

Invasive Animals Cooperative Research Centre Revised Commonwealth Agreement Outcomes, Outputs and Milestones

Approved by DIISR

| | Detail | Due Date |
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| 1 Outcome | A benefit of \$29 million p.a. by reducing the impacts of fox and wild dogs by 10% | |
| 1.1 Output | New knowledge on fox and wild dog biology, ecology, impact, management, and the ecological interactions of control methods | 2011 |
| 1.1.1a Milestone | Ecological studies commenced to identify interactions with other processes threatening wildlife or damaging production, and new wild dog and fox management technologies and strategies tested and refined. Issues not covered at demonstration sites targeted in these studies. Achievement date: July 2005 & ongoing with biennial review in July 2007, 2009 | 31 Jul 2005 |
| 1.1.1b Milestone | Ecological studies commenced to identify interactions with other processes threatening wildlife or damaging production, and new wild dog and fox management technologies and strategies tested and refined. Issues not covered at demonstration sites targeted in these studies. Achievement date: July 2005 & ongoing with biennial review in July 2007, 2009 | 31 Jul 2007 |
| 1.1.1c Milestone | Ecological studies commenced to identify interactions with other processes threatening wildlife or damaging production, including the potential for meso-predator release associated with fox control | 31 Jul 2009 |
| 1.1.2 Milestone | Ecological experiments and large scale demonstration projects completed | 30 Jun 2011 |
| 1.1.3 Milestone | Estimation of fox and wild dog abundance using DNA-based technologies implemented | 30 Jun 2011 |
| 1.2 Output | New humane fox and wild dog toxin and antidote | 2011 |
| 1.2.1 Milestone | Laboratory experiments and assessments to ensure safety of new toxins for field trials completed. Testing for species-specificity included | 30 Jun 2007 |
| 1.2.2 Milestone | New products and new applications of existing toxins registered. One new chemical toxicant registered. One synergist to 1080 tested and assessed for registration and marketing. If the new chemical toxicant is successfully registered, the market for the synergist may be reduced, as the new active will replace the 1080 toxin. | 30 Jun 2008 |
| 1.2.3a Milestone | Field trials of new products completed in association with commercial partners and/or end-users | 30 Jun 2009 |
| 1.2.3b Milestone | Field trials of new products completed in association with commercial partners and/or end-users | 30 Sep 2009 |
| 1.2.4 Milestone | Laboratory experiments and pen trials completed for new antidote to methaemoglobin-inducers | 31 Dec 2010 |
| 1.2.5 Milestone | National APVMA registration package submitted for new toxin for foxes | 30 Sep 2010 |
| 1.2.6 Milestone | National APVMA registration package submitted for new toxin for wild dogs | 30 Sep 2010 |

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| 1.2.7 Milestone | New product registration applications and new registration applications of existing toxins submitted to the APVMA. One new chemical toxicant registration application submitted. One synergist to 1080 tested and assessed for registration. If the new chemical toxicant is successfully registered, the market for the synergist may be reduced, as the new active will reduce demand for products containing the 1080 toxin. | 31 Oct 2010 |
| 1.2.8 Milestone | National APVMA registration package submitted for antidote for working and pet dogs | 31 Dec 2010 |
| 1.3 Output | New approved fox and wild dog lures and new toxin delivery methods. | 2011 |
| 1.3.1 Milestone | National market potential and registration requirements of fox and wild dog lures and novel toxin delivery systems (e.g. M-44 mechanical ejectors) assessed. | 30 Jun 2006 |
| 1.3.2 Milestone | Quickest route to market for land managers assessed for lure and ejector products. | 30 Jun 2006 |
| 1.3.3a Milestone | National registration (if necessary) obtained for delivery systems and multiple canid lure devices that will increase canid detection and bait uptake | 30 Jun 2008 |
| 1.3.3b Milestone | National APVMA registration package submitted (if necessary) for delivery systems and multiple canid lure devices that will increase canid detection and bait uptake. | 30 Jun 2011 |
| 1.4 Output | Fox and wild dog management packages that include new and existing toxins, application strategies and end-user training | 2012 |
| 1.4.1 Milestone | End-users of package engaged and involved in its development. | 31 Jul 2006 |
| 1.4.2a Milestone | Education and training package linked to demonstration sites developed for end-users. | 30 Jun 2007 |
| 1.4.2b Milestone | Education and training package linked to demonstration sites developed for end-users. | 30 Jun 2009 |
| 1.4.2c Milestone | Education and training package linked to demonstration sites developed for end-users. | 30 Jun 2011 |
| 1.4.3a Milestone | Management-scale (end-user) assessment of new wild dog and fox strategies commenced at demonstration sites in different states with different stakeholders. | 31 Jul 2005 |
| 1.4.3b Milestone | Management-scale (end-user) assessment of new wild dog and fox strategies commenced at demonstration sites in different states with different stakeholders. | 31 Jul 2007 |
| 1.4.3c Milestone | Management-scale (end-user) assessment of new wild dog and fox strategies commenced at demonstration sites in different states with different stakeholders. | 31 Jul 2009 |
| 1.4.4 Milestone | Education and training packages for new fox and wild dog strategies completed. | 30 Jun 2011 |
| 1.4.5 Milestone | Final management and education/training packages released and marketed nationally. | 31 Dec 2011 |
| 1.4.6a Milestone | National recommendations for improved fox and wild dog control practices drafted and finalised. | 30 Jun 2008 |
| 1.4.6b Milestone | National recommendations for improved fox and wild dog control practices drafted and finalised. | 30 Jun 2009 |
| 1.4.6c Milestone | National recommendations for improved fox and wild dog control practices produced. | 30 Jun 2011 |

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| 2 Outcome | A benefit of \$16 million p.a. by reducing feral pig damage by 15% | |
| 2.1 Output | New knowledge on feral pig ecology and impacts | 2011 |
| 2.1.1 Milestone | Molecular ecology studies undertaken to characterise feral pig population structuring to improve population management effectiveness | 1 Jul 2009 |
| 2.1.2a Milestone | Ecological studies commenced to identify interactions with other processes threatening wildlife or human health or damaging production, and new feral pig management technologies and strategies tested and refined. Issues not covered at demonstration sites targeted in these studies | 31 Jul 2006 |
| 2.1.2b Milestone | Ecological studies commenced to identify interactions with other processes threatening wildlife or human health or damaging production, and new feral pig management technologies and strategies tested and refined. Issues not covered at demonstration sites targeted in these studies | 30 Jun 2008 |
| 2.1.2c Milestone | Ecological studies commenced to identify environmental impacts, and interactions with other processes threatening wildlife or human health or damaging production, and new feral pig management technologies and strategies tested and refined. | 30 Jun 2010 |
| 2.1.3 Milestone | Large scale ecological experiments and demonstration projects completed. | 30 Jun 2011 |
| 2.2 Output | PIGOUT - First generation manufactured shelf-stable feral pig bait that exhibits high target specificity | 2010 |
| 2.2.1 Milestone | Field trials of PIGOUT bait conducted in association with end-users (subject to State and Federal approval) | 1 Jul 2009 |
| 2.2.2a Milestone | Registration and market delivery of sodium fluoroacetate feral pig baits | 31 Dec 2006 |
| 2.2.2b Milestone | Registration and market delivery of sodium fluoroacetate PIGOUT feral pig baits | 1 Jul 2009 |
| 2.2.3a Milestone | Commercial uptake of new feral pig baits | 31 Dec 2007 |
| 2.2.3b Milestone | Commercial uptake of new feral pig baits | 1 Jul 2009 |
| 2.2.4a Milestone | Adoption of new baits through demonstration sites and publicity | 30 Jun 2008 |
| 2.2.4b Milestone | Adoption of new baits through demonstration sites and publicity | 31 Dec 2009 |
| 2.3 Output | HOGGONE - Second generation feral pig toxin with improved humaneness profile | 2012 |
| 2.3.1 Milestone | 'Achilles Heel' review of feral pig physiology to find species-specific toxicants completed. | 31 Dec 2007 |
| 2.3.2 Milestone | Target-specific 'Achilles Heel' feral pig bait formulated, if suitable toxicants are identified and successfully tested. | 30 Jun 2010 |
| 2.3.3 Milestone | Field trials of new toxin conducted in association with demonstration sites, commercial partners and/or end users (subject to State and Federal approval) | 31 Dec 2010 |
| 2.3.4 Milestone | National registration package submitted to APVMA for HOGGONE feral pig baits | 30 Jun 2011 |
| 2.3.5 Milestone | Adoption of new baits through demonstration sites and publicity. | 30 Jun 2012 |
| 2.4 Output | Additional feral pig management technologies and bait delivery systems | 2012 |

