April, the CMA has recently requested additional samples to be taken on the 2/3 and No. 4 channels at locations closer to McDonalds Swamp and Wirra-Lo Wetland Complex, respectively (both wetlands are approximately 30 kilometres away from the channel offtakes on Gunbower Creek).

## What's does this mean for our planned deliveries?

The CMA was able to deliver top-ups to Round Lake and Lake Elizabeth in early March 2016, just prior to the bloom reaching the Torrumbarry 1/9 and 28/2 channels, respectively. In mid-April and mid-May 2016, BGA levels in the source channels for Round Lake and Lake Elizabeth respectively, dropped again, allowing two small top-up to be delivered.

Wirra-Lo Wetland Complex received a delivery in early April 2016, after low BGA levels were detected in the No. 4 Channel (connecting channel) and the No. 4 Channel offtake on Gunbower Creek (Koordrook Weir). A second autumn top-up is scheduled to occur in mid May, to coincide with the irrigation dewatering processes. However regular BGA analysis of the delivery channels and source water for McDonalds Swamp, show low BGA concentrations in the 2/3 Channel (connecting channel) although the 2/3 Channel offtake on Gunbower Creek (Cohuna) had high concentrations of toxic cyanobacteria. The 2/3 Channel holds a relatively small volume of water and advice from GMW is that an environmental water delivery to McDonalds Swamp will quickly use all of the water in the 2/3 Channel and then draw up to 600 ML BGA contaminated water from Gunbower Creek into the wetland.

The risk of delivering a large volume of BGA water to McDonalds Swamp was considered too high and therefore after consulting with the MEWAG group on 11 May, the North Central CMA has decided to postpone the environmental water delivery until the irrigation season resumes in August 2016.

At Richardson's Lagoon, the Murray River is still at a high alert level. Due to the flexibility associated with pumping of the Murray River, delivery is not confined to the irrigation season and could occur over the winter months. If BGA levels do not drop in the coming months, the top-up will be postponed to late winter-early spring. There are no ecological risks associated with delaying the water delivery to Richardson's Lagoon.

For more Information visit GMW's BGA webpage at <http://www.g-mwater.com.au/bluegreenalgae-alert/>

## Current watering actions

Wetland	Volume		Dates	
	Total event (ML)	Daily rate (ML/d)	Start	End
Past				
Lake Elizabeth	100	8	07/09	20/09
	140	20	23/11	30/11
	200	20	11/01	21/01
	240	20	16/02	27/02
	250	40	7/03	13/03
Richardson's Lagoon	100	50	16/05	18/05
	100	25	20/08	26/08
	630	32	25/09	15/10
Round Lake	579	32	22/10	9/11
	80	8	31/08	10/09
	144	8	18/09	06/10
	70	8	12/10	21/10
	40	8	30/11	5/12
	132	8	7/01	23/01
	70	8	11/03	20/03
Johnson Swamp	40	14	14/04	17/04
	1080	30-60	26/09	16/10
Wirra-Lo Complex	1820	10-60	20/11	3/02
	144	3-10	19/10	5/11
	280	7	30/11	16/12
	77	6-10	7/04	15/04
	TBA	6-10	16/05	TBA
Planned future (pending reduced BGA levels)				
Richardson's Lagoon	Up to 690	32	Mid to late autumn	

## CONTACT US

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For updates on our current watering activities visit [http://www.nccma.vic.gov.au/Water/Environmental\\_Water/CurrentWateringActivities/index.aspx](http://www.nccma.vic.gov.au/Water/Environmental_Water/CurrentWateringActivities/index.aspx)

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