

Section 5: Outputs and Milestones

Commercialisation and Utilisation Strategy - Outputs and Milestones

<i>1. Productivity growth in existing industries (\$350 million NPV new perennial plant-based farming systems on 7.4 million hectares (mha) of agricultural land)</i>	
Output 1.1: EverGraze Plus – More livestock from perennial\$ and More livestock from native perennial\$ grasses in the high rainfall zone (>500 mm)	June 2014
• EverGraze practice change on 500 farms	June 2009
• EverGraze package to 3,000 end users	June 2011
• EverGraze practice change on 2,400 farms	June 2014
Output 1.2: Forage cultivars (chicory, Lotus or perennial Medicago) – from Pasturesearch	June 2014
• Pre-basic seed delivered to commercial partner	April 2013
• Cultivar enters the market accompanied by information on management and crop integration requirement	June 2014
Output 1.3: New acid-tolerant perennial forage cultivars – from PastureSearch	June 2011
• Pre-basic seed to commercial partner	June 2009
• Commercial release	June 2010
• New forage planted on 100 farms	July 2011
Output 1.4: A new herbaceous forage for the warm season, summer dominant or high rainfall zone with a management and utilisation package commercially released - from PastureSearch with application in EverGraze	June 2014
• Agreement with seed company for commercial cultivar release and distribution completed	June 2014
Output 1.5: Enrich – new shrub-based livestock production system for landscape and natural resource health in the low/medium rainfall zone	June 2014
• Instruction manual for components to 1,000 producers	June 2008
• Full package to 3,000 producers	June 2014
• Practice change on 500 farms	June 2014
Output 1.6: New shrub cultivar (Atriplex) – from FloraSearch	June 2014
• Pre-basic clones to commercial partner	June 2012
• Commercial release	June 2012
Output 2.1: EverCrop – new farming system in each of 3 agro-climatic zones	June 2014
• 100 trained and accredited users	December 2013
• Full production package to producers	December 2013
• Practice change on 100 farms	June 2014

Output 2.2: Drought tolerant forage legume cultivar – from Pasturesearch	June 2014
• Pre-basic seed to commercial partner	June 2014
• 10 farms with small plot demonstrations	June 2014
Output 2.3: EverCrop Decide – new crop systems analysis tool tools that integrate production and conservation objectives	December 2013
• Tool fully developed and tested for each target zone	December 2012
• Distribution to 50-100 extension providers in 5 key partner agencies (WA, SA, Vic, NSW)	December 2013
Output 2.4: Feed grain quality salt/waterlogging-tolerant wheat	June 2014
• Pre-basic seed to commercial partner	April 2012
• Commercial release	December 2013
• 10 farm demonstration plantings	June 2013
Output 2.6: Breeding material for bread quality salt/waterlogging-tolerant wheat	June 2014
• Breeding lines available for commercial development	June 2014
Output 2.7: Prospectus for development of perennial wheat	June 2012
• Confirmation of freedom to operate with germplasm from international collaborators	June 2008
• Report to the consortium of potential investors on potential and feasibility of a full breeding program	June 2012
Output 6.1: Adoptability index – assessment tool for the potential adoption of FFI CRC products	June 2012
• Preliminary index developed	June 2008
• Use by 80% of projects in FFI CRC portfolio	June 2010
• Use by 20% of relevant projects in external organisations	June 2014
<i>2. Profitable new regional industries (\$170 million NPV new woody crops on 0.1 mha agricultural land feeding new processing industries)</i>	
Output 1.5: Salt/waterlogging-tolerant wheat suitable for biofuel	June 2014
• Pre-basic seed to commercial partner	April 2013
• 10 farm demonstration plantings	June 2014
Output 3.1: 'Wyalong' mallee seed – from FloraSearch	December 2013
• Establish strategy background IP access and for IP protection of resulting cultivars.	December 2008