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| 2.4.1 Milestone | Studies commenced on new feral pig management technologies, including bait delivery systems (HogHopper) | 30 Jun 2010 |
| 2.5 Output | Feral pig baits with capacity to carry contraceptives and/or vaccines (in collaboration with USA and UK scientists) | 2012 |
| 2.5.1 Milestone | International market potential and registration requirements assessed for contraceptive or vaccine incorporation in feral pig baits. | 30 Jun 2006 |
| 2.5.2 Milestone | Feral pig contraceptive and/or vaccine baits promoted for regions/countries that do not allow broad-scale lethal control, if PIGOUT proves suitable | 30 Jun 2011 |
| 2.5.3 Milestone | International use of PIGOUT / HOGGONE re-assessed in relation to fulfilling market potential for an Australian SME. | 30 Jun 2012 |
| 2.6 Output | Feral pig management packages that include new and existing toxins, application strategies and end-user training | 2012 |
| 2.6.1 Milestone | End-users of package engaged and involved in its development. Benchmarking product and strategy acceptance initiated. | 30 Jun 2006 |
| 2.6.2a Milestone | Rapid adoption of new management strategies to reduce agricultural and environmental impacts ensured through demonstration sites and collaborative field-based projects with end-users. | 30 Jun 2008 |
| 2.6.2b Milestone | Rapid adoption of new management strategies to reduce agricultural and environmental impacts ensured through demonstration sites and collaborative field-based projects with end-users. | 30 Jun 2011 |
| 2.6.3 Milestone | Education and training packages for new feral pig strategies completed. | 31 Dec 2011 |
| 2.6.4 Milestone | Education and management packages released and marketed nationally and internationally. | 30 Jun 2012 |
| 2.6.5a Milestone | National recommendation for improved practices for feral pig control drafted and finalised. | 30 Jun 2008 |
| 2.6.5b Milestone | National recommendation for improved practices for feral pig control drafted and finalised. | 30 Jun 2010 |
| 2.6.5c Milestone | National recommendations for improved feral pig control practices produced | 31 Dec 2011 |
| 3 Outcome | A benefit of \$7 million p.a. by reducing rodent damage by 20% | |
| 3.1 Output | A virally vectored immunocontraceptive (VVIC) product for the control of mouse plagues. | 2012 |
| 3.1.1 Milestone | Laboratory experiments and assessments to ensure safety for pen releases completed. Preliminary testing included for species-specificity, likelihood and consequences of recombination events, and studies of insect transmission. | 31 Dec 2006 |
| 3.2 Output | An information package which satisfies State and Federal Government requirements, inclusive of public support, to deploy VVIC for the control of mouse plagues. | 2009 |
| 3.2.1 Milestone | A communication strategy to obtain acceptance for full release of VVIC product implemented. | 31 Jul 2005 |
| 3.2.2 Milestone | Strategy developed for consultation and survey of public and regulatory attitudes to GM house mouse contraceptive release. | 30 Jun 2006 |
| 3.2.3 Milestone | Full benefit-risk framework completed. | 31 Dec 2006 |
| 3.2.4 Milestone | Approval documents for control pen release submitted to State and Federal regulatory authorities. | 31 Dec 2006 |

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| 3.3 | New and improved rodent control methods | 2012 |
| Output | | |
| 3.3.1 Milestone | Experiments commenced to determine if new or improved practices can be developed and used to control rodents completed. | 31 Jul 2007 |
| 3.3.2 Milestone | Experiments commenced to determine if new or improved baits / actives can be developed and used to control rodents. | 30 Jun 2010 |
| 3.3.3 Milestone | Experiments to determine if novel baits can be used to control rodents completed. | 30 Jun 2010 |
| 3.3.4 Milestone | Pen trials to test novel baits (subject to any necessary approval from State and Federal authorities) commenced. | 31 Jul 2011 |
| 3.3.5 Milestone | National recommendations for improved practices or alternatives to current methods of rodent control completed. | 30 Jun 2012 |
| 3.4 | Technology and products for the control of mouse plagues transferred to commercial partners. | 2012 |
| Output | | |
| 3.4.1 Milestone | A business plan showing economic viability, strategic uses and risk assessments for mouse virally vectored immunocontraception (VVIC). Determination of proponents finalised. | 30 Jun 2007 |
| 3.4.2 Milestone | Approval for controlled pen releases obtained from State and Federal authorities (delays possible subject to requests for additional information). | 30 Jun 2007 |
| 3.5 | Improved and / or new rodent control options to protect produce in agricultural areas | 2012 |
| Output | | |
| 3.5.1a Milestone | Extent of problem and market opportunities scoped for new products | 30 Jun 2007 |
| 3.5.1b Milestone | Extent of problem and market opportunities scoped for new products and/or strategies | 31 Dec 2010 |
| 3.5.2 Milestone | Explore opportunities to license technologies from international partners. | 30 Jun 2007 |
| 3.5.3 Milestone | Applications to the APVMA submitted for the commercial use of MOUSEOFF-ZP and RATOFF to extend their use and current label claims | 30 Jun 2010 |
| 3.5.4 Milestone | Alternative rodent control strategies researched and where possible developed. | 30 Jun 2010 |
| 3.5.5 Milestone | A business plan showing economic viability and strategic uses for new and improved rodent control methods. | 30 Jun 2011 |
| 3.5.6 Milestone | National recommendations for improved practices or alternatives to current methods of rodent control in agricultural areas produced. | 30 Jun 2012 |
| 4 | A capacity to deliver improved quality and availability of inland water through reduced impacts and rates of spread of carp and other pest fish species | |
| Outcome | | |
| 4.1 | New knowledge on carp and tilapia biology and/or ecological interactions and control options | 2012 |
| Output | | |
| 4.1.1 Milestone | Biological studies commenced to improve knowledge of carp genetics | 1 Jul 2009 |
| 4.1.2 Milestone | Ecological studies commenced to identify and characterise carp movement and migration, recruitment and nursery hotspots in the MDB, and examine carp-predator interactions and implications for management | 1 Jul 2009 |
| 4.1.3 Milestone | Ecological studies commenced to collect critical ecological and life history data of feral tilapia | 1 Jul 2009 |
| 4.1.4 Milestone | Baseline information on tilapia life history consolidated. Investigation of tilapia dispersal in Queensland commenced. | 31 Dec 2009 |
| 4.1.5 Milestone | Information on carp population dynamics and vulnerability consolidated | 30 Jun 2010 |

