



# RESEARCH UTILISATION STRATEGY 2013 - 2014



 $\ensuremath{\mathbb{G}}$  Bushfire Cooperative Research Centre 2013.

No part of this publication must be reproduced, stored in a retrieval system or transmitted in any form without prior written permission from the copyright owner, except under the conditions permitted under the Australian Copyright Act 1968 and subsequent amendments.

Publisher:

Bushfire CRC

February 2013

## **CONTENTS**

CONTEXT	4
Bushfire CRC research program	4
2010-2013	4
2003-2010	5
RESEARCH UTILISATION APPROACH	6
GOALS	8
Bushfire CRC Extension Partnership Goal	8
Bushfire CRC Extension Product Goal	9
Bushfire CRC Extension Process Goal	10
Bushfire CRC Extension People Goal	11
Bushfire CRC Extension Profile Goal	12
REFERENCES	13
ATTACHMENT ONE- BUSHFIRE CRC EXTENSION USAGE PATH	14

### CONTEXT

This document complements the **Bushfire CRC Extension Strategic Directions 2012-2014** document, which articulates our objective, vision, mission, values, goals and strategic directions. The Bushfire CRC Commonwealth Agreement details the research programs and projects as well as the responsibilities and obligations of partners and supporting legal context.

The objective of the Bushfire CRC is to provide research that enhances the management of bushfire risk to the community in an economically and ecologically sustainable way. The formation of the Bushfire CRC in 2003 and the subsequent commitment to provide further funding for another three years is recognition of the importance of this research. Funding for the extension has been managed to enable support for utilisation of this research program to June 2014.

A 2012 Review by the Department of Innovation found the relationships and partnerships within the Bushfire CRC were exemplary. A survey of end user partners conducted in November 2012 found satisfaction with collaboration and engagement opportunities. However, respondents were still having difficulty dealing with understanding the research and what it might mean to industry practice. Alarmingly, at a strategic level, alignment between the Bushfire CRC outputs and the agencies' strategic plans has declined as has the perception about the learning culture of the industry and the participants own agency. The most important barriers to research utilisation were underpinned by perceived shortcomings in internal agency processes, with limited capacity to cope with the change research might bring and the need for industry wide approaches also being relevant.

The Bushfire CRC and its extension have the following;

Vision - Sustainable Fire Research Providing the Science for Safer Communities, and

**Mission**- To reduce the risk to the community and to fire fighters in an ecologically sustainable and economic way.

#### **BUSHFIRE CRC RESEARCH PROGRAM**

#### 2010-2013

The Bushfire CRC Extension has three funded programs of Research;

**Understanding Risk**, which aims to support a reduction in losses through better community understanding of the risk from fire;

**Communicating Risk**, which aims to facilitate a reduction in the loss of life through better communication of fire risk; and

Managing the Threat for Safer Communities, which ultimately will contribute to a reduced loss of life, assets, and adverse environmental impacts, while reducing the marginal cost of service delivery through better management of extreme events.

These programs have 13 project areas, many of which involve multiple research partners. High level project outlines and milestones have been documented, and supporting project plans are monitored by the research arm of the Bushfire CRC. This research utilisation strategy outlines the key approaches that will be pursued to facilitate the usage of the research deliverables (as articulated in the Submission to the Commonwealth Agreement, and replicated in Attachment One of this Strategy).

The research outputs have been integrated into seven 'usage' themes:

- Integrated fire related policy, practice and legislation
- Risk assessment tool box
- Communication tools and information
- Better incident management systems and practices
- Impact of fire in the landscape
- Better utilisation of scarce resources
- The health and fitness

The utilisation approach aims to maximise the likelihood of successful impact.

A research utilisation plan accompanies this strategy and is consistent with the requirements of the Governing Board and Commonwealth. Progress on the Implementation of the strategy is reported to the Research Utilisation Committee of the Governing Board.

#### 2003-2010

The Bushfire CRC had four key research programs;

Program A, Safe Prevention, Preparation and Suppression,

Program B, Fire in the Landscape,

 $\label{eq:community} \textbf{Program C, Community Self Sufficiency for Fire Safety, and}$ 

Program D, Protection of People and Property.

