

## Cottoning onto the Murrumbidgee River – river and riparian field days, 18-19 February 2017

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### Abstract

In February 2017, CottonInfo, Murrumbidgee Landcare Incorporated (MLI), Murrumbidgee Irrigation (MI), Riverina Local Land Services (RLLS) and the Australia Government ran two field days in the Murrumbidgee valley. The aim of the field days was to extend the latest cotton industry riparian vegetation research outcomes, increase participants awareness of the value of riparian vegetation on farms and educate them on the latest best management practices for riparian areas on cotton farms. 71 people participated in the field days.

As part of the development and delivery of the field days a biodiversity booklet showcasing local River Red Gum Communities was produced and distributed to participants. A key outcome for the field day was the collaboration between CottonInfo, MLI, MI and RLLS, as part of the newly formed Landcare Irrigation Area Collective (LIAC), to deliver the field day. This collaboration established new local networks between cotton growers and local natural resource management advisors.

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March 2017

## Acknowledgements

The “Cotting onto the Murrumbidgee River” river and riparian field days was undertaken by CottonInfo with support from Murrumbidgee Landcare Incorporated, Murrumbidgee Irrigation, Riverina Local Land Services and the Australian Government.

Thanks goes to:

- The organising committee of Kerri Keely (Murrumbidgee Landcare Incorporated), Annabel Lugsdin (Murrumbidgee Landcare Incorporated), Bindi Vanzella (Riverina Landcare), and Cathy Semmler (Murrumbidgee Irrigation)
- Local helpers Stacey Lugsdin and Sally Ware (RLLS)
- Technical presenter, ecologist Dr Rhiannon Smith (University New England) and Michelle Durkan (Taronga Zoomobile)
- Ecologist Phil Spark (North West Ecological) for provision of photos for use in biodiversity booklet, and
- Out and About Adventure kayak instructors, Peter Vaughan and Andy Fraser.

*Photo overleaf: Hay cotton farmers Jenny Cleton and Paul Cleton with Doug Cleton, Hugh Cleton, Lucy Cleton, Maya Cashmere and Michelle Durkan from Taronga Zoomobile.*



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This activity is part of the Local Landcare Coordinators Initiative



**Local Land**  
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The Local Landcare Coordinators Initiative is funded by the NSW Government, and is supported through the partnership of Local Land Services and Landcare NSW.



**Australian Government**



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## Field Day Information

### Background

The 2016-17 National Cotton NRM campaign identified a need to continually improve the extension of the cotton industries riparian ecosystem services research outcomes and increase growers knowledge of riparian BMP's.

To help achieve this, CottonInfo formed a partnership with Murrumbidgee Landcare Incorporated, Murrumbidgee Irrigation, Riverina Local Land Services (RLLS) and the Australia Government to:

- Extend the latest cotton industry riparian vegetation research outcomes within the Murrumbidgee valley
- Increase awareness of the value of riparian vegetation on farms within the Murrumbidgee valley and
- Extend best management practices for riparian areas on cotton farms.

Following on from the success of the “Gwydir Cottoning onto the great outdoors” field day series, a similar field day structure and program, which targeted farming families, was developed for the “Cottoning onto the Murrumbidgee River” field days. The program was developed based on the delivery of fun family based activities that engaged both decision makers (husband and wife) in the family farming business.

In May 2016 CottonInfo was invited by Murrumbidgee Irrigation to join the new Landcare Irrigation Area Collective, a group of various private and government organisations within the Murrumbidgee and Murray Irrigation areas actively improving and managing natural resources of the Riverina irrigation areas. From these initial meetings the “Cottoning onto the Murrumbidgee River” program was developed to deliver a series of riparian awareness and management field days.

The three day program which included a session kayaking on the river was developed originally for early November 2016 at Gogeldrie Weir Park (2 events- friday and saturday) and Maude Weir at Hay on the Sunday. Unfortunately due to widespread flooding the events had to be postponed with a new date set for the 17<sup>th</sup>, 18<sup>th</sup> & 19<sup>th</sup> February 2017. Owing to poor RSVP's the Friday event was cancelled. Initially the program included a fisheries technical expert from NSW DPI but unfortunately they withdrew from the event at late notice. A copy of the final agendas for all 3 field days can be found in Appendix 1.