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| 4.2 Output | Knowledge of the potential of daughterless platform technology | 2012 |
| 4.2.1 Milestone | Study commenced examining the regulation and manipulation of sex in carp | 1 Jul 2009 |
| 4.2.2 Milestone | Commence tests into the viability of a suitable daughterless construct in a model species in a controlled environment | 1 Jul 2009 |
| 4.2.3 Milestone | Experiments completed to examine whether daughterless technology works to drive a model fish population to extinction | 31 Dec 2010 |
| 4.2.4 Milestone | Commence work on the development of a daughterless construct for carp | 31 Dec 2010 |
| 4.2.5 Milestone | Analysis of the international, national and State policy and regulatory frameworks regarding the use of control technologies against invasive fish undertaken to guide and enable the implementation of various control options, particularly daughterless technology and CyHV-3. | 31 Dec 2010 |
| 4.3 Output | Knowledge on the potential of Cyprinid herpes virus 3 (CyHV-3) as a biocontrol agent for carp in Australia | 2012 |
| 4.3.1 Milestone | Complete trials to determine the activity of CyHV-3 against Australian carp | 1 Jul 2009 |
| 4.3.2 Milestone | Complete carp susceptibility trials to CyHV-3 to determine the most vulnerable carp stages | 31 Dec 2010 |
| 4.3.3 Milestone | Complete screening of a range of non-target native species for susceptibility to CyHV-3 | 30 Jun 2012 |
| 4.4 Output | Improved technologies and cost-effective responses to management of new freshwater fish invasions and reduced rates of spread of existing pests. | 2012 |
| 4.4.1 Milestone | Hazard analysis workshop held for water managers, community groups, and local, national and international biologists on reducing risks of spread of pest fish from water storage and irrigation impoundments. | 30 Jun 2006 |
| 4.4.2a Milestone | Risk and hazard analyses for new pest fish and significant range extensions of existing pests completed. | 30 Jun 2007 |
| 4.4.2b Milestone | Risk and hazard analyses for new pest fish and significant range extensions of existing pests completed. | 30 Jun 2012 |
| 4.4.3 Milestone | Identification and evaluation of tools and techniques for a national "early warning system" completed (rapid detection of new invasions or significant range expansions). | 30 Jun 2010 |
| 4.4.4 Milestone | First generation tilapia population simulation model completed and released | 30 Jun 2012 |
| 4.4.5a Milestone | Policy recommendations for rapid response options, including vector management, and recommendations for response plans for specific invasive fish problems completed. | 30 Jun 2008 |
| 4.4.5b Milestone | Policy recommendations for rapid response options, including vector management, and recommendations for response plans for specific invasive fish problems completed. | 31 Dec 2009 |
| 4.4.6 Milestone | Prepare information and registers to support a national rapid response plan | 30 Jun 2010 |
| 4.4.7 Milestone | Collaborative (with the USA) studies undertaken on sensory cues as attractants for pest fish and developing biocides for carp and other species initiated. | 30 Jun 2009 |
| 4.4.8 Milestone | Develop a range of techniques incorporating attractants and repellents for use in an integrated pest fish management program | 30 Jun 2012 |
| 4.5 Output | Adaptive management framework for assessing national control options for pest fish. | 2011 |

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| 4.5.1 Milestone | Carp simulation model completed and released | 1 Jul 2009 |
| 4.5.2 Milestone | Multi-state, coordinated analysis of carp ecology and population dynamics to assess weaknesses that can be exploited for control completed. | 30 Jun 2009 |
| 4.5.3 Milestone | Population dynamics and genetic models in adaptive management framework evaluated. | 30 Jun 2010 |
| 4.5.4 Milestone | Field tests of selected options commenced at nationally high profile demonstration sites involving regional managers, water users and community groups. | 30 Jun 2009 |
| 4.5.5 Milestone | National, high profile demonstration sites, involving regional managers, water users and community groups, commenced to trial management options. | 30 Jun 2009 |
| 4.5.6 Milestone | Produce practical manual for running carp fishing competitions from Logan-Albert demonstration site | 1 Jul 2009 |
| 4.5.7 Milestone | Produce practical manual for carp control using sustained fishdown methods. | 30 Jun 2011 |
| 4.5.8 Milestone | Produce practical manual for carp control using barrier traps. | 30 Jun 2011 |
| 4.6 Output | New generation biocidal products for controlling invasive fish investigated | 2010 |
| 4.6.1a Milestone | International workshop held for industry representatives, scientists and environmental managers on development of new generation biocides. | 30 Jun 2006 |
| 4.6.1b Milestone | Collaboration with international scientists and environmental managers on potential development of new generation biocides. | 1 Jul 2009 |
| 4.6.2a Milestone | Joint R&D with pest control companies and liaison with overseas agencies initiated to assess market opportunities directly and via international biotechnology conferences (e.g., the BIO meetings). | 30 Jun 2007 |
| 4.6.2b Milestone | Joint R&D with pest control companies and liaison with overseas agencies initiated to assess market opportunities directly and via international biotechnology conferences (e.g., the BIO meetings). | 30 Jun 2008 |
| 4.6.2c Milestone | Joint R&D with pest control companies and liaison with overseas agencies initiated to assess market opportunities directly and via international biotechnology conferences (e.g., the BIO meetings). | 30 Jun 2009 |
| 4.6.3 Milestone | Review of biocides in aquatic environments completed | 30 Jun 2010 |
| 4.7 Output | Integrated pest fish management package | 2012 |
| 4.7.1a Milestone | Studies scoping options for carp control (pheromone attractants, novel biocides, biological control, recombinant techniques, e.g., daughterless) completed. | 30 Jun 2009 |
| 4.7.1b Milestone | Studies scoping options for carp control (pheromone attractants, novel biocides, biological control, recombinant techniques, e.g., daughterless) completed. | 31 Dec 2009 |
| 4.7.2 Milestone | Risk analyses, community consultation and management strategy evaluation of control options selected from scoping studies for detailed evaluation and development completed. | 30 Jun 2011 |
| 4.7.3a Milestone | National biennial workshops held with MDBC, NZ DoC, State and Commonwealth agencies, water users, conservation agencies and other key groups, to evaluate progress on and practicality of the Business Plan. | 30 Jun 2006 |
| 4.7.3b Milestone | National biennial workshops held with MDBC, NZ DoC, State and Commonwealth agencies, water users, conservation agencies and other key groups, to evaluate progress on and practicality of the Business Plan. | 30 Jun 2008 |

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| 4.7.4a Milestone | Annual meetings of "Daughterless" Consultative Committee (Directors of State Fisheries agencies, CEO of AIA CRC, representatives of relevant Commonwealth agencies, chaired by MDBC) held to evaluate progress towards Business Plan and facilitate development of the policy and legislative frameworks required to make it operational. | 30 Jun 2006 |
| 4.7.4b Milestone | Annual meetings of "Daughterless" Consultative Committee (Directors of State Fisheries agencies, CEO of AIA CRC, representatives of relevant Commonwealth agencies, chaired by MDBC) held to evaluate progress towards Business Plan and facilitate development of the policy and legislative frameworks required to make it operational. | 30 Jun 2007 |
| 4.7.4c Milestone | Annual meetings of "Daughterless" Consultative Committee (Directors of State Fisheries agencies, CEO of AIA CRC, representatives of relevant Commonwealth agencies, chaired by MDBC) held to evaluate progress towards Business Plan and facilitate development of the policy and legislative frameworks required to make it operational. | 30 Jun 2008 |
| 4.7.4d Milestone | Annual meetings of "Daughterless" Consultative Committee (Directors of State Fisheries agencies, CEO of AIA CRC, representatives of relevant Commonwealth agencies, chaired by MDBC) held to evaluate progress towards Business Plan and facilitate development of the policy and legislative frameworks required to make it operational. | 30 Jun 2009 |
| 4.7.4e Milestone | Annual consultations with VPC fish working group, Australian Fisheries Management Forum, and MDBA pest fish working group, held to facilitate development of the policy and legislative frameworks required to make management package operational. | 30 Jun 2010 |
| 4.7.4f Milestone | Annual consultations with VPC fish working group, Australian Fisheries Management Forum, and MDBA pest fish working group, held to facilitate development of the policy and legislative frameworks required to make management package operational. | 30 Jun 2011 |
| 4.7.4g Milestone | Annual consultations with VPC fish working group, Australian Fisheries Management Forum, and MDBA pest fish working group, held to facilitate development of the policy and legislative frameworks required to make management package operational. | 30 Jun 2012 |
| 4.7.5a Milestone | Input into the MDBA Basin Alien Fish Plan | 30 Jun 2010 |
| 4.7.5b Milestone | Input into the MDBA Basin Alien Fish Plan | 30 Jun 2011 |
| 4.7.5c Milestone | Input into the MDBA Basin Alien Fish Plan | 30 Jun 2012 |
| 4.7.6 Milestone | Pest fish education and management package completed | 1 Jan 2012 |
| 4.7.7 Milestone | Key elements for national policy and legislative frameworks for effective management of aquatic pest animals recommended to State, Commonwealth and NZ government lead agencies (e.g., Vertebrate Pest Committee, Ministerial Council for Natural Resource Management). | 30 Jun 2008 |