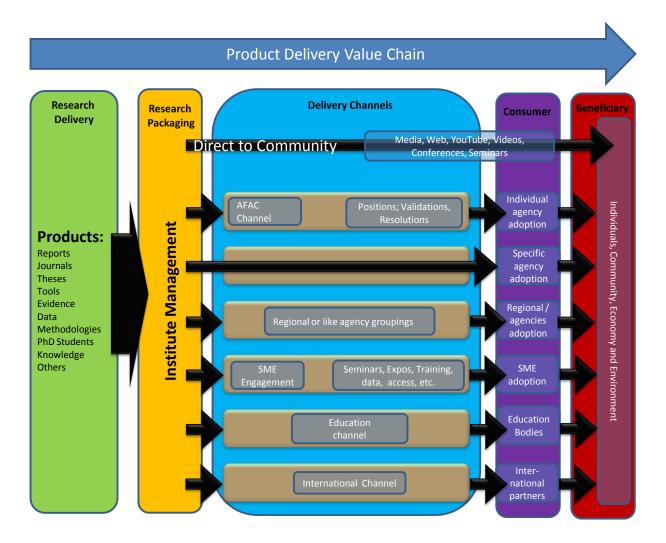
The adoption of research was into four integrated outcome areas; Aerial Suppression, Protecting Fire Fighters, Prescribed Burning, and Community Safety, was guided by the Research Adoption Strategy 2008-2010, and implemented through the Bushfire CRC Research Adoption Plan 2009-2010.

The utilisation of research can take many years and good practice research emerging from another CRC suggests that "...research findings need to be integrated and diffused to industry over time and specific applications need to be formulated and reformulated in response to ...changing needs.." (Beesley, 2005; 3).

## RESEARCH UTILISATION APPROACH

Our approach to Research Utilisation was broadly outlined in the submission to the Commonwealth. It commits to:

- Integration across programs and projects into 'usage' areas and a striving to maximise the impact of the research (as detailed in Attachment One).
- Building on the successful high-level **partnership** with the peak industry body, AFAC, and its business groups as well as expansion to include the engagement of the strategic partner bodies identified in the Bushfire CRC product delivery chain (see diagram below)



This updated Research Utilisation Strategy 2010 - 2014 has been informed by:

- the Research Utilisation Surveys 2010 and 2012,
- the April 2012 Review by the Department of Innovation,
- from evaluation of partner feedback at Research Advisory Forum meetings.

This continues to build on the use of the products and mechanisms developed to support research utilisation over the past few years, namely:

- passive information mechanisms (e.g. Web Site, Fire Notes),
- Interactive information and awareness mechanisms (conference posters and presentations);
- Interactive **engagement** mechanisms (professional development events such as forums, workshops, and seminars);
- end user-research collaboration mechanisms (AFAC working groups and meetings); and
- embedding of new knowledge into industry training, professional development and other education.

The critical review of the pre-2010 research adoption approach provided by the 2010 survey and its analysis identified the need to emphasise the following areas as critical to success

- · Relationships and partnerships
- Engagement and active involvement
- Nurturing of a responsive and learning culture within end user agencies
- Building of research utilisation capacity and capability within end user agencies
- Creation of high quality **products** to support utilisation
- Supporting agencies to make the research meaningful for their context.

For consistency with the current Bushfire CRC Strategic Directions 2010-2014 document, these Utilisation Strategies are elaborated within in the overarching Goals.

Importantly, survey participants (both in the 2010 and 2012 surveys) identified that *the* key barrier to their agency's utilisation of its Bushfire CRC research is related to the internal agency processes that are in place to manage research utilisation. This context must be appreciated and is outside of the sphere of influence of the Bushfire CRC to address.

## **GOALS**

#### **BUSHFIRE CRC EXTENSION PARTNERSHIP GOAL**

To build sustainable partnerships to create benefits for all.