At the 2 field days held the following topics were covered:

- Landscape principles for healthy rivers, why value riparian areas – Cathy Semmler (Murrumbidgee irrigation)
- Ecosystem services of native vegetation on cotton farms – Dr Rhiannon Smith (UNE – CRDC funded research)
- BMP's for rivers and riparian areas –Stacey Vogel (CottonInfo)
- What are the indicators of river health? - Kerri Keely/Annabel Lugsdin (Murrumbidge Irrigation Incorporated)

- What fauna is found here, food & habitat requirements – Michell Durkan (Taronga zoomobile)

The field days were promoted heavily through the CottonInfo extension network and local media. A booklet showcasing River Red gum communities, some of the local fauna that lived within them and BMP's for their management was also created and handed out to all participants of the field day.

## Participants Responses

A comprehensive evaluation was conducted to provide evidence of changes in KASA (Knowledge, aspirations, skills and attitudes) as a result of attending the field days. Participants completed an anonymous feedback sheet at the end of each workshop. The evaluation template is provided in Appendix 3. A total of 29 evaluations were received over the two field days, where 71 people attended – a 41% percent response rate. Predominantly attendees were families. Approximately 57 of the attendees were adults with the remainder predominantly primary age children.

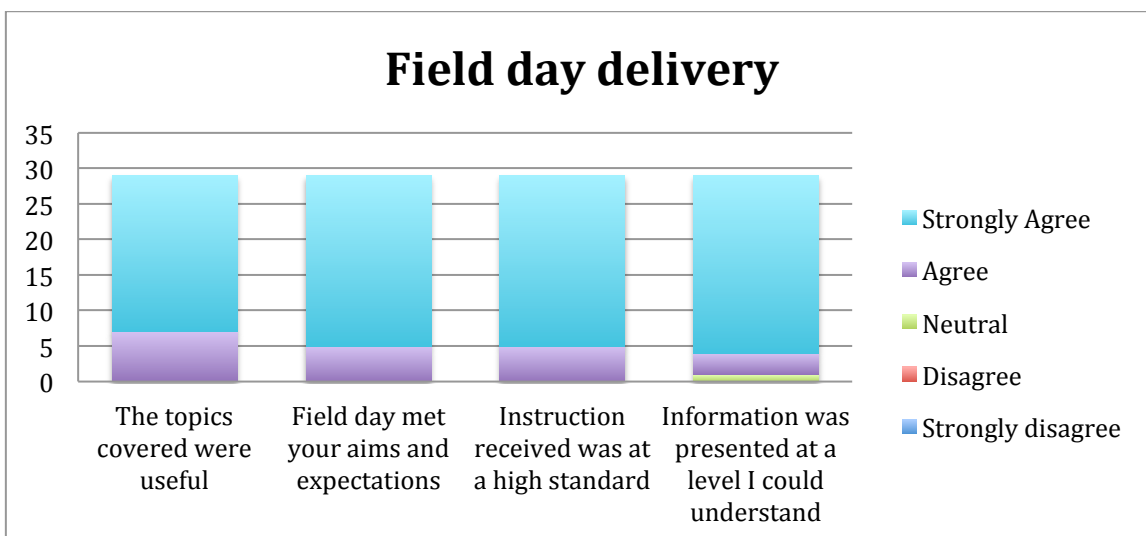
The results of the evaluations are summarised in this section.

## Demographics

There were a total of 71 participants at the field day. Of respondents 21% were growers or farm managers, 45% identified themselves as a mixture of agronomists, teachers, consultants, contractors, students and environmental enthusiasts. The remaining respondents did not specify an occupation.

## Field day delivery

Most participants agreed that the field days had met their aims and expectations and information was presented at a level they could understand. All participants felt that the instruction received was at a high standard and the topics covered were useful. One participant made the comment that some of the younger kids found some of the information a little technical.