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| 4.7.8a Milestone | Recommendations produced for State, Commonwealth and NZ government lead agencies (e.g., Vertebrate Pest Committee, Ministerial Council for Natural Resource Management) on the key elements for national policy and legislative frameworks for effective management of aquatic pest animals. | 30 Jun 2008 |
| 4.7.8b Milestone | National recommendations on the key elements of a national policy and legislative framework to enable effective management of aquatic pest animals, and suggested further development and implementation pathway options for daughterless technology and Cyprinid herpes virus 3 (CyHV3) produced. | 1 Jan 2012 |
| 5 Outcome | Deliver innovative, practical control measures against cane toads | |
| 5.1 Output | Bait and other lethal control technologies reviewed and where possible tested and registered for local control of cane toads. | 2007 |
| 5.1.1 Milestone | Discovery phase of lethal bait and pheromone research projects established | 31 Dec 2005 |
| 5.1.2 Milestone | Completion of discovery phase of bait and pheromone projects and decision taken on viability of deployment phase. | 31 Dec 2007 |
| 5.1.3 Milestone | Assessment of ecological or topical control methods against cane toads completed. | 31 Dec 2007 |
| 6 Outcome | Reduced impact of feral cats over five million hectares | |
| 6.1 Output | New knowledge on feral cat ecology, and ecological interactions of control methods | 2012 |
| 6.1.1 Milestone | Assessment of ecologically-sound feral cat colony control protocol. | 30 Jun 2007 |
| 6.1.2 Milestone | A review of feral cat impacts and control methods, and identification of feral cat impact hotspots and appropriate control techniques | 31 Dec 2009 |
| 6.1.3 Milestone | Ecological studies on the movement patterns and habitat use of feral cats, and ecological interactions of control methods, including evidence of meso-predator release | 30 Jun 2011 |
| 6.1.4 Milestone | Continental survey of cat genetic variation completed | 31 Dec 2011 |
| 6.2 Output | Tools and strategies for reducing the impact of feral cats. | 2012 |
| 6.2.1 Milestone | Field effectiveness of (toxic (1080) ERADICAT) feral cat baits for reducing the impact of predation on threatened wildlife measured. | 30 Jun 2009 |
| 6.2.2 Milestone | Complementary feral cat products investigated and developed. | 30 Jun 2012 |
| 6.3 Output | Humane and species tailored (PAPP) CURIOSITY feral cat baits. | 2011 |
| 6.3.1 Milestone | Field effectiveness of non-toxic CURIOSITY feral cat baits for reducing the impact of predation on threatened wildlife measured. | 31 Dec 2010 |
| 6.3.2 Milestone | Effectiveness of toxic (PAPP) CURIOSITY feral cat baits assessed, if non-toxic baits are shown to be attractive and exhibit high target specificity | 30 Jun 2010 |
| 6.3.3 Milestone | Registration of recently-developed feral cat bait with inclusion of new or existing toxins encouraged and assisted. | 30 Jun 2008 |
| 6.3.4 Milestone | Data package provided to assist DEWHA and other project partners develop the registration package for a new or improved feral cat toxin | 31 Dec 2010 |
| 6.4 Output | Education and management package | 2012 |

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| 6.4.1 Milestone | Market potential and public acceptance of feral cat baits assessed. | 30 Jun 2006 |
| 6.4.2a Milestone | Education and training package linked to demonstration sites launched for end-users. | 30 Jun 2008 |
| 6.4.2b Milestone | Education and training package linked to demonstration sites launched for end-users. | 30 Jun 2011 |
| 6.4.3 Milestone | National recommendations for improved cat control practices produced. | 31 Jan 2012 |
| 7 Outcome | Increased agricultural profitability through improved integration of existing biological, conventional and newly-developed control options for rabbits | |
| 7.1 Output | Biodiversity impacts of rabbits determined | 2010 |
| 7.1.1 Milestone | Threshold rabbit densities that impact on natural regeneration of vegetation determined. | 30 Jun 2010 |
| 7.2 Output | The mechanisms behind the lack of effectiveness of Rabbit Haemorrhagic Disease (RHD) in higher rainfall areas understood. | 2010 |
| 7.2.1 Milestone | Network for RHD Virus sample collection and field observation, and a centralised laboratory for virus analysis established. | 30 Jun 2006 |
| 7.2.2a Milestone | Field studies, sample collection and laboratory analysis commenced. June 2006 and reviews in June 2007, 2008, 2009, 2010 | 30 Jun 2006 |
| 7.2.2b Milestone | Field studies, sample collection and laboratory analysis commenced. June 2006 and reviews in June 2007, 2008, 2009, 2010 | 30 Jun 2007 |
| 7.2.2c Milestone | Field studies, sample collection and laboratory analysis commenced. June 2006 and reviews in June 2007, 2008, 2009, 2010 | 30 Jun 2008 |
| 7.2.2d Milestone | Field studies, sample collection and laboratory analysis commenced. June 2006 and reviews in June 2007, 2008, 2009, 2010 | 30 Jun 2009 |
| 7.2.2e Milestone | Field studies, sample collection and laboratory analysis commenced. June 2006 and reviews in June 2007, 2008, 2009, 2010 | 30 Jun 2010 |
| 7.3 Output | Rabbit Haemorrhagic Disease suspension delivered product made available to end users. | 2009 |
| 7.3.1 Milestone | Approval for use of Rabbit Haemorrhagic Disease virus on baits obtained from regulatory authority. | 30 Jun 2006 |
| 7.3.2 Milestone | Adequate stocks of Rabbit Haemorrhagic Disease virus available for use by pest control managers. | 30 Jun 2006 |
| 7.3.3 Milestone | The use of bait delivered Rabbit Haemorrhagic Disease virus demonstrated to pest control managers. | 30 Jun 2007 |
| 7.3.4 Milestone | Registration of Rabbit Haemorrhagic Disease virus suspension delivered product transferred to a State agency and renewed annually. | 30 Jun 2009 |
| 7.3.5 Milestone | Protocols for delivery of Rabbit Haemorrhagic Disease Virus bait to landholders established in consultation with state agencies responsible for pest management. | 30 Jun 2007 |
| 7.4 Output | Freeze-dried Rabbit Haemorrhagic Disease bait delivered product made available to end users. | 2011 |
| 7.4.1 Milestone | The use of freeze-dried Rabbit Haemorrhagic Disease virus on baits demonstrated in laboratory. | 31 Dec 2010 |
| 7.4.2 Milestone | National APVMA registration package submitted | 31 Dec 2010 |

