



FINAL REPORT 2015

For Public Release

Part 1 - Summary Details

CRDC Project Number: RRR1402

Project Title: myBMP Lead Certification Auditor

Project Commencement Date: 1/12/13 Project Completion Date: 30/6/15

CRDC Research Program: 5 Performance

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Date Submitted: 26/8/2015

Part 3 – Final Report

1. Background

The my BMP program (www.myBMP.com.au) is an environmental management system which provides self-assessment mechanisms, practical tools and auditing processes to ensure that Australian cotton is produced according to best practice. myBMP is the industry’s assurance mechanism – a best management practice system for growers to improve on-farm production. It attends to the industry’s requirement for risk management and supports industry’s social licence.

Through myBMP, all Australian cotton growers have a resource bank to access the industry’s best practice standards, which are fully supported by scientific research and development, resources and technical support. By using myBMP’s tools, growers can improve on-farm production performance by; better managing business and production risk, maximising potential market advantages, and demonstrating responsible and sustainable natural resource management to the community.

Information is categorised into 11 key modules for growers including: biosecurity, biotechnology, energy and input efficiency, fibre quality, human resources and WHS, integrated pest management, natural assets, pesticide management, petrochemical storage and handling, soil health, and water management.

The myBMP Program includes an option for growers to achieve “certification” by having an external audit completed on their farm practices. A typical audit covers a review of farm documentation and a farm visit (Figure 1). An audit involves the five core modules (pesticides, soil, water, natural assets, and petrochemicals) plus one random module.

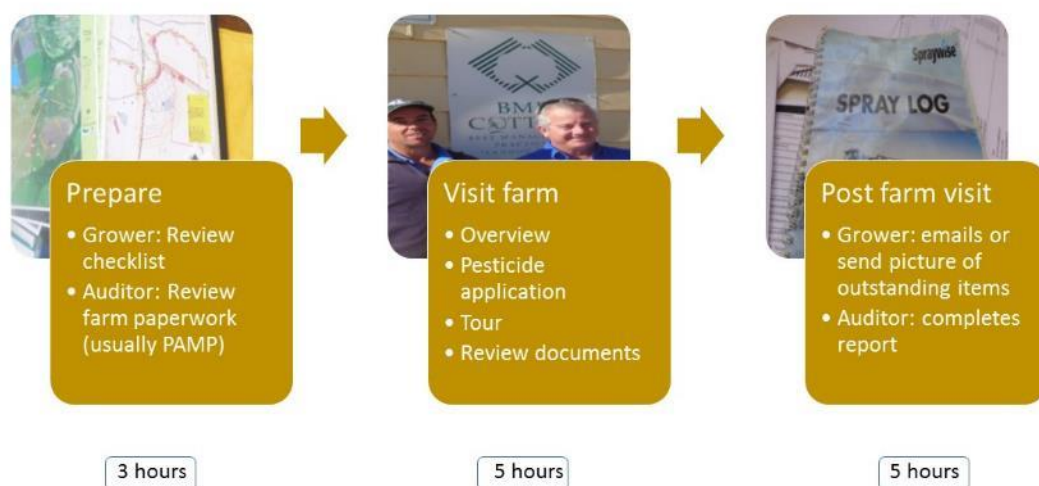


Figure 1: Outline of the typical myBMP certification process and auditors time for each task. Each farm audit currently takes an auditor around 2 days to complete depending on the travel involved.

The myBMP Programs aims to increase the number of “certified” myBMP growers. Therefore, it was considered critical to train at least another five – ten people to meet the rising demand by growers for certification audits as well as improve the myBMP audit process and systems.

To become an auditor, my BMP policy requires an auditor to;

- undertake a five day environmental auditing course
- undertake a two day myBMP training course (provided by this project)
- undertake two supervised mentored audits (provided by this project).

2. Objectives

The aim of this project was to contribute to the provision of a consistent, robust and credible audit system for myBMP. This project also provided training and mentoring for auditors to assess myBMP standards set by the Australian cotton industry.

The Project Objectives	Status
Lead the myBMP Audit function, including providing of amendments and improvements to myBMP Audit function.	Completed and described in next section of report.
Lead the team of Auditors to achieve a professional approach to auditing achieving and maintaining Auditors familiarity with myBMP.	Completed and described in next section of report.
Assist in the training, mentoring and scrutineering of Auditors.	Completed and described in next section of report.
Assist in tracking practice change in the field as observed in myBMP Auditing.	Completed and described in next section of report.
Adjudicate disputes and propose action to “GM my BMP”.	All disputes were resolved as they arose.
The original project plan included an objective to integrate process for auditing of gins and classing facilities into the myBMP Audit program.	This aspect of the project was not completed by this project, and became a task for the myBMP Manager.

3. Methods

This project reported to the myBMP General Manager and communicated frequently with the myBMP office managers, other auditors and Cotton Australia regional staff.