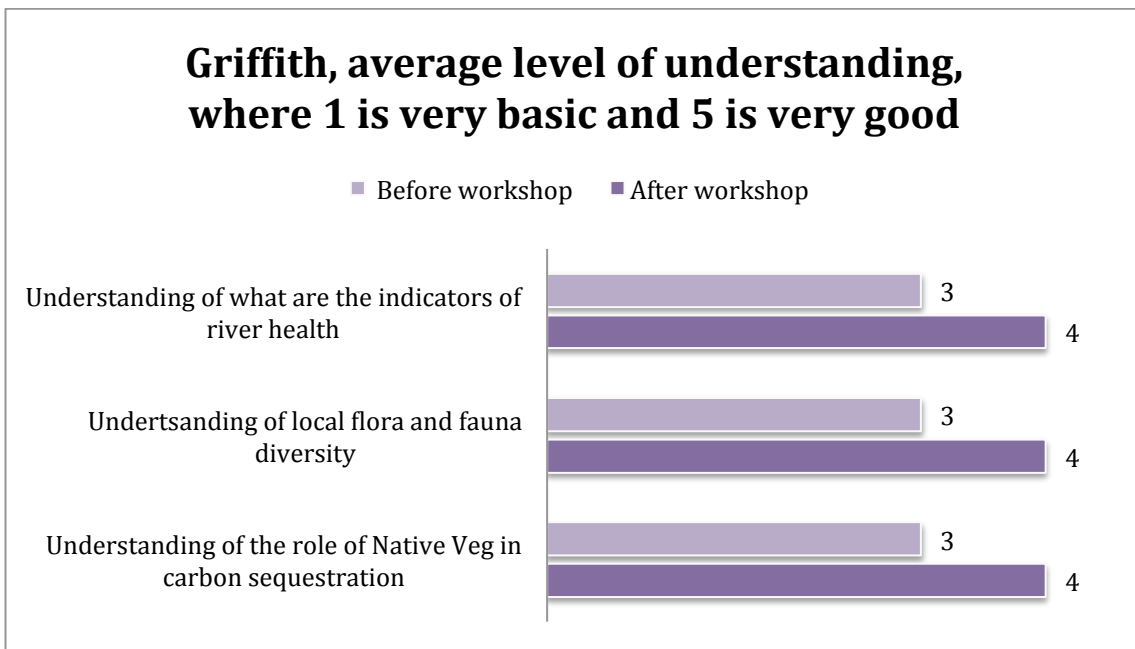


**Figure 1** Participants evaluations of field day delivery (Griffith and Hay combined)

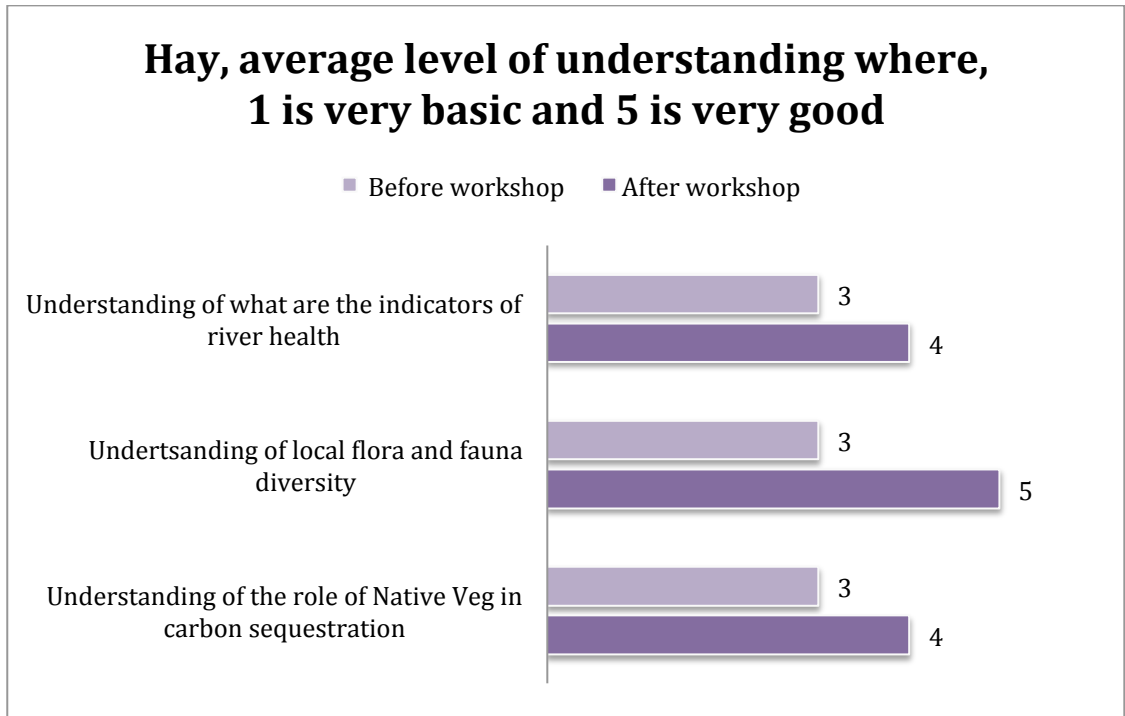
## Changes in KASA (Knowledge, awareness, skills and aspirations)

### Gains in Understanding

A summary of KASA changes from both field days (Figure 2 & 3) indicated an overall increase in the level of understanding of the three key areas, indicators of river health, habitat requirements of local biodiversity and ecosystem services of native vegetation (carbon sequestration).