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| 7.4.3 Milestone | Protocols for delivery of freeze-dried Rabbit Haemorrhagic Disease Virus on baits to landholders established in consultation with state agencies responsible for pest management. | 31 Dec 2010 |
| 7.5 Output | Rabbit warren pressure CO fumigator | 2012 |
| 7.5.1 Milestone | Operational performance of fumigator determined under field simulated conditions | 30 Jun 2011 |
| 7.5.2 Milestone | National APVMA registration package submitted | 31 Dec 2011 |
| 7.6 Output | Optimal strategy for bait delivered RHD Virus | 2011 |
| 7.6.1a Milestone | Windows of opportunity for bait product deployment determined | 30 Jun 2009 |
| 7.6.1b Milestone | Windows of opportunity for bait product deployment determined based on studies of the virus | 30 Jun 2011 |
| 7.6.2 Milestone | Results of field trials analysed and built into an optimal RHD bait delivery strategy | 30 Jun 2011 |
| 7.7 Output | Optimal strategies for conventional rabbit control | 2012 |
| 7.7.1 Milestone | Optimal use of conventional rabbit control techniques determined through field evaluations and demonstration sites, and newly-developed techniques incorporated into an overall rabbit management strategy. | 30 Jun 2012 |
| 7.8 Output | Strategies for optimal use of Rabbit Haemorrhagic Disease (RHD) and conventional controls. | 2012 |
| 7.8.1 Milestone | Consultation process established with community and end users (pest control managers and land managers). | 30 Jun 2006 |
| 7.8.2 Milestone | Optimal control strategies using conventional control methods delivered to end users. | 30 Jun 2010 |
| 7.8.3 Milestone | Optimal control strategies incorporating natural outbreaks of Rabbit Haemorrhagic Disease (RHD) and bait delivery of RHD delivered to end users. | 30 Jun 2011 |
| 7.8.4 Milestone | Strategies adopted by pest control managers and land managers. | 30 Jun 2012 |
| 7.8.5. Milestone | National recommendations to improve rabbit control practices | 31 Dec 2011 |
| 8 Outcome | Deliver improved and humane approaches to reduce the production and biodiversity impacts of expanding or other overabundant and widespread pest species | |
| 8.1 Output | Leadership role in implementing welfare based invasive animal control practices demonstrated | 2012 |
| 8.1.1 Milestone | Leadership role in the development of aspects of the <i>Australian Animal Welfare Strategy</i> (Animals in the Wild theme) adopted | 30 Jun 2012 |
| 8.1.2 Milestone | Additional draft codes of practice and standard operating procedures for humane pest animal control developed | 31 Dec 2009 |
| 8.1.3 Milestone | Process for national acceptance of draft codes of practice initiated | 1 Jul 2009 |
| 8.1.4 Milestone | New welfare based control strategies developed | 31 Dec 2011 |
| 8.1.5 Milestone | National acceptance of standard operating procedures | 30 Nov 2011 |
| 8.2 Output | A better understanding of the social impacts of animal invasions to improve priority setting, design of control programs and remove blockages to innovation or control. | 2011 |
| 8.2.1 Milestone | Community attitudes towards specific invasive animal problems, e.g. wild dogs, quantified. | 30 Jun 2009 |

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| 8.2.2 Milestone | Social costs of specific invasive animal problems to agricultural producers and their families quantified. | 30 Jun 2009 |
| 8.2.3 Milestone | Social dynamics to invasive animal management studied | 30 Jun 2011 |
| 8.3 Output | Management recommendations to reduce the impacts of Australia's pest birds | 2011 |
| 8.3.1 Milestone | Building on experience from key pest animals, existing and new management techniques investigate and developed for control of a range of invasive animals not mentioned specifically under previous outcomes e.g, birds | 30 Jun 2009 |
| 8.3.2 Milestone | Techniques for estimating pest bird impacts on horticulture developed | 1 Jul 2009 |
| 8.3.3 Milestone | Bird damage costs across all horticultural industries estimated | 1 Jul 2009 |
| 8.3.4 Milestone | National guidelines for improved pest bird management in horticulture produced | 1 Jul 2009 |
| 8.3.5 Milestone | Field trials completed to demonstrate the potential efficacy of the avicide DRC 1339 for starling control in piggeries | 1 Jul 2009 |
| 8.3.6 Milestone | Evaluate pest bird management strategies using bio-economic modelling | 30 Jun 2010 |
| 8.4 Output | Management packages for improved herbivore management | 2012 |
| 8.4.1 Milestone | Improved understanding of the ways in which large vertebrate herbivores interact with rangeland resources. | 30 Jun 2009 |
| 8.4.2 Milestone | Studies that demonstrate the circumstances in which commercial harvesting contributes to production and biodiversity outcomes completed | 30 Jun 2011 |
| 8.4.3 Milestone | Pest physiology and potential delivery systems investigated for a range of species to increase effectiveness of anti-fertility agents/vaccines/toxins likely to significantly increase agricultural productivity of protect human health. | 30 Jun 2007 |
| 8.4.4 Milestone | Efficacy of anti-fertility agents/vaccines/toxins and delivery systems tested in pen and field trials, and best-practice applications determined. | 30 Jun 2009 |
| 8.4.5 Milestone | Carrier formulations which can deliver fertility control agents developed | 30 Jun 2010 |
| 8.4.6 Milestone | Field evaluation of oral carrier formulation commenced | 30 Jun 2010 |
| 8.4.7a Milestone | National workshops held to describe pest problems, share knowledge, recognise gaps and agree on coordinated actions. | 30 Jun 2006 |
| 8.4.7b Milestone | National workshops held to describe pest problems, share knowledge, recognise gaps and agree on coordinated actions. | 30 Jun 2007 |
| 8.4.7c Milestone | National workshops held to describe pest problems, share knowledge, recognise gaps and agree on coordinated actions. | 30 Jun 2008 |
| 8.4.7d Milestone | National workshops held to describe pest problems, share knowledge, recognise gaps and agree on coordinated actions. | 30 Jun 2009 |
| 8.4.7e Milestone | National workshops held to describe pest problems, share knowledge, recognise gaps and agree on coordinated actions. | 30 Jun 2010 |
| 8.4.7f Milestone | National workshops held to describe pest problems, share knowledge, recognise gaps and agree on coordinated actions. | 30 Jun 2011 |
| 8.4.7g Milestone | National workshops held to describe pest problems, share knowledge, recognise gaps and agree on coordinated actions. | 30 Jun 2012 |
| 8.4.8 Milestone | Best practice herbivore control options which incorporate lethal and non-lethal options developed | 30 Jun 2010 |

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| 8.4.9 Milestone | Current guidelines for management strategies for large herbivores, including deer, goats, camels, horses, donkeys and macropods, reviewed. Changes developed and/or recommended, where appropriate | 30 Jun 2009 |
| 8.4.10 Milestone | Participate in development or review of guidelines for large herbivores | 31 Dec 2011 |
| 8.5 Output | Remote vaccine delivery systems (RVDS), such as species-targeted baits and feeders | 2010 |
| 8.5.1 Milestone | Existing vaccine technology, in relation to invasive animal diseases of economic importance to Australasia and international partners, and market potential of remote vaccinations assessed. | 30 Jun 2006 |
| 8.5.2 Milestone | Economic and feasibility analysis of developing new or improved invasive animal disease vaccines conducted. | 30 Jun 2006 |
| 9 Outcome | Reduced risks of economic losses, environmental damage and social stress by forecasting and responding to potential, new or emerging invasive animal problems | |
| 9.1 Output | The development of information systems that improve coordination and evaluation of effort on a national, regional and local level. | 2012 |
| 9.1.1a Milestone | Results from a survey and inventory of pest animal populations, incorporating emerging property management information systems, collated and evaluated. | 30 Jun 2006 |
| 9.1.1b Milestone | Results from a survey and inventory of pest animal populations, incorporating emerging property management information systems, collated and evaluated. | 30 Jun 2007 |
| 9.1.1c Milestone | Results from a survey and inventory of pest animal populations, incorporating emerging property management information systems, collated and evaluated. | 30 Jun 2008 |
| 9.1.1d Milestone | Results from a survey and inventory of pest animal populations, incorporating emerging property management information systems, collated and evaluated. | 30 Jun 2009 |
| 9.1.2a Milestone | Web based data entry systems for abundance, density and damage information developed and evaluated. | 30 Jun 2007 |
| 9.1.2b Milestone | Web based data entry systems for abundance, density and damage information developed and evaluated. | 30 Jun 2008 |
| 9.1.2c Milestone | Web based data entry systems for abundance, density and damage information developed and evaluated. | 30 Jun 2009 |
| 9.1.3 Milestone | Web-based Australasian Invasive Animal Information System, that contains details on pest distributions, identification, response tools and key contacts, further developed. | 30 Jun 2009 |
| 9.1.4 Milestone | Decision support systems to support targeted pest animal control strategies developed. | 30 Jun 2008 |
| 9.1.5a Milestone | Data-capture tools for occurrence, distribution and abundance of invasive animals developed, tested and implemented, and web-based information systems for invasive species evaluated | 30 Jun 2010 |
| 9.1.5b Milestone | Data-capture tools for occurrence, distribution and abundance of invasive animals developed, tested and implemented, and web-based information systems for invasive species evaluated | 30 Jun 2011 |
| 9.1.5c Milestone | Data-capture tools for occurrence, distribution and abundance of invasive animals developed, tested and implemented, and web-based information systems for invasive species evaluated | 30 Jun 2012 |