#### **Research Utilisation Perspective**

The independent fifth year review of the Bushfire CRC remarked on the benefit of the user-leverage available through the strategic **partnership** with AFAC. This partnering provides access to over 300 agency experts, but also provides a forum through which research can be translated into industry-wide positions, guidelines or procedures. The report of the April 2012 Review of the Bushfire CRC by the Department of Innovation noted the very high level of support of end user partners but noted that the range of partners should be extended. Given the cessation of Commonwealth funding in June 2013, the nature of these partnerships can be seen as seeking potential customers for our products. The Bushfire CRC Extension introduced new partners (outside of AFAC) with which strategic **relationships** need to be developed and maintained. Further, the incorporation of research into education requires new collaborations with universities and education providers.

Feedback from Research Advisory Forum participants suggests that building research outputs into education and training is not a high priority of Bushfire CRC partners. This, coupled with the experience from the first seven years of Bushfire CRC research which revealed about a two-year time lag in embedding research into industry training, suggests that the Professional Development pathway will offer a solution that is more timely for the current partners of the Bushfire CRC within the June 2014 timeframe. Development of strategic education opportunities are most likely to be of a longer term and business-like nature.

Successful partnerships require **trust** and can come in many forms depending on their purpose. Thus in addition to supporting the high-level partnerships identified as critical channels in our value chain, more dynamic, responsive and meaningful partnerships (or relationships) focused on the research projects also need to be given opportunity to develop and grow. The 2012 survey of end users indicated the value of project-level relationships particularly in gaining new knowledge and skills.

#### Strategies:

Maintain meaningful strategic and industry-wide relationships with AFAC

Nurture and develop partnerships with individual agencies

Support new partnerships with SMEs and new partners

Scope potential for partnerships between industry educational providers

Continue to support Project-level relationships through supporting and developing Lead End Users (LEUs)

#### **BUSHFIRE CRC EXTENSION PRODUCT GOAL**

To deliver products and outcomes that meet the expectations of all partners.

#### **Research Utilisation Perspective**

The Bushfire CRC Extension Commonwealth Agreement and Project Plans outline some products explicitly; in other cases the appropriate products are emerging out of ongoing conversation and, dialogue between the researchers and the end users and are not yet apparent. Products developed through this strong interaction are likely to reflect the context of the users, who have formed their own **understanding** of what the research might mean and hence how to best utilise it. Evidence from the 2012 survey of end users suggests that workshops and project team interaction are the most useful with helping to understand the changes that might be needed to industry practice. Accordingly, focus on these workshops will be given priority.

Additionally, there will be a range of products that are actually processes that support engagement and active involvement (such as forum, seminars, workshops and other events. Feedback from Research Advisory Forum surveys indicates that industry is comfortable with, and desire workshops, forums and conference events. These opportunities will be factored into all project outcomes. There will also be ones that involve the embedding of research into industry practice (such as training, professional development and other education pathways).

Products will be high quality; that is, they will be targeted and relevant, practical and usable, and engaging. They will also be accessible not only to our end user partners, but also to communities, and the packaging of research into 'user friendly' information products. *Fire Notes* and materials for the Web Site remain a key plank of the Bushfire CRC's research utilisation effort and end users are indicating they expect the delivery of *Fire Notes* from all projects.

#### Strategies:

Update the Research Utilisation Plan 2011-2014 to support delivery and packaging of research outputs for partner utilisation

Encourage the conduct of high quality interactive and engaging events especially workshops

Provide professional development to support research utilisation, particularly in relation to conduct of effective events

Incorporate use of innovative communication tools into Bushfire CRC Communications Strategy

Ensure writing and design communication resources, particularly for *Fire Notes*, are adequate to meet expected demand to end June 2014

#### **BUSHFIRE CRC EXTENSION PROCESS GOAL**

To provide quality research management and utilisation.

#### **Research Utilisation Perspective**

The research utilisation program is fully integrated with the governance, systems and processes of the Bushfire CRC. Its documentation into detailed plans is consultative, open and transparent and is reported on.

The evaluation of research utilisation and understanding the impact of the research is desirable to both demonstrate continuous learning and value for investment. This remains a challenge and was noted by the recommendations of the Department of Innovation Review of April 2012:

Recommendation 4: The panel recommends the CRC evaluate the impact and outcomes of the research and to try and identify appropriate *metrics to track and measure usage* (for all potential impacts),

Recommendation 5: The panel recommends the CRC explore *metrics to track and measure impact* to evaluate success / uptake of research outputs (including web based tools) to evidence change - fire policy, operation processes, industry standards, and social awareness.