Audit Function and Amendments & Auditor Policies and Procedures

The main methodology for this aspect of the project was regular discussions and interactions with myBMP General manager and office administrator on audit process, function and opportunities for improvement. In conjunction with the myBMP Office the project updated the “auditing operating documents” which document procedures and policies in relation to myBMP audits. This task was completed annually. There are 24 documents that describe audit policies and the process and they are maintained on the myBMP website.

Auditor Training & Auditor Mentoring and Development & Pilot Audits

A number of pilot farm audits were completed in Queensland and NSW. These pilot audits enabled better procedures, policies and systems to be developed. A two day training workshop for up to 10 people interested in becoming new myBMP auditors had been conducted just prior to the commencement of this project. The workshop covered each of the myBMP modules and include a farm inspection. It was agreed with CRDC that an additional training course was not required. Additional training was provided to two people on an individual basis to match their skills and needs. After completing the training each trainee auditor is required to undertake two mentored audits. This included training experience in the on line systems for reporting and reviewing documentation and audit process. This took 4-5 days for each auditor and included the lead auditor accompanying the trainee auditor on two farm audits each and then assisting them with the report write up.

Auditor Communication

An annual face to face meeting was held as well as six monthly teleconference with auditors and the myBMP General Manager and Office staff. The purpose was to provide updates and discuss issues.

Adjudicate disputes and propose action

A formal process has been documented to manage any disputes. A number of start-up issues have arisen and these were resolved on a case by case basis. No formal disputes needed resolution.

Assist in tracking practice change as a result of myBMP

It was hoped that the electronic myBMP data base could be used to track practise change of growers. Unfortunately, this has not been possible for audited farms due to challenges with software development. As alternative approach, some case studies have been documented for evaluation purposes.

For privacy reasons, the names of growers, farms and auditor have not been included in this final report.

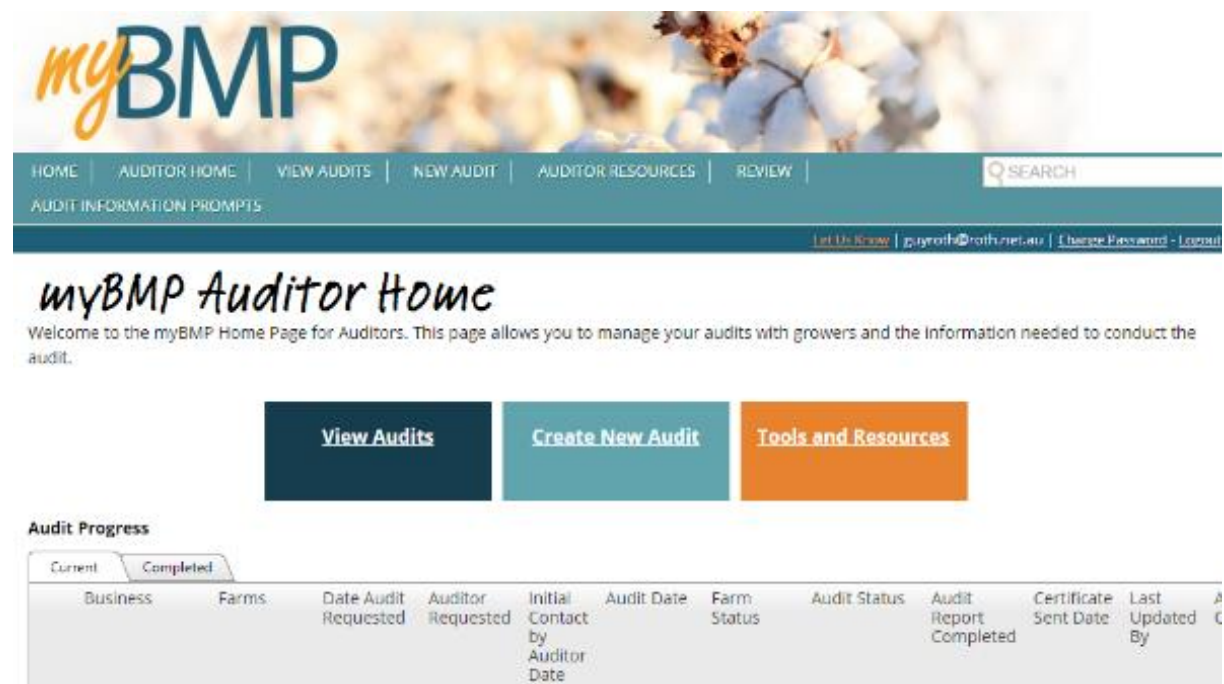


Figure 2: The myBMP auditor home page where auditors can view audits, create new audits and find the supporting tools and resources.