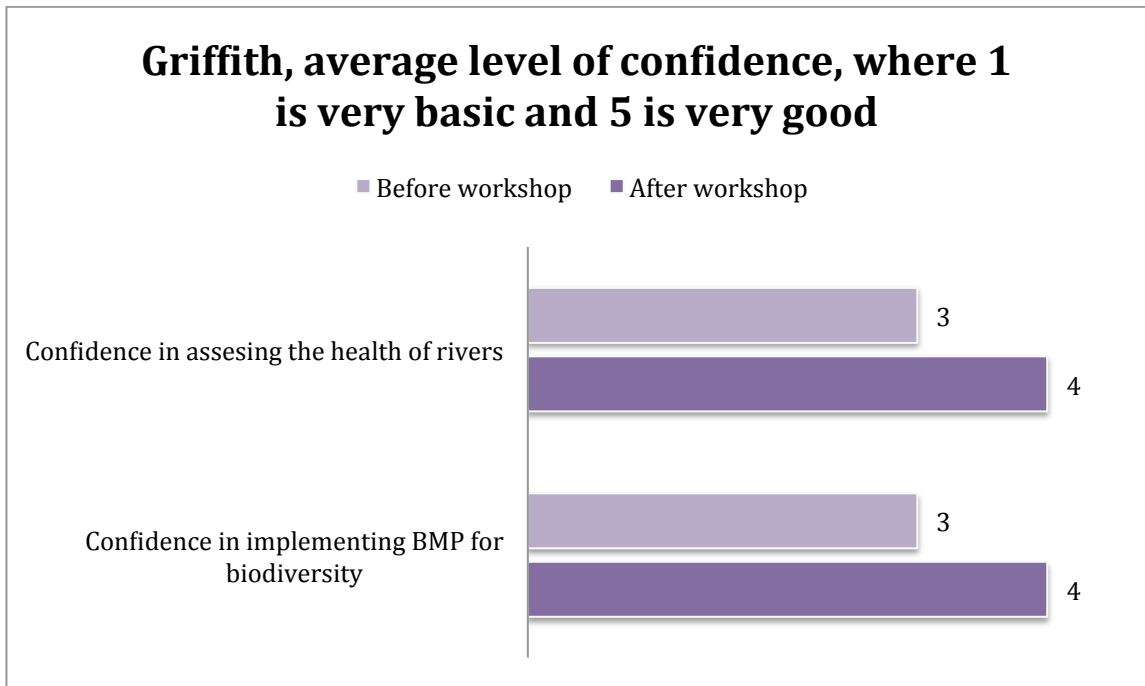


**Figure 2** Average level of understanding of the 3 key areas before and after the field day, where 1 is very basic and 5 is very good.

