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Development Corporation

# National Weeds and Productivity Research Program Annual Operational Plan 2010-11



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**Rural Industries Research and  
Development Corporation**

# **National Weeds and Productivity Research Program**

## **Annual Operational Plan 2010 –11**

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# Contents

<b>Objectives.....</b>	<b>4</b>
1: Improve knowledge for effective risk management of weeds. ....	4
2: Reduce current and future impacts of weeds on Australia’s productive systems and environments. ....	4
3: Support improved adoption of weed management approaches. ....	4
4: Plan for future funding and institutional arrangements for national investment and management of weeds R&D .....	4
<b>Strategic plan and internet accessibility.....</b>	<b>4</b>
<b>Sources of funds .....</b>	<b>4</b>
<b>Total R&amp;D expenditure budget for 2010-11 .....</b>	<b>5</b>
<b>Background .....</b>	<b>5</b>
<b>Key long-term strategies.....</b>	<b>6</b>
<b>Expected key outputs for 2010–11 .....</b>	<b>6</b>
<b>Expected key outcomes for 2010–11 .....</b>	<b>6</b>
<b>Key performance indicators for 2010–11 .....</b>	<b>7</b>
<b>Proposed communication and extension activities for 2010–11 .....</b>	<b>7</b>
<b>New Projects being funded or under consideration in 2010–11 .....</b>	<b>7</b>
<b>Weeds budget statement.....</b>	<b>8</b>

# Weeds annual operational plan for 2010-11

## Objectives

### **1: Improve knowledge for effective risk management of weeds.**

Investing in R&D that fills key knowledge gaps for effective risk management of weeds.

**Priority:** Investing in R&D that fills key knowledge gaps which contribute to more effective risk management of weeds. RIRDC will collaborate with key agencies including Plant Health Australia, the Biosecurity Services Group of the Department of Agriculture, Fisheries and Forestry, CSIRO, other rural research and development corporations, and state and territory government agencies in identifying knowledge gaps and commissioning the necessary research.

### **2: Reduce current and future impacts of weeds on Australia's productive systems and environments.**

Investing in R&D to investigate the most serious invasive plant problems and to provide the knowledge and methods to solve those problems.

### **3: Support improved adoption of weed management approaches.**

Investing in R&D that improves understanding of economic, social and environmental impacts of invasive plants, that identifies the motivators and barriers to the uptake of cost-effective integrated weed management strategies and options and ensures better coordination and information exchange between researchers, land managers and regulatory agencies about integrated approaches for priority management of invasive weeds.

### **4: Plan for future funding and institutional arrangements for national investment and management of weeds R&D**

Investing in R&D that identifies options, the pros and cons of those options and how the preferred option or options can be implemented.

## **Strategic plan and internet accessibility**

The National Weeds and Productivity Research Plan, 2010-15 is available in hard copy from Canprint and at <http://www.rirdc.gov.au>

## **Sources of funds**

The Australian Government has provided total funding for the Program up to \$12.4 million (inclusive of GST) over the two years to 30 June 2012. A total of between \$5.2 million and \$7.6 million will be received from the Department of Agriculture, Fisheries and Forestry for projects commissioned by RIRDC and for administration, strategy development and program management (up to \$1.98 million).

The balance of between \$4.8million and \$7.2million will be for projects selected through the open call. These funds will be provided on a reimbursement basis after the projects have been approved. The specific division of the funds between the two categories (commissioned and open call) will be determined by the cost of the commissioned projects up to the maximum specified in the Services Agreement that exists between Department of Agriculture, Fisheries and Forestry and Rural Industries Research and

Development Corporation. Revenue of \$3.8million (inclusive of GST) was provided from the Department in 2009-10. This has been carried forward to 2010-11 and will be supplemented by a further payment from the Department of \$3.9million (inclusive of GST).

The 2010-11 budget for the Program will be \$7.3million (exclusive of GST). This does not include open call grants reimbursed by the Department.