4. Results and Discussion

Audit Function and Amendments, Auditor Policies and Procedures

As expected with any new process there were a number of teething issues that needed resolving. Five examples follow;

- The audit reporting function of the myBMP website did not function well at the start of the project. It was taking auditors about 4 days to complete an audit report, which was clearly not practical. A number of improvements were made to the software platform during the project, which reduced this time to 1 day. Drafting the audit report remains one of the most time consuming aspects of myBMP auditing (Figure 1 & 3). Growers want to know what to fix, while a paper trail of what specifically was checked is needed. If the goal is to complete the report on the farm before the auditor leaves then modifications are required. Cotton Australia plans to update the audit reporting platform in late 2015.
- A number of improvements were made on specific myBMP standards to provide greater clarity or reduce duplication during the project. For example, mapping originally involved about 40 practice items in 3 modules and this was consolidated into one.
- Amendments were also suggested to reduce the number of practices. The audit process requires coverage of the five core modules plus a random module. This equates to about 360 practices to “check off” during an audit. At one per minute, this equates to a minimum of 6 hours. There remains too many “nice to haves” for auditing purposes. Every practice checked takes time and the cumulative time in the end is reflected in costs. The current review of myBMP needs to rectify this.
- One of the main barriers to certification has been the petrochemical module. Supporting resources are inadequate and greater clarity on bundling is required. The current review of myBMP has already actioned this item.
- As mentioned in the methods section there are 24 documents that describe auditor policies and procedures. These are known as the Audit Office Documents and Standard Operating Documents and have been reviewed several times during the project to ensure they remain current. At the request of Cotton Australia field staff a new checklist for growers just prior to the audit visit was developed. Other topics covered by these documents include items like: arranging the audit, opening meeting, disputes, auditor selection criteria, draft interview questions, mentoring procedures, scrutineering procedures, complaints process, and a code of ethics.

Current Audit:		Module	Key Area	Audit Summary	Continuous Improvement	Report
Audit Glencoe 2015-6-15		Soil Health	Nutrition	View / Edit	View	View

Standard Comments						
Select	L	Checklist Item	Grower Documents	Grower Comments	Compliant (Yes, No, N/A)	Auditor Comments
<input type="checkbox"/>	2	Crop nutrient requirements are assessed at the appropriate time (pre and in-crop) to determine a nutrient management program for a targeted yield			NO	
<input type="checkbox"/>	2	A nutrient budget is prepared based on an assessment of nutrient inputs and outputs (crop removal and losses)			NO	
<input type="checkbox"/>	2	Plant monitoring is undertaken during the season to assess crop nutrient status and used to adjust crop nutrient program			NO	
<input type="checkbox"/>	2	Nutrient monitoring and record keeping is undertaken on a regular basis to identify any long term trends in nutrient status			NO	

Insert

Compliant (Yes, No, N/A)	Auditor Comments	Cont. Impr.
Yes	<input type="text"/>	<input type="checkbox"/>
Add/Edit Record		

Compliant (Yes, No, N/A)	Auditor Comments	Cont. Impr.
Yes	<input type="text"/>	<input checked="" type="checkbox"/>
Add/Edit Record		

Figure 3: Entry screen for auditors to enter report data. There are a lot of navigation clicks required to enter data adding to time required for data entry.

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Auditor Resources

This section shows the resources available to auditors.

[Finalised Demonstration Audit Report.xlsx](#)

Document Name	Description	
AOD 07 myBMP Auditor Procedures June 2011_v1.pdf	MyBMP Auditor Procedures	Download
SOD 04 myBMP Auditor Pre-Audit Contact Guidelines May 2010_v1.pdf	Auditor Pre-Audit Contact Guidelines	Download
AOD 11 myBMP Random Surveillance Audit Selection Procedure Oct 2010_v1.pdf	myBMP Random Surveillance Audit Selection Procedure	Download
biotech_topic_glyphosate_resistance.pdf	Biotech Topic Glyphosate Resistance	Download
AOD 10 myBMP Non compliance procedure Oct 2010_v1.pdf	Non Compliances identified during the audit procedure	Download
SOD 09 myBMP Non-compliance Verification Record May 2010_v1.pdf	Audit Non-Compliance Verification Record	Download
AOD 05 Selection Criteria for myBMP auditors Oct 2010_v1.pdf	Selection Criteria for myBMP Auditors	Download
Australian Cotton Production Manual 2011.pdf	Australian Cotton Production Manual 2011	Download
AOD 14 myBMP Code of Ethics for Scrutineers, Mentors and Auditors June 2011_v1.pdf	Code of Ethics for Scrutineers, Mentors and Auditors	Download
SOD 08 Certification Audit Report May 2010_v1.pdf	Certification Audit Report	Download
AOD 08 myBMP Auditor Mentoring Procedures Oct 2010_v1.pdf	myBMP Auditor Mentoring Procedures	Download
myBMP%20Grower%20Access%20Permission%20Form.doc	myBMP Grower Access Permission Form	Download
SOD 06 myBMP Closing Meeting Guidelines May 2010_v1.pdf	Closing Meeting Guidelines for an audit	Download

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Figure 4: The auditor procedure documents are available on the myBMP website.