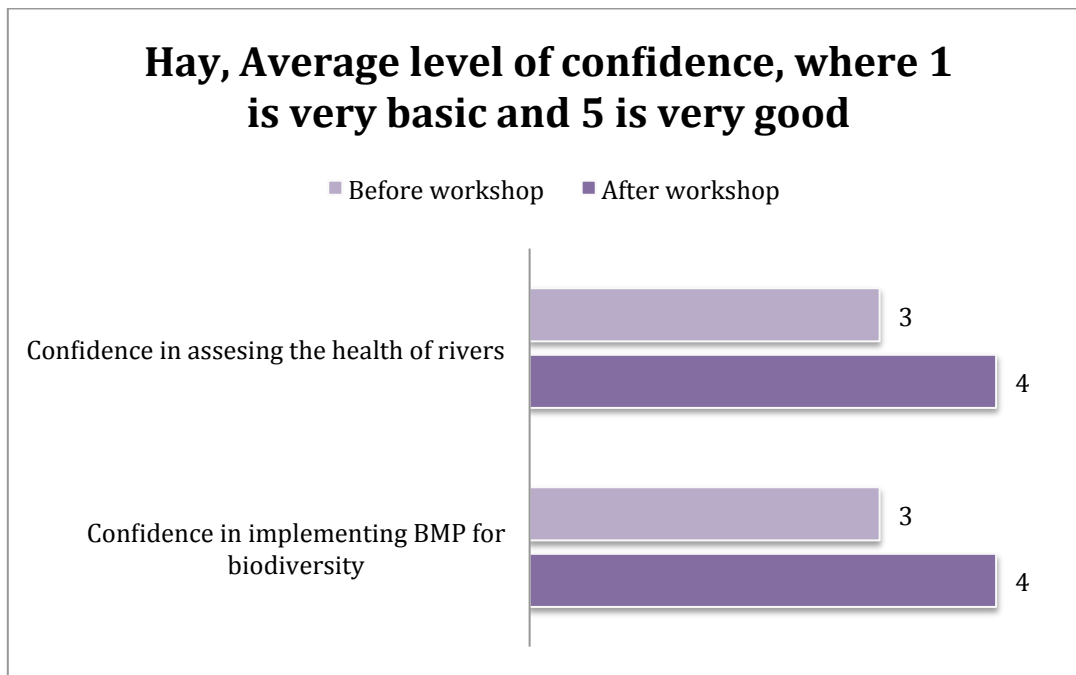


**Figure 3** Average level of understanding of the 3 key areas before and after the field day, where 1 is very basic and 5 is very good.

Participants also recorded an overall increase in their level of confidence to implement what they had learned at the workshop.



**Figure 4** Average level of confidence to implement practices in the 3 key areas before and after the field days, where 1 is very basic and 5 is very good.



**Figure 5** Average level of confidence to implement practices in the 3 key areas before and after the field days, where 1 is very basic and 5 is very good.

Forty eight percent of respondents were more likely to adopt riparian BMP's on their farm as a result of attending the field days, 17% they were already adopting best practice, 10% said they would not and the remainder did not answer the question.

#### Feedback responses from participants:

- Show more animals
- It was excellent couldn't be better
- BBQ lunch, simpler sandwiches for kids (Griffith)
- Go for longer with more information
- More animals
- More animals, maybe an echidna some fish and a baby kookaburra
- Good to see the child friendly level of info and their enthusiasm to participate
- Fantastic event would love to have involved the scouts but they operate during school term. Advertising over holidays reduced RSVP's





Photo: Presenters left to right, Annabel Iugsdin (M. Landacre), Dr Rhiannon (UNE) Smith and Michelle Durkan (Taronga), Hay 2017



Photo: Participants Gogelderie weir, Feb 2017

## Communications

### Field day fauna Booklet

A field day booklet was developed as a follow-up educational tool, Appendix 4. The booklet contained information about River Red Gum Woodlands, local biodiversity occurring within the Riverina area and what management actions readers could do to preserve their habitat. Extra copies of the booklet were printed for use by Murrumbidgee Landcare Incorporated and other members of the LIAC in future relevant extension events.

### Event promotion

- Distribution of field day flyer through committee networks and local newsletters, newspapers and social media such as:
  - CottonInfo and MI website
  - Email to schools-Griffith High, Leeton High, St Francis in Leeton, Binya Public, Darlington Point Public, Whitton Public, Wamoon Public, Darlington Point Public, Coleambally Central School, Leeton Primary, Parkview Primary
  - Advertising in Murrumbidgee Field Naturalists newsletter
  - Email-Irrigation Area Collective
  - Distribute posters
  - Meeting with Kate O'Callagan from Southern Cotton re promoting the event
  - Posters at Southern Cotton, Whitton Shop, Pool and Post Office, Darlington Point Shop, Pool and Post Office, Griffith Supermarket,
  - Radio interviews-Triple M in Riverina, 2MIA FM ( twice) , , Anne Delaney ABC radio
  - Bindi-ABC radio advertising (twice)
  - Riverina Local Land Services e newsletter
  - Mli website, facebook and twitter accounts

### Social Media

During the events we used Twitter to publicise and promote the events. These tweets were re-tweeted or liked by CottonInfo, Murrumbidgee Landcare Incorporated, Murrumbidgee Irrigation, CEO Cotton Research Development Corporation, CEO for Murray Darling Wetlands Working group Ltd and field day participants

<https://twitter.com/vogelstacey>

### Post media

An article on the field day was published in the local Hay newspaper.

### Conclusion

The 2017 “Cottoning onto the Murrumbidgee River” riparian and river awareness and management field days were a successful capacity building activity. Ecologists, researchers and natural resource management technical staff provided 71 people from the Riverina area with the latest riparian management information.