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| 9.1.6a Milestone | Pest density-damage relationships for invasive animals assessed to optimise benefits from control. | 30 Jun 2007 |
| 9.1.6b Milestone | Pest density-damage relationships for invasive animals assessed to optimise benefits from control. | 30 Jun 2008 |
| 9.1.6c Milestone | Pest density-damage relationships for invasive animals assessed to optimise benefits from control. | 30 Jun 2009 |
| 9.1.6d Milestone | Pest density-damage relationships for at least one invasive animal assessed to optimise benefits from control. | 30 Jun 2010 |
| 9.1.6e Milestone | Pest density-damage relationships for at least one invasive animal assessed to optimise benefits from control. | 30 Jun 2011 |
| 9.1.6f Milestone | Pest density-damage relationships for at least one invasive animal assessed to optimise benefits from control. | 30 Jun 2012 |
| 9.2 Output | Validated risk models, systems and assessments | 2010 |
| 9.2.1 Milestone | Assessment and the prioritisation of risk of pest potential for invasive animals existing in Australia, and those that could potentially be imported completed. | 30 Jun 2008 |
| 9.2.2a Milestone | Risk analysis and identification of hazards (i.e. expansion of range of existing pests, new incursions) completed. | 30 Jun 2007 |
| 9.2.2b Milestone | Risk analysis and identification of hazards (i.e. expansion of range of existing pests, new incursions) completed. | 30 Jun 2010 |
| 9.2.3a Milestone | Risk assessments conducted on farming species with the potential to establish feral populations, and then security arrangements matched to level of risk and potential consequences of escape. | 30 Jun 2009 |
| 9.2.3b Milestone | Risk assessments conducted on farming species with the potential to establish feral populations, and ensure this information is given to appropriate government agencies to act on | 1 Jul 2009 |
| 9.2.4 Milestone | Risk analysis and modelling, undertaken to increase our knowledge of disease/vector behaviour and to quantitatively define the risks posed by invasive animal populations as hosts of exotic and emerging diseases. | 30 Jun 2008 |
| 9.2.5 Milestone | Epidemiological modelling, integrated with new disease/vector studies, to improve the design of disease management strategies completed. | 30 Jun 2008 |
| 9.2.6 Milestone | Improved tools developed to communicate risk reduction issues to key stakeholders (the public, fishers, hunters, land managers, the aquarium and pet trades), and evaluated through surveys of stakeholder attitudes and responsiveness to different forms of communication. | 30 Jun 2009 |
| 9.2.7 Milestone | A code of conduct for the disposal of unwanted animals developed. | 30 Jun 2009 |
| 9.3 Output | Cost-effective early warning detection and response options to restrict introductions or the range of invasive animals. | 2012 |
| 9.3.1 Milestone | Tools for monitoring pests at low population densities developed. | 30 Jun 2008 |
| 9.3.2a Milestone | A national pest animal genotyping facility developed. | 30 Jun 2007 |
| 9.3.2b Milestone | A national pest animal genotyping facility developed and reviewed annually. | 1 Jul 2009 |
| 9.3.2c Milestone | A national pest animal genotyping facility developed and reviewed annually. | 30 Jun 2010 |
| 9.3.2d Milestone | A national pest animal genotyping facility developed and reviewed annually. | 30 Jun 2011 |

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| 9.3.2e Milestone | A national pest animal genotyping facility developed and reviewed annually. | 30 Jun 2012 |
| 9.3.3 Milestone | Tools for measuring success of management strategies e.g. fox eradication in Tasmania, developed. | 30 Jun 2009 |
| 9.3.4 Milestone | A "Toolbox" of early detection and rapid response options for new or spreading pest invasions developed and delivered to national Vertebrate Pest Committee and State agencies. | 31 May 2012 |
| 9.4 Output | Delivery of improved technical and strategic packages for managing invasive species that are hosts for endemic/exotic pathogens that threaten humans, livestock or native fauna. | 2012 |
| 9.4.1 Milestone | Ecological and epidemiological studies to improve the management of invasive species that are hosts for endemic pathogens commenced. | 30 Jun 2005 |
| 9.4.2a Milestone | Quick-knockdown' (cyanide) baits for invasive animal disease surveillance and containment developed | 31 Dec 2008 |
| 9.4.2b Milestone | Quick-knockdown' (e.g. cyanide) baits for invasive animal disease surveillance and containment examined for at least one species. | 31 Dec 2009 |
| 9.4.3a Milestone | Strategies, including products and procedures, for detecting and mitigating the risk of disease spreading from invasive species to humans, livestock and native fauna developed. | 30 Jun 2008 |
| 9.4.3b Milestone | Strategies, including products and procedures, for defining, detecting and mitigating the risk of disease spreading from invasive species to humans, livestock and native fauna developed. | 30 Jun 2010 |
| 9.4.3c Milestone | Strategies, including products and procedures, for defining, detecting and mitigating the risk of disease spreading from invasive species to humans, livestock and native fauna developed. | 30 Jun 2012 |
| 9.5 Output | Management recommendations for endemic and exotic diseases of invasive animals. | 2011 |
| 9.5.1a Milestone | Current information relating to invasive animal diseases (exotic and endemic) collated, published and disseminated, and potential risks to Australasia assessed. | 30 Jun 2006 |
| 9.5.1b Milestone | Current information relating to invasive animal diseases (exotic and endemic) collated, published and disseminated. | 1 Jul 2009 |
| 9.5.2a Milestone | Recommendations developed for improved practices to reduce the impact of endemic disease infections carried by invasive animals. | 30 Jun 2009 |
| 9.5.2b Milestone | National recommendations for improved practices to reduce the impact of endemic and exotic disease infections carried by invasive animals produced. | 30 Jun 2011 |
| 10 outcome | Growth in Australian invasive animal control industries. | |
| 10.1 Output | A registration, marketing, export and community uptake package for reducing the impacts of invasive pest animals. | 2010 |
| 10.1.1 Milestone | A team of professionals, skilled in the areas of registration, marketing, export and community uptake, established to be consulted for advice. | 30 Jun 2007 |
| 10.1.2a Milestone | Generic protocols and processes prepared for managing the registration, marketing and export of invasive animal pest control products. | 30 Jun 2007 |
| 10.1.2b Milestone | Generic protocols and processes prepared for managing the registration, marketing and export of invasive animal pest control products. | 1 Jul 2009 |