Auditor Training & Auditor Mentoring and Development & Pilot Audits

In the past the cotton industry had trained about 10 people to undertake myBMP audits. However, at the start of this project only one person was still available to do audits. This high attrition rate was because when people completed the training there were no audits required by growers. As time went on these people made alternative work choices.

However, as time progressed and audit demand increased four new auditors were trained and accredited during this project. This involved providing training on the myBMP website platform as well as accompanying each of them on two mentored audits. These mentored audits were conducted at 8 commercial cotton farms in Emerald, Theodore, Goondiwindi, Mungindi, Tandou and Wee Waa.

Auditor Communication

Six monthly teleconferences/meetings were convened with auditors and the myBMP General Manager and Office staff. The purpose was to provide updates, share experience and discuss issues to improve the myBMP auditing process. One example to improve the process was the development of a short myBMP Checklist for growers just prior to audit. This is reproduced below.

The aim of having this checklist is to provide a short summary of documents and / or actions growers should have ready before a myBMP certification audit. It is not a comprehensive list or everything, rather a short list of a few common things to have handy so things proceed more quickly on the day.

- Farm map to help you explain how the farm works
- Pesticide Application Management Plan (or similar information)
- Crop check sheets from agronomist,
- Pesticide application orders
- Biotechnology Technology User Agreement and Audits of this.
- Weather monitoring records for pesticide applications for both ground rigs and aerial operators according to product label.
- Chemical training records of staff eg Chemcert certificate/card.
- Staff induction records
- Evidence of how do you communicate with neighbours, staff, consultants etc. and evidence of that (diary notes, signed agreements, minutes of meetings, emails etc.)
- Emergency plans and evidence of communication and implementation of that to relevant people (staff, contractors). Eg Hold a tool box meeting and write up brief minutes, on display around farm, hold a drill etc.
- Managing chemical or petrochemical spills, first aid, eye wash, worker safety , PPE gear
- Pesticide storage, mixing and handling facilities, PPE, a manifest, access to SDS.
- Soil and water management, environmental management and evidence of practice (eg soil tests, water use efficiency calculations, water quality information).
- Storm water management plan
- If any native vegetation clearing has taken place, approval of this or evidence of exemption.

Examples of Farm Practice Change due to myBMP Certification

One of the aims of myBMP is to improve farming practices. There are many drivers of farm practice change including government regulations, R&D, new technologies, market drivers such as the Better Cotton Initiative and cotton industry myBMP campaigns. However, there is strong evidence that the audits do result in direct practice change by growers. This change in practice may occur weeks before the audit, an hour before the audit or subsequent to the audit.

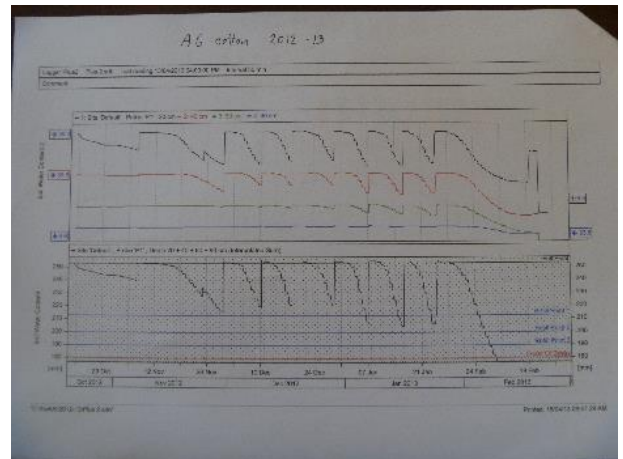
The following pictures in Figure 5 are some examples of actions myBMP certified farmers have been doing as best practice.