Importantly, the evaluation material collected during the events found that field day participants increased their awareness and understanding of riparian management. The evaluations also indicated that 48% of respondents were more likely to adopt riparian BMP’s on their farm as a result of attending the field days, 17% they were already adopting best practice, 10% said they would not and the remainder did not answer.

The field days were an example of how riparian management research outcomes can be successfully delivered to cotton communities in a fun and interactive way. The success of the field days was also a positive start to CottonInfo’s inclusion in the Landcare Irrigation Area Collective.

## Appendices

### Appendix 1 Field day program

<b>AGENDA</b> <b>Friday 17<sup>th</sup> Feb 2017 – Gogeldrie Weir</b>	
<b>9:30am start</b>	Participants arrive at starting point  Welcome & Introduction/Event facilitation–Stacey Vogel (CottonInfo) (5mins) -  Jimmy Ingram (5mins) - welcome to country  Erin Lenon (Commonwealth officer of water) – environmental flows (10mins)  Sky Wassen (CSU) –Wetland and riverine function, why value it what services providing farming community (10mins)  Facilitator Hand over to Guides for induction
<b>9:55am</b>	Kayaking Induction by kayak guides (Out & About Adventures) - Workplace Health & Safety outlined to group and Job Safety Assessment sheet handed around for signature
<b>10:15 – 11:30</b> <b>Paddle</b>	Participants on river paddling by 10:15am (2hrs (6-8km) paddling +1/2 morning tea)  Technical experts to point out things of interest as paddle and answer questions.  Short talk on bank about what we can see as move kayaks around structure Sky Wassens (CSU) Kerri Anne (MI/Landcare) – facilitate discussion as paddle
<b>11:30-12:00</b> <b>Morning tea</b>	Morning tea stop (simple morning tea can be packed by Guides).
<b>12:00 – 1:15</b> <b>Paddle</b>	Technical experts point things of interest and answering questions
<b>1:15 – 2:00pm</b>	<b>Lunch</b>



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<b>2:00 – 2:40</b>	Cathy Semmler (MI) Why are healthy riparian areas important? (10mins) Dr Rhiannon Smith (UNE/CRDC) Ecosystem services of NV –Cotton research outcomes (15mins)
<b>2:40 – 2:50</b>	Management – what can I do? /, funding incentives etc TBC speaker Riverina LLS – 10mins
<b>2:50 – 3:00</b>	Wrap-up, Collection of workshop evaluation sheets Workshop Close – (5mins)



<b>Weekend Saturday 18<sup>th</sup> Feb 2017</b> <b>Gogeldrie Weir -9:30– 2:30pm</b> <b>Concurrent sessions</b>	
<b>9:30am</b> <b>Start</b>	Participants arrive at starting point  Welcome & Introduction –Facilitator / Stacey Vogel (CottonInfo) (5mins)  Landscape principles for healthy rivers (use satellite image) – Cathy Semmler environment officer Murrumbidgee Irrigation (10mins)  The value of River Red Gums- Dr Rhiannon Smith UNE/CRDC (5mins)
<b>10:00am</b>	Sessions begin. Group split into 2 concurrent sessions.
<b>Session 1</b> <b>1hr &amp; 45mins</b> <b>10:00am – 11:45am</b>	<b>Activity 1 – Kayaking</b>  Kayaking Induction by kayak guides/grab some fruit/muslei bar (10mins)  1 ½ hr Paddling with NRM Technical experts , Dr Rhiannon Smith UNE, Cathy Semmler Murrumbidgee Irrigation)  <b>Activity 2 – Riverbank activities (can start morning tea early so ready to take off</b>  Morning tea – 15minutes  Waterwatch Activity –Kerri Keely Murrumbidgee Landcare /Annabel Lugsdin (45mins)  <u><a href="#">Fauna show &amp; Tell- Taronga Zoo (45min) – 11.00am</a></u>
<b>Session 2</b> <b>1hr &amp; 45mins</b> <b>11:45am – 1:30pm</b>	<b>Activity 1 – Kayaking 1 1/2</b>  Kayaking Induction by kayak guides (10mins)  1 ½ hr Paddling with NRM Technical experts Dr Rhiannon Smith UNE, Annabel Lugsdin)  <b>Activity 2– Riverbank activities (can start morning tea early so ready to take off</b>  Morning Tea – 15minutes



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	Fauna show & Tell- Tooronga Zoo (45mins) Waterwatch Activity – Kerri/Cathy(45mins)
<b>1:30pm – 2:00pm</b>	Lunch (wrap-up and close while people are grabbing something to eat. Evaluation sheets
<b>2:00pm Lunch/close</b>	Wrap-up and Collection of workshop evaluation sheets – Stacey Vogel CottonInfo (5mins)