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| 10.1.3 Milestone | A plan developed for community engagement in the uptake of invasive animal control products. | 30 Jun 2010 |
| 10.1.4 Milestone | A plan developed to track the growth of SMEs that are associated with IA CRC activities. | 30 Jun 2010 |
| 11 Outcome | Increased professional and practical skills-base in invasive animal management through education, training and community awareness | |
| 11.1 Output | Post graduate training: 24 PhD candidatures completed in support of CRC outcomes and fully integrated with a Certificate of Achievement in Research Leadership and Management. | 2012 |
| 11.1.1 Milestone | An appropriate mix of subjects, delivery modes and industry placements provided from the education providers of the CRC for PhD students. (The PhD cohorts will commence in 2006, 2007 and 2008). | 30 Jun 2012 |
| 11.1.2a Milestone | A four-year, instead of the typical three-year, PhD program implemented for each student to enable scholars to complete their parallel Research Leadership and Management Certificate of Achievement without disadvantaging their research studies. Completion date for each cohort of PhD students expected: June 2010, June 2011, June 2012 | 30 Jun 2010 |
| 11.1.2b Milestone | A four-year, instead of the typical three-year, PhD program implemented for each student to enable scholars to complete their parallel Research Leadership and Management Certificate of Achievement without disadvantaging their research studies. Completion date for each cohort of PhD students expected: June 2010, June 2011, June 2012 | 30 Jun 2011 |
| 11.1.2c Milestone | A four-year, instead of the typical three-year, PhD program implemented for each student to enable scholars to complete their parallel Research Leadership and Management Certificate of Achievement without disadvantaging their research studies. Completion date for each cohort of PhD students expected: June 2010, June 2011, June 2012 | 30 Jun 2012 |
| 11.1.3a Milestone | Students placed in industry at a time best suited to the research program of the student and the timetable of the most appropriate industry partner. Each fulltime PhD cohort to have undertaken their industry placement by December of their final year: December 2009, December 2010, December 2011 | 31 Dec 2009 |
| 11.1.3b Milestone | Students placed in industry at a time best suited to the research program of the student and the timetable of the most appropriate industry partner. Each fulltime PhD cohort to have undertaken their industry placement by December of their final year: December 2009, December 2010, December 2011 | 31 Dec 2010 |
| 11.1.3c Milestone | Students placed in industry at a time best suited to the research program of the student and the timetable of the most appropriate industry partner. Each fulltime PhD cohort to have undertaken their industry placement by December of their final year: December 2009, December 2010, December 2011 | 31 Dec 2011 |

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| 11.1.4a Milestone | Thirty honours degree candidates (1 year full-time, 2 years part-time) enrolled in the life of the IA CRC. Six honours students enrolled (enrolment may be at any CRC partner university) each year in 2006 - 2010 | 28 Feb 2006 |
| 11.1.4b Milestone | Thirty honours degree candidates (1 year full-time, 2 years part-time) enrolled in the life of the IA CRC. Six honours students enrolled (enrolment may be at any CRC partner university) each year in 2006 - 2010 | 28 Feb 2007 |
| 11.1.4c Milestone | Thirty honours degree candidates (1 year full-time, 2 years part-time) enrolled in the life of the IA CRC. Six honours students enrolled (enrolment may be at any CRC partner university) each year in 2006 - 2010 | 28 Feb 2008 |
| 11.1.4d Milestone | Thirty honours degree candidates (1 year full-time, 2 years part-time) enrolled in the life of the IA CRC. Six honours students enrolled (enrolment may be at any CRC partner university) each year in 2006 - 2010 | 28 Feb 2009 |
| 11.1.5 Milestone | Short-course and on-line teaching units developed for the PhD program offered to employees in the pest animal industry. | 30 Jun 2007 |
| 11.2 Output | Manager and field officer training: Graduates of PESTPLAN - new diploma level training course in strategic invasive animal management, and Conservation and Land Management Level 2-4 course | 2012 |
| 11.2.1a Milestone | Consultation with partners to develop training courses and management packages to optimise rapid and correct uptake of products delivered to national and international stakeholders and end-users, as new IA CRC products, technologies, techniques and strategies are developed (in conjunction with each programme and demonstration sites). | 31 Jan 2006 |
| 11.2.1b Milestone | Consultation with partners to develop training courses and management packages to optimise rapid and correct uptake of products delivered to national and international stakeholders and end-users, as new IA CRC products, technologies, techniques and strategies are developed (in conjunction with each programme and demonstration sites). | 30 Jun 2007 |
| 11.2.1c Milestone | Consultation with partners to develop training courses and management packages to optimise rapid and correct uptake of products delivered to national and international stakeholders and end-users, as new IA CRC products, technologies, techniques and strategies are developed (in conjunction with each programme and demonstration sites). | 30 Jun 2008 |
| 11.2.1d Milestone | Consultation with partners to develop training courses and management packages to optimise rapid and correct uptake of products delivered to national and international stakeholders and end-users, as new IA CRC products, technologies, techniques and strategies are developed (in conjunction with each programme and demonstration sites). | 30 Jun 2009 |
| 11.2.1e Milestone | Consultation with partners to develop training courses and management packages to optimise rapid and correct uptake of products delivered to national and international stakeholders and end-users, as new IA CRC products, technologies, techniques and strategies are developed (in conjunction with each programme and demonstration sites). | 30 Jun 2010 |
| 11.2.1f Milestone | Consultation with partners to develop training courses and management packages to optimise rapid and correct uptake of products delivered to national and international stakeholders and end-users, as new IA CRC products, technologies, techniques and strategies are developed (in conjunction with each programme and demonstration sites). | 30 Jun 2011 |

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| 11.2.1g Milestone | Consultation with partners to develop training courses and management packages to optimise rapid and correct uptake of products delivered to national and international stakeholders and end-users, as new IA CRC products, technologies, techniques and strategies are developed (in conjunction with each programme and demonstration sites). | 30 Jun 2012 |
| 11.2.2 Milestone | Land and water areas currently under strategic best practice, invasive animal management plans identified | 31 Dec 2006 |
| 11.2.3 Milestone | Training provider workshop held to update and discuss future directions, issues and requirements of training providers | 31 Jan 2007 |
| 11.2.4a Milestone | A series of five courses, delivering consistent national approaches to knowledge, management and practical skills training, presented to facilitate a rapid uptake of new technologies, and provide the opportunity for two-way information flow | 30 Jun 2007 |
| 11.2.4b Milestone | A series of five courses, delivering consistent national approaches to knowledge, management and practical skills training, presented to facilitate a rapid uptake of new technologies, and provide the opportunity for two-way information flow | 30 Jun 2008 |
| 11.2.4c Milestone | A series of five courses, delivering consistent national approaches to knowledge, management and practical skills training, presented to facilitate a rapid uptake of new technologies, and provide the opportunity for two-way information flow | 30 Jun 2009 |
| 11.2.4d Milestone | A series of five courses, delivering consistent national approaches to knowledge, management and practical skills training, presented to facilitate a rapid uptake of new technologies, and provide the opportunity for two-way information flow | 30 Jun 2010 |
| 11.2.4e Milestone | A series of five courses, delivering consistent national approaches to knowledge, management and practical skills training, presented to facilitate a rapid uptake of new technologies, and provide the opportunity for two-way information flow | 30 Jun 2011 |
| 11.2.4f Milestone | A series of five courses, delivering consistent national approaches to knowledge, management and practical skills training, presented to facilitate a rapid uptake of new technologies, and provide the opportunity for two-way information flow | 30 Jun 2012 |
| 11.2.5a Milestone | Specialist training presented to national and international students, researchers and land managers for each key invasive species targeted by the AIA CRC | 30 Jun 2007 |
| 11.2.5b Milestone | Specialist training presented to national and international students, researchers and land managers for each key invasive species targeted by the AIA CRC | 30 Jun 2008 |
| 11.2.5c Milestone | Specialist training presented to national and international students, researchers and land managers for each key invasive species targeted by the AIA CRC | 30 Jun 2009 |
| 11.2.6a Milestone | Awareness training presented for councillors and staff at a minimum of 14 urban electorates to facilitate informed policy making | 30 Jun 2007 |
| 11.2.6b Milestone | Awareness training presented for councillors and staff at a minimum of 14 urban electorates to facilitate informed policy making | 30 Jun 2008 |
| 11.2.6c Milestone | Awareness training presented for councillors and staff at a minimum of 14 urban electorates to facilitate informed policy making | 30 Jun 2009 |
| 11.2.7a Milestone | Invasive animal management training presented for local government land managers and rangers at a minimum of 14 urban electorates | 30 Jun 2007 |
| 11.2.7b Milestone | Invasive animal management training presented for local government land managers and rangers at a minimum of 14 urban electorates | 30 Jun 2008 |