Natural Assets Module

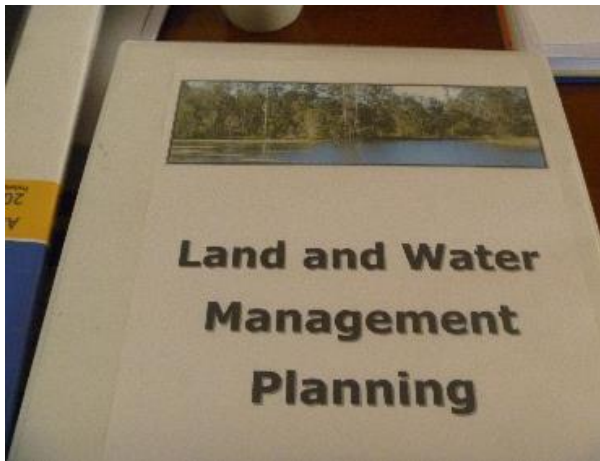


Riparian area protected

Water Module



Hourly soil moisture monitoring



Land and water management plans on Qld farms



Water low and volume metering



Native vegetation not grazed and fenced off



Water storage evaporation monitoring

Pesticide Application Module



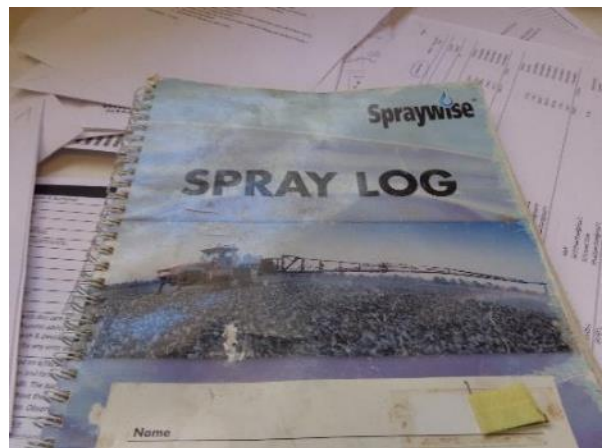
Pesticide application management plans



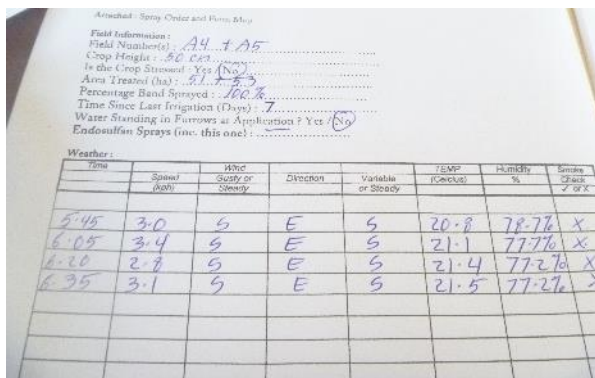
Written spray orders



Weather monitoring during sprays



Spray log data recorded in the field



Recording of weather during spray operations



Windsocks for monitoring the wind



Clean water on spray rigs for staff safety.



PPE equipment in place

EMERGENCY PROCEDURES	
PROTECTIVE EQUIPMENT	DO THIS
IF THIS HAPPENS	
FOR ALL EMERGENCIES	<p>1. Stop work immediately and alert others.</p> <p>2. Notify the site manager or supervisor.</p> <p>3. Evacuate the area immediately.</p> <p>4. Do not re-enter the area until cleared by the site manager or supervisor.</p> <p>5. Report any injuries or damage to the site manager or supervisor.</p>
HAZARDOUS INCIDENT	<p>1. Stop work immediately and alert others.</p> <p>2. Notify the site manager or supervisor.</p> <p>3. Evacuate the area immediately.</p> <p>4. Do not re-enter the area until cleared by the site manager or supervisor.</p> <p>5. Report any injuries or damage to the site manager or supervisor.</p>
SPILL OR LEAK	<p>1. Stop work immediately and alert others.</p> <p>2. Notify the site manager or supervisor.</p> <p>3. Evacuate the area immediately.</p> <p>4. Do not re-enter the area until cleared by the site manager or supervisor.</p> <p>5. Report any injuries or damage to the site manager or supervisor.</p>
FIRE	<p>1. Stop work immediately and alert others.</p> <p>2. Notify the site manager or supervisor.</p> <p>3. Evacuate the area immediately.</p> <p>4. Do not re-enter the area until cleared by the site manager or supervisor.</p> <p>5. Report any injuries or damage to the site manager or supervisor.</p>
FIRST AID	<p>1. Stop work immediately and alert others.</p> <p>2. Notify the site manager or supervisor.</p> <p>3. Evacuate the area immediately.</p> <p>4. Do not re-enter the area until cleared by the site manager or supervisor.</p> <p>5. Report any injuries or damage to the site manager or supervisor.</p>

Emergency plans



Emergency shower



First aid kits available



Fire extinguishers in place



Chemicals securely stored. Good ventilation.



Safety data sheets in place



Evaporation pit lined



Bunding installed



Triple rinsed drums ready for recycling



Locked chemical storage shed

Petro Chemical Storage Module



An earth bunding of a large petrochemical tank

Other Modules



Upgrade pump motor with remote energy use monitoring



Waste oil management. Good area for draining oil filters



Wash down pad for cleaning machinery



Bunded petrochemical storage



Stubble retention

Figure 5: Examples of the range of practices implemented by farmers who have chosen to participate in my BMP certification

Table 1 shows some of the issues identified during a myBMP audit that required attention for the grower’s farm to be certified. Data from 21 audits is included. Recording of weather monitoring, bunding of large diesel tanks, retaining written copies of contractor agreements and papers, and eye wash first aid facilities were the most common non-conformances on these farms. The issues do vary considerably between farms, which is expected due to management differences. These non-conformances were fixed by growers as part of the certification process.

Table 1: Some examples of non-conformances identified during some farm audits.