A high priority for RIRDC in managing the Program beyond 2011-12 will be to establish collaborative relationships with other agencies that will lead to funding the Program over the five years of this Plan (ie, to 30 June 2015)

### **Total R&D expenditure budget for 2010-11**

\$7.277 million

### **Background**

This second stage of the National Weeds and Productivity Research Program will be managed by the Rural Industries Research and Development Corporation (RIRDC) and will build on and complement previous weeds research and the first stage of the National Weeds and Productivity Research Program which was managed by the Department of Agriculture, Fisheries and Forestry.

Weeds have a significant impact on many areas of Australia including urban, agricultural, natural ecosystems within national parks and other public land including waterways. Weed proliferation is a complex, man-made problem with significant environmental, economic and social impacts, which are estimated to a total cost of more than \$4 billion per annum for control and loss of productivity to the Australian economy.

Future weed threats are likely to increase across Australia with changes in climate, changes to agricultural practices and increased population shifts and travel into and around Australia. The increasing frequency of droughts, floods, and bush fires are causing invasive weeds to spread more widely and in greater numbers than previously experienced in Australia. In addition to environmental changes, the spread of urban communities into agricultural and environmentally sensitive areas fragments the landscape, placing weed control responsibilities into the hands of untrained landowners with poor knowledge of land management.

Due to the invasive nature of weeds, uncontrolled infestations of weeds lead to the deterioration of farming land, affecting food production, causing the destruction of natural eco systems and ecological processes and clogging of waterways. The estimated cost to the Australian livestock industry alone is \$2.8 billion per annum.

Solutions to weed problems require a long-term approach, with engagement and support from all components of the community. Stakeholders need greater capacity to prevent the arrival and establishment of new weed species and the ability to effectively manage weeds using a range of tactics to reduce the impact. This range of options, includes assessing commercial and commercially viable weed controls that are available to use and how accessible they are to farmers and landholders?

The research from past Cooperative Research Centres has provided considerable technical expertise to control weeds. There is now the challenge of finding solutions to controlling weeds. Transforming the human capacity to control weeds will require strategies to overcome social, economic, climatic and environmental constraints.

Weed control is essential to securing food production, freeing up waterways and preserving Australia's natural habitats.

### **Key long-term strategies**

- Investigate and solve the most serious invasive plant problems, focusing efforts to improve productivity and benefits across the most populated parts of Australia
- Investigate new methods to reduce weed impact which reduce reliance on herbicides and promote integrated approaches which also help to reduce energy and chemical inputs in agriculture
- Refine landscape-scale integrated weed management strategies to manage the risks associated with invasive plants in agriculture, forests, pastures and native vegetation, including addressing climate change mitigation and adaptation issues
- Identify motivators and barriers to the uptake of cost-effective integrated weed management strategies and options to encourage the uptake of integrated practices
- Improve understanding of economic, social and environmental impacts of invasive plants

### **Expected key outputs for 2010–11**

- National Weeds and Productivity Research Plan, 2010-15
- National Weeds and Productivity Research Annual Operational Plan, 2010-11
- Establishment of the National Weeds and Productivity Research Advisory Committee
- Open call grant guidelines
- Guidelines for commissioned research
- Contracting of commissioned research
- Contracting of open call grant projects
- Postgraduate scholarships on weeds
- Publications on weeds and weed management information
- Maps on location of weed species
- Fellowships for overseas' weed experts to visit Australia
- National Weeds and Productivity Research web portal
- 39 first stage reports published on RIRDC website
- National Weeds and Productivity Research Communication Plan
- National Weeds and Productivity Research Monitoring and Evaluation Plan

### **Expected key outcomes for 2010–11**

Significant measured progress towards the following outcomes:

- More effective integrated weed management strategies being adopted, particularly at a landscape scale to manage the risks associated with invasive plants in agriculture, forestry and natural resource management. This includes preventative, mitigative and adaptive strategies including the impact of climate change.