**Weekend Sun 19<sup>th</sup> Feb 2017**

**Hay -9:30– 2:30pm**

**Concurrent sessions**

<p><b>9:30am Start</b></p>	<p>Participants arrive at starting point</p> <p>Welcome &amp; Introduction –Facilitator / Stacey Vogel (CottonInfo) (5mins)</p> <p>The value of River Red Gums and landscape principles for healthy riparian areas- Dr Rhiannon Smith UNE/CRDC (15mins)</p>
<p><b>10:00am</b></p>	<p>Sessions begin. Group split into 2 concurrent sessions.</p>
<p><b>Session 1 1hr &amp; 45mins 10:00am – 11:45am</b></p>	<p><b>Activity 1 – Kayaking</b></p> <p>Kayaking Induction by kayak guides/grab some fruit/museli bar (10mins)</p> <p>1 ½ hr Paddling with NRM Technical experts , Dr Rhiannon Smith UNE, Stacey Vogel ?</p> <p><b>Activity 2 – Riverbank activities (can start morning tea early so ready to take off</b></p> <p>Morning tea – 15minutes</p> <p>Waterwatch Activity –Annabel /Stacey Vogel (45mins)</p> <p><u><a href="#">Fauna show &amp; Tell- Taronga Zoo (45min) – 11:00am</a></u></p>
<p><b>Session 2 1hr &amp; 45mins 11:45am – 1:30pm</b></p>	<p><b>Activity 1 – Kayaking 1 1/2</b></p> <p>Kayaking Induction by kayak guides (10mins)</p> <p>1 ½ hr Paddling with NRM Technical experts Dr Rhiannon Smith UNE,</p> <p><b>Activity 2– Riverbank activities (can start morning tea early so ready to take off</b></p> <p>Morning Tea – 15minutes</p> <p>Fauna show &amp; Tell- Tooronga Zoo (45mins)</p> <p>Waterwatch Activity – Annabel/Stacey(45mins)</p>





**CottonInfo** Information when you need it

<b>1:30pm – 2:00pm</b>	Lunch (wrap-up and close while people are grabbing something to eat.
<b>2:00pm Lunch/close</b>	Wrap-up and Collection of workshop evaluation sheets – Stacey Vogel CottonInfo (10mins)







CottonInfo Information when you need it

## Appendix 2 - Field day Flyer



# cottoning on to the Murrumbidgee River

**You are invited to three great events: free kayak trips and wildlife discovery adventures on the Murrumbidgee River!**

Join flora and fauna experts for these fun events at any of our great locations over three days!

**Gogeldrie Weir: Friday 17 Feb 2017**

9:30am-3:00pm

Join us for a relaxing morning cruising down the river on a free kayak trip while learning about your local river. **Over 18s only.** Kayaks and PFDs provided, along with a free morning tea and BBQ lunch.

**Gogeldrie Weir: Saturday 18 Feb 2017**

9:30am-2:30pm

Join us for a fun family day kayaking and exploring the local river and its wildlife. Come and see what special guests Taronga Zoo have brought for us to have a look at! Kayaks and PFDs provided, along with a free morning tea and BBQ lunch.

**Hay Weir: Sunday 19 Feb 2017**

9:30am-2:30pm

Join us for a fun family day kayaking and exploring the local river and its wildlife. Come and see what special guests Taronga Zoo have brought for us to have a look at! Kayaks and PFDs provided, along with a free morning tea and BBQ lunch.

**Please RSVP for all events by Friday 3 Feb.**

Contact Kerri Keely: 0428 396 826, [kkeely@mli.org.au](mailto:kkeely@mli.org.au). Spaces are limited so get in quickly!



*This project is supported by funding from the Australian Government.*



The Local Landcare Coordinators Initiative is funded by the NSW Government, and is supported through the partnership of Local Land Services and Landcare NSW.