Module	Farm																					
Natural Assets																						
Maps	x					x	x									x						
Pesticides																						
PAMP	x						x								x				x			
Weather records aerial		x		x	x													x	x			
Weather records ground	x			x	x												x	x				
Training chemcert	x	x		x																		
Training safety record		x	x																	x		
Contractors (insurance)	x	x				x	x								x	x			x			
Contractors agreement	x														x	x			x	x		
Buffer zones maps						x				x												
Risk assessments	x		x																	x	x	
Chemical shed signs				x						x												
Chemical shed bunds							x					x										
Chem shed emergency	x						x					x								x		
Chem shed eye wash	x						x			x	x	x	x									
Chem shed shower	x									x												
Old chemical drums	x			x			x													x		
Neighbour coms				x	x															x		
SDS							x													x		
First aid training	x				x							x										
Petrochemical Storage																						
Fuel tank location		x																				
Bunding>10000 l	x		x				x	x			x	x							x	x	x	
Signage																				x	x	x
ULP tank signs	x			x			x					x										
SDS							x				x									x		
Safety training												x								x		
Waste oil	x		x				x								x					x	x	
Fire extinguishers	x																			x	x	
Soils																						
NUE																				x		
Testing	x																			x		
Water																						
Water quality																				x	x	
Stormwater plan	x																					
GPWUI																						

Outcomes

5. Describe how the project's outputs will contribute to the planned outcomes identified in the project application. Describe the planned outcomes achieved to date.

The project contributed to the CRDC strategic plan by providing an essential service to the myBMP program (Strategy 5.1). That is, the myBMP audit development and oversight. It also increased the human capacity of people to undertake credible and robust myBMP audits of grower's farms. The project outputs also contribute to changing farm practice such as improved workplace health and safety (Strategy 4.1.2), successful crop protection (strategy 1.1), productive resource efficiencies (strategy 1.2), as well as responsible landscape management (strategy 2.2).

For industry, the project has ensured there is a practical, cost effective team of people capable of undertaking myBMP audit certifications according to industry policy.

For the community, there is strong evidence that the myBMP certification process results in practice change so that growers achieve best practice. It provides the community confidence that the cotton industry is applying its practices to high standards, to achieve economic, environmental and social outcomes.

Economic outcomes that arise from the project are better farming practices and less risk exposure by growers to work place health and safety, agricultural chemical use and statutory regulations.

Environmental outcomes that arise from the project are increased adoption by growers of farming practices that have positive natural resource management outcomes such as riparian zone management, soil conservation, improved resource efficiency use, better water quality, and successful crop protection.

Social outcomes arising from the project include increased knowledge, skills of the human capacity of the industry and a safer workplace. A further social outcome of the project is its contribution to maintaining the social licence of the cotton industry to operate.

Some of these outcomes are difficult to attribute to the auditing process specifically in many cases. There are numerous other drivers of farm practice change including tougher government regulations, R&D adoption, and new technologies in the market place, increased market access such as the Better Cotton Initiative and cotton industry myBMP campaigns.

However, there is strong evidence that the audits do result in practice change by growers. This change in practice may occur weeks before the audit, an hour before the audit or subsequent to the audit (Figure 6).

As one auditor put it "I have seen a lot of new spill kits, signs, and paperwork, but that doesn't matter because the process has instigated farmer practice change"



myBMP

Figure 6: Some clear examples of practice change by growers that have occurred just prior to audit. There are lots of new labels, first aid equipment, PPE gear, eye washes, and spill kits!!!

At the start of this project there were 5 myBMP accredited farms. There are currently 72 accredited myBMP farms with ten growers and 20 farms in the Better Cotton Initiative. Figure 7 provides an indication of the geographic spread of the certified myBMP farms.