- Improved tools, methods and technology that can solve the most serious invasive plant problems impacting on primary industry productivity and the environment. This will include new methods that reduce reliance on high cost and potentially harmful herbicides and promote integrated approaches to weed management. This objective will be aligned to the needs of Australian agriculture to address energy and chemical inputs in production and also the impact of climate change on the spread and invasive intensity of endemic and potential weeds.
- The adoption of the outputs of R&D by stakeholders of the National Weeds and Productivity Research Program.
- A well-researched plan for future investment and institutional arrangements for national weeds research and development that can be presented to the Government prior to the ending of the current funding for the National Weeds and Productivity Research Program.

#### **Key performance indicators for 2010–11**

- Research projects identified and contracted that address the objectives of the Program
- 2010-11 budget fully committed

#### **Proposed communication and extension activities for 2010–11**

- Adoption of Communications Plan
- Establishment of world class weeds web portal
- Create and publish a compendium of previous weeds research
- Provide information as required on significant events

#### **New Projects being funded or under consideration in 2010–11**

Commissioned and open call research and development projects up to \$6.1 million will be funded.

## Weeds budget statement

	2006-07 Actual	2007-08 Actual	2008-09 Actual	2009-10 AOP Budget	2009-10 AOP Forecast	2010-11 AOP Budget
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
<b>Income</b>						
RIRDC Core Contributions	-	-	-	-	-	-
RIRDC Salary Contribution	-	-	-	-	-	-
Commonwealth Contributions	-	-	-	-	-	-
External Contributions	-	-	-	-	3,415,500	3,861,000
Statutory Industry Levies	-	-	-	-	-	-
Interest	-	-	-	-	-	-
Industry Levy Penalties	-	-	-	-	-	-
Royalties	-	-	-	-	-	-
Project Refunds	-	-	-	-	-	-
Publications	-	-	-	-	-	-
All Other Income	-	-	-	-	-	-
Other Income	-	-	-	-	-	-
<b>Total Income</b>	-	-	-	-	3,415,500	3,861,000
<b>R&amp;D Expenditure</b>						
RESEARCH	-	-	-	-	-	6,117,725
Advisory Committee Expenses	-	-	-	-	-	80,000
External Research Management	-	-	-	-	-	-
Employee Expenditure	-	-	-	-	-	-
Communications	-	-	-	-	-	100,000
Meeting Expenses	-	-	-	-	-	50,000
Travel and Accommodation	-	-	-	-	-	-
Other Expenses	-	-	-	-	-	-
Consulting Fees	-	-	-	-	-	-
Temporary Staff	-	-	-	-	-	-
Couriers	-	-	-	-	-	-
Levy Collection Costs	-	-	-	-	-	-
Other Expenses	-	-	-	-	-	678,775
Other Expenses	-	-	-	-	-	728,775
Program Management Fees	-	-	-	-	-	250,000
<b>Total R&amp;D Expenditure</b>	-	-	-	-	-	7,276,500
<b>Operating Result</b>	-	-	-	-	3,415,500	(3,415,500)
Retained surpluses at beginning of period	-	-	-	-	-	3,415,500
<b>Retained surpluses at end of period</b>	-	-	-	-	3,415,500	-



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Weeds create many costly challenges for the Australian primary production sector and to our natural environment. These challenges require Australia to continually improve knowledge of weeds and to adopt practices that lead to the prevention, mitigation or adaptation to invasive weeds.

Research plays a valuable role in increasing knowledge and developing the information, tools, management options and resources that will enable Australia to better manage the weed challenge.

The Rural Industries Research and Development Corporation (RIRDC) has been appointed as the manager of the National Weeds and Productivity Research Program by the Minister for Agriculture, Fisheries and Forestry.

The Australian Government has provided up to \$12.4 million (inclusive of GST) for the first two years of the Program with the goal of reducing the impact of invasive weeds on farm and forestry productivity as well as on biodiversity. A significant challenge for RIRDC will be to build partnerships between industry and government for extending the funding and institutional arrangements for investment in weeds R&D over the longer term.

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Most of RIRDC's publications are available for viewing, free downloading or purchasing online at [www.rirdc.gov.au](http://www.rirdc.gov.au). Purchases can also be made by phoning 1300 634 313.

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