

**LCC001: SUGAR INDUSTRY RIPARIAN MANAGEMENT GUIDELINES  
FINAL REPORT**

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**RESEARCH ORGANISATION:** Lovett Clarke Consulting Pty Ltd

**CONTACT:** Dr Siwan Lovett  
Lovett Clarke Consulting  
30 Hoddle Gardens  
AINSLIE ACT 2602

Tel: 02 6257 9821  
Fax: 02 6257 3420  
Email: siwan.lovett@lwa.gov.au

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### ABSTRACT:

The sugar industry is responding to increasing external scrutiny by improving its environmental credentials. The Canegrowers Environmental Audit identified as a high priority the need for the industry to integrate sound strategies and practices for riparian management into industry expansion, property management planning and best management practice. This project has used research conducted into riparian land management through Land & Water Australia's National Riparian Lands R&D Program, and tailored it to meet the needs of the sugar industry. Through consultation with cane growers and other industry bodies, the project has produced a publication that is based on the practicalities of cane growing and allows users to adapt it easily to their own situation and management objectives. The publication is entitled - *Managing Riparian Lands in the Sugar Industry: A Guide to Principles and Practices*, and will be made available through industry networks and organisations such as CANEGROWERS, Bureau of Sugar Experiment Station, Department of Natural Resources and catchment management committees.

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### PROJECT SUMMARY:

Recent environmental audits conducted in the sugar industry have identified riparian land management on cane farms as a top priority. Several grower groups, as well as catchment management plans in sugar catchments, have also identified improved management of riparian lands as a high priority. As a result there is a demand to integrate sound strategies and practices for riparian management into industry expansion, property management planning and best management practice. Prior to this project, however, there was little information available that was specific to the needs of the industry and its individual growers.

In order to address this need, the focus of the project has been on the production of a useful, relevant and accessible guideline for extension officers and cane growers to use when seeking advice about riparian land management on cane farms. The project has drawn upon the results of Land & Water Australia's National Riparian Lands R&D Program, that has been investing in research for the past eight years and has produced a set of *Riparian Land Management Technical Guidelines*. These guidelines have been used as the basis for the development of *Managing Riparian Lands in the Sugar Industry: A Guide to Principles and Practices*. This guide has been developed over the past year, with involvement from a range of cane growers, government, researchers and community groups to ensure that the material contained within it targets the needs of the sugar industry.

The objectives guiding the Project have been:

1. To assist the sugar industry and individual producers to understand the principles of sound riparian management, and how they can be used to contribute to sustainable productivity, improved environmental management and enhanced environmental credentials for the industry.

2. To enable the sugar industry to respond to a high priority of the Canegrowers Environmental Audit by integrating sound strategies for riparian management into industry expansion, property management planning and best management practice.
3. To prepare, publish and distribute through industry networks a practical and easy to use riparian management guideline for use by extension officers and producers, and to meet a range of industry identified environmental priorities, including the possible development of a code of practice.

These objectives have been met, with the production of an easy to use and highly relevant guideline that shows how riparian lands on cane farms can fulfil a range of different management objectives. The guideline relates directly to on-farm management with information provided about using riparian lands to fulfil not only environmental, but also economic objectives. For example, riparian lands can be used to trap sediment, shelter crops from wind, stabilise eroding banks and provide habitat for native animals such as owls that control cane rats. The guideline shows how these management objectives can be achieved using riparian lands without greatly impacting on farm productivity levels. The material is presented in an easy to use and attractive format, with the recommended management practices underpinned by sound science. This is important, as many cane growers want the reassurance that the management practices they implement are based on credible science.

The guideline has been developed following extensive consultation with a range of people representing cane growers, researchers, extension and government organisations (see Attachment A). Face-to-face meetings were combined with an intensive review period in which drafts of the guideline were sent out for comment and all feedback was considered. This process was undertaken over a three-month period and the final product bears testament to the emphasis placed on incorporating detailed input from a diverse range of potential end-users.

Copies of the guideline are enclosed with this report. Following discussions with those involved in the project, it is anticipated that the guideline will be available from key industry, government and research outlets, namely, CANEGROWERS, Sugar Research and Development Corporation, Bureau of Sugar Experiment Stations, Productivity Boards, Department of Natural Resources & Mines, Environmental Protection Agency and Land & Water Australia. Suggestions about how the guideline can be accessed through other communication mechanisms are provided in the recommendations section of this report.

The production of the guidelines is a significant step forward for the sugar industry as it enables cane growers to act on their desire to improve their industry's environmental credentials. The guidelines provide cane growers with the reassurance that the activities they undertake on their farms to improve riparian lands management is based on sound science. In addition, through their involvement in the development of the guidelines, the key government and research agencies working with the sugar industry endorse the recommended management practices contained within the publication. This means that cane growers can use the guidelines confident in the knowledge that no contradictory advice from a government or research agency is likely to impede their progress in improving on-farm riparian land management.