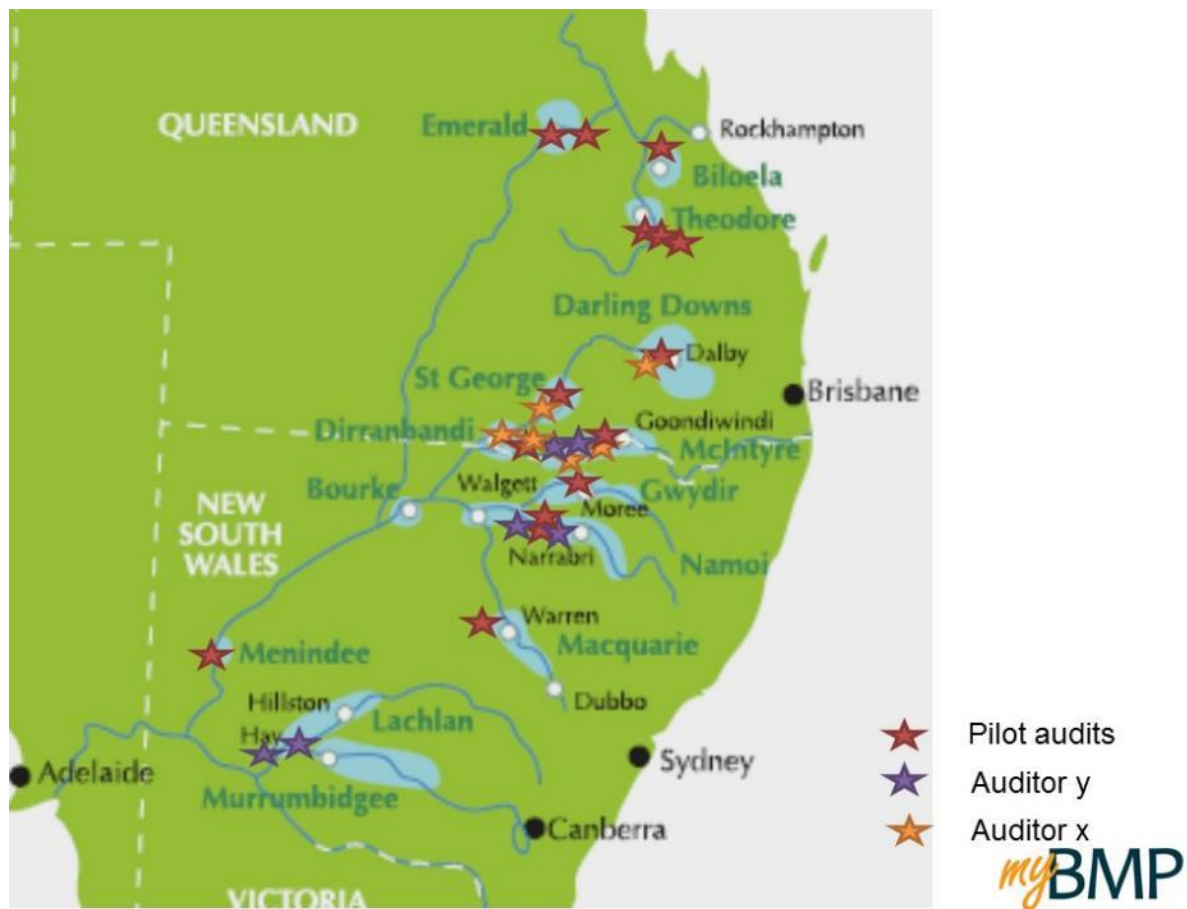
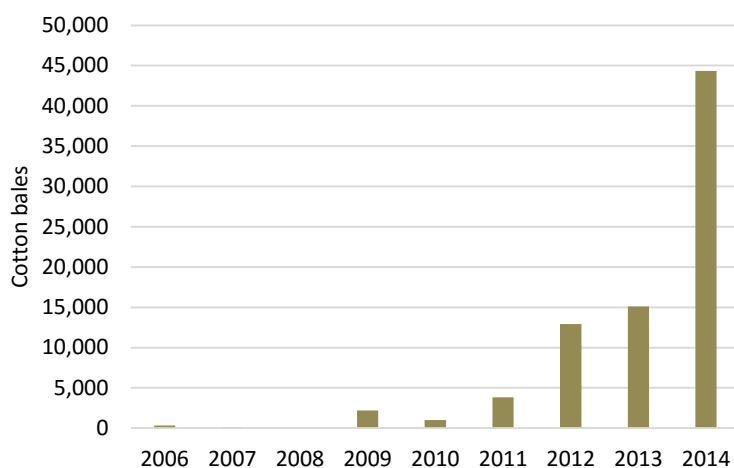


Figure 7: The geographical distribution of myBMP Certified farms. The red stars represent activity from this specific project and its preceding project. The purple and yellow stars are commercial fee for service audits completed by auditors.

In 2013 when this project commenced around 15,000 cotton bales were produced on certified myBMP farms. The number of myBMP bales shipped in 2014 increased significantly to around 45,000 bales and this has increased further and is currently over 65,000 bales for 2015 (Figure 8).

Figure 8: myBMP certified cotton bales shipped to customers



(Source: Cotton Australia Australian Grown Cotton, Sustainability Report).

6. Please describe any:-

- a) technical advances achieved (eg commercially significant developments, patents applied for or granted licenses, etc.);**
- b) other information developed from research (eg discoveries in methodology, equipment design, etc.); and**
- c) required changes to the Intellectual Property register.**

Nil.

Conclusion

7. Provide an assessment of the likely impact of the results and conclusions of the research project for the cotton industry. What are the take home messages?

The project has trained five myBMP auditors as well as facilitated the implementation of the myBMP audit certification system to keep up with industry demand. At the start of this project there were 5 myBMP accredited farms and by the end there were 72 accredited myBMP farms with ten growers and 20 farms in the Better Cotton Initiative.

Further evidence includes in 2013 when this project commenced around 15,000 cotton bales were produced on certified myBMP farms. The number of myBMP bales shipped in 2014 increased significantly to around 45,000 bales and this has increased further and is currently over 65,000 bales for 2015.

As stated previously this project is not the sole driver of this change in myBMP certification. It is however an essential cog in the system of projects and activities promoting myBMP. The Better Cotton Initiative and the Monsanto Grant for myBMP certification have possibly been the strongest drivers for audit demand during the life of this project.