## Appendix 3 – Evaluation Form



## Evaluation form: Cottoning onto the Murrumbidgee Feb 2017

*Thank you for attending today's event. We value your time and would appreciate your feedback.*

- |  | <i>Disagree</i>                     |                                      |                                      |                                   | <i>Agree</i>               |
|--|-------------------------------------|--------------------------------------|--------------------------------------|-----------------------------------|----------------------------|
| 1. The event met your aims & expectations:                               | <input type="checkbox"/> 1          | <input type="checkbox"/> 2           | <input type="checkbox"/> 3           | <input type="checkbox"/> 4        | <input type="checkbox"/> 5 |
| 2. The instruction received was of a high standard:                      | <input type="checkbox"/> 1          | <input type="checkbox"/> 2           | <input type="checkbox"/> 3           | <input type="checkbox"/> 4        | <input type="checkbox"/> 5 |
| 3. The event was presented at a level you could understand:              | <input type="checkbox"/> 1          | <input type="checkbox"/> 2           | <input type="checkbox"/> 3           | <input type="checkbox"/> 4        | <input type="checkbox"/> 5 |
| 4. The topics covered were useful:                                       | <input type="checkbox"/> 1          | <input type="checkbox"/> 2           | <input type="checkbox"/> 3           | <input type="checkbox"/> 4        | <input type="checkbox"/> 5 |
| 5. The pace of delivery of information was:                              | <input type="checkbox"/> Too slow   | <input type="checkbox"/> About right | <input type="checkbox"/> Too fast    |                                   |                            |
| 6. The amount of information was:  | <input type="checkbox"/> Not enough |                                      | <input type="checkbox"/> About right | <input type="checkbox"/> Too much |                            |
| 7. How could we have improved the event to be more useful for you? _____ |                                     |                                      |                                      |                                   |                            |

8. With regard to the river health please rate your:
- a. level of understanding of what the indicators are for river and riparian health (where 1 is very basic & 5 very good)
- Before today's event:       1    2    3    4    5
- After today's event:         1    2    3    4    5
- b. level of confidence in being able to assess how healthy your local river is (where 1 is very basic & 5 very good)
- Before today's event:       1    2    3    4    5
- After today's event:         1    2    3    4    5
9. With regard to biodiversity please rate your:
- a. level of understanding of the diversity of native flora and fauna that live in your local landscape and what their habitat and food requirements are (where 1 is very basic & 5 very good)
- Before today's event:       1    2    3    4    5
- After today's event:         1    2    3    4    5
- b. level of confidence in managing native flora and fauna on your farm or in your local landscape (where 1 is very basic & 5 very good)
- Before today's event:       1    2    3    4    5
- After today's event:         1    2    3    4    5



10. As a result of this event, are you (more) likely to adopt Best Management Practices for river and riparian areas or biodiversity on your farm or in your catchment; or if you are already adopting it, to do it more effectively?

Yes                       No                       Already adopted/using effectively

11. What would prevent you from adopting these BMP's and/or what else do you need to assist you in adopting them? \_\_\_\_\_  
\_\_\_\_\_

12. As a result of this event, please rate your level of understanding of the role native vegetation such as River Red gums play in sequestering carbon (where 1 is very basic & 5 very good)

Before today's event:             1    2    3    4    5

After today's event:             1    2    3    4    5

14. How do you classify yourself?

Grower/farm manager    Farm staff                       Consultant/advisor                       Retailer

Agency                       Other. Please specify: \_\_\_\_\_

15. Do you have a riparian area on your farm?

Yes                      No

16. Any further feedback? \_\_\_\_\_  
\_\_\_\_\_

**Thank you.**



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Irrigation**



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# cottoning on to the Murrumbidgee! Nature's workforce

CottonInfo and its partners Murrumbidgee Irrigation, Murrumbidgee Landcare Incorporated, NSW Landcare, the Riverina Local Land Services and the Australian Government are running a series of free, fun and informative kayak trips on the Murrumbidgee River in February 2017.

This booklet contains information about some of the amazing flora and fauna we hope to see while paddling on the river and how this natural workforce is providing benefits to our farms and rural communities.

One such 'natural worker' is Australia's iconic River Red Gum. River Red Gum communities, which are common along our rivers and creeks, provide habitat and food for a diversity of species such as microbats and sugar gliders, as well as a range of free environmental services such as habitat for crop pest predators, carbon sequestration and erosion control.

Join us to see and learn more about our natural workforce and what you can do to help protect them.

For more information visit [www.cottoninfo.com.au](http://www.cottoninfo.com.au).

*This project is supported by funding from the Australian Government.*



STACEY VOGEL



MICHAEL SNEDIC



Murrumbidgee Irrigation



This activity is part of the Local Landcare Coordinators Initiative



Local Land Services

The Local Landcare Coordination Initiative is funded by the NSW Government, and is supported through the partnership of Local Land Services and Landcare NSW