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## RECOMMENDATIONS:

1. The enclosed guidelines have been provided in two formats – one in full colour and one in black and white. The full colour version is clearly more visually appealing and, as the black and white copy shows, it photocopies easily. Our recommendation would be that SRDC print the guidelines in full colour, as particular attention has been paid to sourcing photographs and laying out the information using colour coding and other design elements. Our experience in this area has revealed that people like hard copy publications that are attractive and make the subject matter ‘come to life’. It was with this in mind that the full colour copy was developed.

Indicative quotes have been sourced (Attachment B) with 500 full colour copies \$16,698.00. A two-colour version has also been quoted with 500 two-colour copies \$11,330.00. If a decision were made to go to two-colour however, there would be an extra cost involved for the designer to rework the colours, this would probably cost around \$1000.00.

Land & Water Australia are keen to see the guideline produced in full colour and will pay for 100 copies of the guideline, as there has been significant interest in the publication. The guideline will retail at \$30.00 incl GST. Given the \$16,698.00 quoted above, for 100 copies Land & Water Australia would provide \$3340.00 towards costs, and, if requested, would also manage the printing process for free. This leaves a shortfall of around \$13,358.00. Given the involvement of CANEGROWERS and their need to act on the findings of the environmental audit, perhaps they could be approached to assist SRDC cover the remaining cost.

2. In addition to the hard copy of the guideline, SRDC may also wish to consider placing the guideline on the web. Our experience in this area has led us to reproduce reports and guidelines with a mixture of html and pdf formats. Translated, this means that we produce an introduction and contents page for the publication that is in a form that people can see as soon as they go to the website. If they wish to explore the contents of the publication they can then use the hotlinks provided to download a section of the guideline. If SRDC would like to see how this is done, the [www.rivers.gov.au](http://www.rivers.gov.au) website has a number of publications produced in this way. Go to the publications part of the site and look for ‘demonstration and evaluation of riparian restoration final reports’ to see how this works.
3. Other opportunities to build on the information contained in the guideline include:
  - running a series of riparian management workshops in sugar growing areas based on the contents of the guideline and held in conjunction with similar projects being undertaken by BSES, SRDC and QDNRM;
  - developing a series of ‘fact sheets’ that further simplify the guidelines and are used to raise awareness about key riparian management issues; and
  - developing a booklet that links to the guidelines and tells stories, in their own words, of cane growers who have implemented different river and riparian management practices and how this has impacted on their sugar growing operation.

Land & Water Australia would be willing to provide advice to SRDC on these opportunities, and may be able to provide financial or in-kind contributions to develop future projects.

**ATTACHMENT A:****Table 1: Reviewers providing feedback in 'Managing Riparian Lands in the Sugar Industry: A Guide to Principles and Practice'.**

Nigel Tucker/Nick Stevens PO Box YUNGABURRA QLD 4872 07 4095 3406 (veg expert/extension)	Jennifer Marohasy CANEGROWERS 190-194 Edward Street BRISBANE QLD 4000 (industry)
Tony Blatch BSES PO Box 630 NAMBOUR QLD 4560 (extension)	Tom Watters PO Box 172 Gordonvale QLD 4865 (grower)
Steve Garrad BSES PO Box 630 INNISFAIL QLD 4860 (extension)	Mark Morton PO Box 166 Gordonvale QLD 4865 (grower)
Drewe Burgess BSES PO Box 725 TOLGA QLD 4882 (extension)	Mick Camilleri PO Box 950 Innisfail QLD 4860 07 4064 4211 (grower)
John Amprimo Dept Natural Resources BRISBANE QLD 4000 (govt)	Ross Digman PO Box 106 TULLY QLD 4854 (grower)
Steve Elson Environment Protection Agency PO Box 3130 Rockhampton Shopping Fair 4702 (govt)	Alan Murray Dept of Primary Industries 6 <sup>th</sup> Floor, Primary Industries Building 80 Ann Street BRISBANE QLD 4000 (govt)
Ian Prosser CSIRO Land & Water CANBERRA ACT 2600 (researcher)	Robert Troedson SRDC BRISBANE QLD 4000 (industry/researcher)
Walter Scattini 45/72 Lorimer Terrace Kelvin Grove BRISBANE Qld 4059 (researcher)	Keith Schmidtke Box 355 SERENA QLD 4737 (grower)
Wayne Thomas Senior Admin Officer CANEGROWERS PO Box 410 INGHAM QLD 4850 (Industry/grower)	George Lucaks James Cook University TOWNSVILLE QLD (researcher)
Peter Alden Greening Australia PO Box 933 AYR QLD 4807 (extension)	Mr Paul Anderson PO Box 411 PALMWOODS QLD 4555 (extension)

<p>Melissa Azzopardi BSES PMB 57 Mackay Mail Centre QLD 4741 (extension)</p>	<p>Andrew Brodie BSES PO Box 566 TULLY QLD (extension)</p>
<p>David Wallis BSES TULLY QLD (extension)</p>	<p>Damien Taylor Qld Environment Protection Agency BRISBANE QLD 4000 (government)</p>
<p>Dawn Couchman Qld Department of Primary Industries BRISBANE QLD 4000 (government)</p>	

**ATTACHMENT B:**

Quotations for printing of guidelines attached.