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| 11.2.7c Milestone | Invasive animal management training presented for local government land managers and rangers at a minimum of 14 urban electorates | 30 Jun 2009 |
| 11.2.8a Milestone | Four courses delivered to agency staff and land managers focussing on practical detection, monitoring and control skills for dealing with invasive animal incursions | 30 Jun 2008 |
| 11.2.8b Milestone | Four courses delivered to agency staff and land managers focussing on practical detection, monitoring and control skills for dealing with invasive animal incursions | 30 Jun 2009 |
| 11.2.9a Milestone | Host workshops held for each key invasive species (including native species) targeted by the AIA CRC to ensure consistency of national management strategies | 30 Jun 2007 |
| 11.2.9b Milestone | Host workshops held for each key invasive species (including native species) targeted by the AIA CRC to ensure consistency of national management strategies | 30 Jun 2008 |
| 11.2.9c Milestone | Host workshops held for each key invasive species (including native species) targeted by the AIA CRC to ensure consistency of national management strategies | 30 Jun 2009 |
| 11.3 Output | Enhanced professional and skill development for partner agencies to produce benefits through reduced on-ground costs and increased productivity from invasive animal control. | 2012 |
| 11.3.1a Milestone | Annual program of appropriate education and training packages delivered to partner agencies | 31 Dec 2006 |
| 11.3.1b Milestone | Annual program of appropriate education and training packages delivered to partner agencies | 31 Dec 2007 |
| 11.3.1c Milestone | Annual program of appropriate education and training packages delivered to partner agencies | 31 Dec 2008 |
| 11.3.1d Milestone | Appropriate education and training packages produced | 31 Jan 2010 |
| 11.3.1e Milestone | Appropriate education and training packages produced | 31 Jan 2011 |
| 11.3.1f Milestone | Appropriate education and training packages produced | 31 Jan 2012 |
| 11.4 Output | End-user capacity-building: increased knowledge and skills | 2012 |
| 11.4.1a Milestone | All current stakeholder knowledge and provided management and practical skills training benchmarked and re-evaluated, and a training implementation strategy developed | 30 Jun 2006 |
| 11.4.1b Milestone | Profile end-user knowledge and the drivers and barriers to end-user groups taking up invasive animal control best practice and a training plan developed | 1 Jul 2009 |
| 11.4.3a Milestone | Extension practitioner workshop held to enhance skills and knowledge to effectively deliver strategic best practice invasive animal management strategies | 31 Dec 2007 |
| 11.4.3b Milestone | Extension materials produced to enhance skills and knowledge to effectively deliver strategic best practice invasive animal management strategies. | 31 Dec 2011 |
| 11.4.4 Milestone | Three key demonstration sites utilised to lead local stakeholders through the process of identifying a problem and developing local/regional pest management plans, including obtaining essential supplementary resources, to the point of implementation | 31 Dec 2009 |
| 11.4.5a | Development and maintenance of online educational and practical resources through feral.org.au for schools, managers and landholders | 30 Jun 2010 |

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| 11.4.5b | Development and maintenance of online educational and practical resources through feral.org.au for schools, managers and landholders | 30 Jun 2011 |
| 11.4.5c | Development and maintenance of online educational and practical resources through feral.org.au for schools, managers and landholders | 30 Jun 2012 |
| 11.5 Output | Increased stakeholder and community awareness | 2012 |
| 11.5.1a Milestone | Mass media coverage of invasive animal issues, impacts and solutions obtained | 30 Jun 2010 |
| 11.5.1b Milestone | Mass media coverage of invasive animal issues, impacts and solutions obtained | 30 Jun 2011 |
| 11.5.1c Milestone | Mass media coverage of invasive animal issues, impacts and solutions obtained | 30 Jun 2012 |
| 11.5.2 Milestone | Awareness of strategic invasive animal issues by key stakeholder groups increased | 31 Jan 2012 |
| 11.6 Output | Commercial application of training programs offshore | 2012 |
| 11.6.1a Milestone | Development of an annual program of short and online courses and training packages developed as part of our Preparedness Through Education Program. (Courses will specifically target offshore regions such as the USA and Pacific nations where there is a high level of concern with invasive animal control) | 31 Dec 2006 |
| 11.6.1b Milestone | Development of an annual program of short and online courses and training packages developed as part of our Preparedness Through Education Program. (Courses will specifically target offshore regions such as the USA and Pacific nations where there is a high level of concern with invasive animal control) | 31 Dec 2007 |
| 11.6.1c Milestone | Development of an annual program of short and online courses and training packages developed as part of our Preparedness Through Education Program. (Courses will specifically target offshore regions such as the USA and Pacific nations where there is a high level of concern with invasive animal control) | 31 Dec 2008 |
| 12 Outcome | Established national and local benchmarks for invasive animal impact, density and distribution from which performance on delivery of all outcomes can be assessed | |
| 12.1 Output | Assessment of the overall impact of the Invasive Animal CRC throughout its life, and recommended directions and requirements into the future. | 2012 |
| 12.1.1a Milestone | Agreed benchmarks established for invasive animal impacts, density and distribution in Australasia, this information portrayed to the public and changes in community attitudes to invasive animals monitored. | 30 Jun 2006 |
| 12.1.1b Milestone | Agreed benchmarks established for invasive animal impacts, density and distribution in Australasia, this information portrayed to the public and changes in community attitudes to invasive animals monitored. | 30 Jun 2007 |
| 12.1.1c Milestone | Agreed benchmarks established for invasive animal impacts, density and distribution in Australasia, this information portrayed to the public and changes in community attitudes to invasive animals monitored. | 30 Jun 2008 |
| 12.1.1d Milestone | Agreed benchmarks established for invasive animal impacts, density and distribution in Australasia, this information portrayed to the public and changes in community attitudes to invasive animals monitored. | 30 Jun 2009 |

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| 12.1.1e Milestone | Agreed benchmarks established for invasive animal impacts, density and distribution in Australia | 30 Jun 2011 |
| 12.1.2a Milestone | Invasive animal distributions and impacts in Australasia, and community attitudes towards current and potential invasive animal species evaluated. | 30 Jun 2006 |
| 12.1.2b Milestone | Invasive animal distributions and impacts in Australasia, and community attitudes towards current and potential invasive animal species evaluated. | 30 Jun 2007 |
| 12.1.2c Milestone | Invasive animal distributions and impacts in Australasia, and community attitudes towards current and potential invasive animal species evaluated. | 30 Jun 2008 |
| 12.1.2d Milestone | Invasive animal distributions and impacts in Australasia, and community attitudes towards current and potential invasive animal species evaluated. | 30 Jun 2009 |
| 12.1.2e Milestone | Community attitudes towards current and potential invasive animal species and control methods monitored and evaluated | 30 Jun 2011 |
| 12.1.3a Milestone | Reductions in pest animal impacts (and associated gains in production) through the various activities of the IA CRC demonstrated through rigorous science. | 30 Jun 2006 |
| 12.1.3b Milestone | Reductions in pest animal impacts (and associated gains in production) through the various activities of the IA CRC demonstrated through rigorous science. | 30 Jun 2007 |
| 12.1.3c Milestone | Reductions in pest animal impacts (and associated gains in production) through the various activities of the IA CRC demonstrated through rigorous science. | 30 Jun 2008 |
| 12.1.3d Milestone | Reductions in pest animal impacts (and associated gains in production) through the various activities of the IA CRC demonstrated through rigorous science. | 30 Jun 2009 |
| 12.1.3e Milestone | Reductions in pest animal impacts (and associated gains in production) through the various activities of the IA CRC demonstrated through rigorous assessment. | 30 Jun 2011 |