In terms of opportunity for improvement there are three key issues. Firstly, drafting the audit report on line remains one the most time consuming aspects of myBMP auditing. Growers want to know what to fix, while a paper trail of what specifically was checked is needed. If the goal is to complete the report on the farm before the auditor leaves then modifications are required. Cotton Australia plans to update the audit reporting platform in late 2015. Secondly, the audit process requires coverage of the five core modules plus a random module. This equates to about 360 practices to “check off” during an audit. At one per minute, this equates

to a minimum of is 6 hours. There remains too many “nice to haves” for auditing purposes. Every practice checked takes time and the cumulative time in the end is reflected in costs. The current review of myBMP needs to rectify this. Thirdly, one of the main barriers to certification has been the petrochemical module. Supporting resources are inadequate and greater clarity on bundling is required. The current review of myBMP has already actioned these items.

One of the aims of myBMP is to improve farming practices. Many of these outcomes are difficult to attribute to the auditing process specifically in many cases. There are many other drivers of farm practice change including government regulations, R&D, new technologies, market drivers such as the Better Cotton Initiative and cotton industry myBMP campaigns. However, there is strong evidence that the audits do result in practice change by growers. This change in practice may occur weeks before the audit, an hour before the audit or subsequent to the audit.

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As one auditor put it *“I have seen a lot of new spill kits, signs, and paperwork, but that doesn’t matter because the process has instigated farmer practice change”*

Extension Opportunities

- 8. Detail a plan for the activities or other steps that may be taken:**
 - (a) to further develop or to exploit the project technology.**
 - (b) for the future presentation and dissemination of the project outcomes.**
 - (c) for future research.**

Cotton Australia is responsible for the extension opportunities. At present a major overhaul of the myBMP website is underway as well as a revision of the the myBMP modules and supporting documents. Looking ahead it will be logical to strategically review the audit aspects

of myBMP certification. The current upgrade of the myBMP Platform should make a significant difference to the ease of use of the myBMP system.

In terms of future research there could be a role to better understand the barriers to certification, even though the industry has knowledge of these at the headline level there could be some regional variation and hence opportunities.

There could be some benefit in producing a cotton grower article on the auditing process, grower experience, and what changed and how. This could also be done as a talk at the cotton conference. It could be done by using pictures to tell the story of some of the ways growers actually do myBMP.

Consideration should be given to an industry campaign to improve the recording and monitoring of weather conditions during spraying.

**9. A. List the publications arising from the research project and/or a publication plan.
(NB: Where possible, please provide a copy of any publication/s)**

n/a. A PowerPoint presentation was made to Cotton Australia/ CRDC myBMP meeting on March 2015.

B. Have you developed any online resources and what is the website address?

n/a.

Part 4 – Final Report Executive Summary

The BMP program (www.myBMP.com.au) is a farm management system and assurance mechanism. It provides self-assessment mechanisms, practical tools and auditing processes to ensure that Australian cotton is produced according to best practice.

Cotton growers can elect to achieve “myBMP certification” by having an external audit completed of their farm practices. A typical audit includes a review of farm documentation and a farm visit, covering the five core modules (pesticides, soil, water, natural assets, and petrochemicals) plus one other random module.

The aim of the myBMP Lead Auditor Certification project was to ensure there was a consistent, robust and credible audit system for myBMP. This project also provided training and mentoring for auditors to assess myBMP standards set by the Australian cotton industry.

The project has trained five myBMP auditors and facilitated the implementation of the myBMP audit certification system to keep up with industry demand. At the start of this project there were 5 myBMP accredited farms and by the end there were 72 accredited myBMP farms with ten growers and 20 farms in the Better Cotton Initiative.

Three key issues were identified during the project that required improvement, which are now being addressed as part of the myBMP review. These were; 1) drafting the audit report on line remains one of the most time consuming aspects of myBMP auditing, 2) reducing the number of practices to a more workable number, and 3) one of the main barriers for growers to certification has been the petrochemical module as supporting resources are inadequate.

One of the aims of myBMP is to improve farming practices. There is strong evidence that the myBMP audits do result in practice change by growers. This change in practice may occur weeks before the audit, an hour before the audit or subsequent to the audit.

The project has ensured there is a practical, cost effective team of people capable of undertaking myBMP audit certifications according to industry policy.

Economic outcomes that arise from the project are better farming practices and less risk exposure by growers to work place health and safety, agricultural chemical use and statutory regulations. Environmental outcomes that arise from the project are increased adoption by growers of farming practices that have positive natural resource management outcomes such as riparian zone management, soil conservation, improved resource efficiency use, better water quality, and successful crop protection. Social outcomes arising from the project include increased knowledge, skills of the human capacity of the industry and a safer workplace. A further social outcome of the project is its contribution to maintaining the social licence of the cotton industry to operate.