#### Strategies:

Research Utilisation Plans and documents transparent and publically available

Conduct monitoring and review processes commensurate with good governance

Develop and apply methods to better understand impact of research outputs

#### **BUSHFIRE CRC EXTENSION PEOPLE GOAL**

To build and enhance the capacity for research, research management and research utilisation with our partners.

#### **Research Utilisation Perspective**

Robust and effective research utilisation requires strong engagement and participation between researchers and end users at all stages; from the instigation of the need, to development of the research proposal through to understanding the implications and finally to making change to utilise the research appropriately. The research utilisation survey and consultation revealed that it is important that **agencies** develop the skills to understand the impact of the research and to **build the capacity** to translate these into improved policies, products and procedures. Mentoring and **good practice** guidance can enable the development of agency research utilisation practices.

The research utilisation surveys and subsequent workshop also identified that a key component to the effective utilisation of research lies with the culture of the agency being one that is responsive, risk taking and learning. The 2012 survey revealed that barriers to research utilisation were underpinned by inadequate agency processes and that agencies found it difficult to understand the change implications of research outcomes. This evidence strongly supports the need to focus on supporting agencies to build capacity in research utilisation. We can also support agencies with developing and recording a narrative about their Bushfire CRC journey, from instigation of the partnership, to embedding of the research outputs into their policy and practice.

#### Strategies:

Support agencies in developing their research utilisation capacity

Work with Lead End Users to develop industry capacity for Research Utilisation

Continue strategic alliance with the AFAC Knowledge Management Group to develop, identify and share examples of good practice of research utilisation suitable for our industry

#### **BUSHFIRE CRC EXTENSION PROFILE GOAL**

To enhance and promote the value of the Bushfire CRC.

#### **Research Utilisation Perspective**

The core of the Bushfire CRC's business is around conducting research. Conversely, the ultimate measure of success relates to the impact of the research, which is greatly enhanced by effective utilisation. The most powerful advocates for the Bushfire CRC are the end users who can articulate and demonstrate the impact the research has had to their business - which is basically about minimising the impact of bushfire on life, property an the environment. For this reason it is critical that the communication and marketing activities of the Bushfire CRC emphasise the use of the research.

#### Strategies:

The Bushfire CRC Communication Strategy will have a focus on use of research

Provide incentives for end users to showcase how they have used the research

Enhance the profile of research utilisation through an ongoing strategic alliance with the AFAC Knowledge Management Group

## REFERENCES

ATN - GO8 November 2012. Excellence in Innovation Research Impacting our Nation's Future - Assessing the benefits. http://www.go8.edu.au/\_\_documents/go8-policy-analysis/2012/atn-go8-report-web-pdf.pdf

Beesley, L. 2003. Relationships among Knowledge Creation, Diffusion and Utilisation in the CRC Process. PhD Thesis. Griffith University

Bushfire CRC submission for extension of funding to Commonwealth of Australia. 4 March 2010

Bushfire CRC Research Adoption Strategy 2008-2010. April 2008.

Bushfire CRC Research Adoption Plan 2009-2010. February 2009.

Bushfire CRC Strategic Directions 2010-2013. August 2010.

Bushfire CRC Research Utilisation Strategy 2010-2014. February 2010.

Bushfire CRC Strategic Directions 2013-2014. May 2012.

Commonwealth Funding Agreement. Department of Innovation, Industry, Science and Research. CRC Funding Agreement number 20090080 Commonwealth of Australia, Bushfire Cooperative Research Centre Limited. 2009.

Commonwealth Department of Innovation, Industry, Science, Research, and Tertiary Education 2012. Third Year Review April 17-19 2012.

Ison, R.L. and Russell, D.B. 2000. Agricultural Extension and Rural Development - Breaking out of Knowledge Transfer Traditions. Cambridge University Press 239 pp

Owen, C. 2011. Report on Bushfire CRC Research Utilisation Consultation. February 2011.

Owen, C. 2012. Report on Bushfire CRC Research Utilisation Consultation. December 2012.

## ATTACHMENT ONE- BUSHFIRE CRC EXTENSION USAGE PATH