• Establish commercial partnership for seed marketing.	June 2010
• Commercial release	June 2013
Output 3.2: Prospectus for prototype commercial harvester for short-cycle woody crops	June 2012
• Prospectus completed	June 2008
• CRC led program to raise capital to develop prototype harvester	June 2009
• First commercial prototype under construction	June 2012
Output 3.3: Client feasibility reports for biomass supply and processing industry investment	December 2010
• Open contacts with emerging processing industry developers.	December 2007
• Win contracts and first reports completed.	December 2009
• Use water/plant growth modelling tool for yield prediction and feasibility analysis	December 2010
Output 3.4: Prediction capability with woody crop production from farm layouts with access to variable water inputs.	June 2012
• Use water/growth model in feasibility investigation for commercial clients.	June 2012
<i>3. Salinity damage reduced (\$350 million NPV assumed conservatively that 1.6Mha of agricultural land will have the onset of salinity delayed or prevented)</i>	
Output 4.1: HIGHPak – improved performance livestock and pasture management packages for saline land	June 2014
• Saltland pasture, livestock management and farm integration packages delivered to the National Saltland Service Centre	December 2013
Output 4.2: New salt tolerant pasture legume and grass cultivars – from Pasturesearch	December 2013
• Commercial release of first salt-tolerant legume cultivar	December 2010
• Commercial release of final 2 cultivars	December 2013
Output 4.3: New salt tolerant halophytic shrub cultivars – from FloraSearch	June 2014
• Pre-basic clones to commercial partner	June 2011
• Commercial release of two cultivars	June 2013
• New shrubs planted on 100 farms	June 2014
Output 4.4: National Saltland Service Centre – a vehicle for the delivery of new tools, products and services	June 2014
• Fully operational with commercialisation plan developed	June 2010
• SGSL technologies implemented on 2,000 farms	June 2014
• HIGHPak technologies trialled on 1,000 farms	June 2014

Output 4.5: SALTCAP – land capability assessment tool for plant-based saline land management	December 2007
• SALTCAP-1 launched	December 2007
• SALTCAP-2 launched	December 2011
• 500 trained and accredited users	December 2012
Output 4.6: SALTDecide – hydrological modelling tool to measure the impact of water management using integrated plant-based and engineering interventions both on-site and off-site	December 2011
• SALT Decide launched	June 2011
• 60 trained and accredited users	June 2014
Output 6.3: Farm business/NRM simulation game (extension of 'Salty Business')	December 2010
• Delivery of 10 workshops with catchment bodies, policy advisers, scientists and students	December 2009
• Delivery of workshops with catchment bodies, policy advisers, scientists and students according to demand	December 2010
<i>4. Other environmental benefits (Unpriced benefits including enhanced habitat values and ecosystem services, protection of off-site biodiversity values and management of weed risk)</i>	
Output 5.1: Management and decision packages that promote farming systems that integrate production and biodiversity outcomes	June 2014
• Developed and validated models refined as management packages and linked to appropriate industry program training and application groups	June 2014
Output 5.2: BioRisk – risk-based decision tool for hydrological ecosystem services	June 2014
• Beta testing with selected stakeholders	June 2012
• Licensed full application	June 2014
• Tool practised in six catchments (or sub-catchments).	June 2014
Output 5.3: CAT Plus – catchment decision tool for perennial vegetation strategies to protect water resources in water supply catchments	June 2014
• Licensed application of current CAT	June 2009
• Beta testing of CAT Plus with selected practitioners	June 2012
• Licensed application of CAT Plus	July 2012
• Tool practised in six catchments (or sub-catchments)	August 2012
<i>5. Capacity building (\$360 million NPV attributable to more effective government policy and national/regional investment programs)</i>	

Output 6.2: NRM Investment Framework – decision tool for selection of priority natural resource management investments	June 2014
• Pilot biodiversity module completed with CMOs	June 2010
• Pilot water quality module completed with CMOs	June 2013
• 10 CMOs using NRMIF to guide their investments	June 2014
Output 7.1: Postgraduates – professionally trained for employment in relevant disciplines	June 2014
• 10 industry ready PhDs graduated	June 2012
• 30 industry ready PhDs graduated	June 2013
• 50 industry ready PhDs graduated with 90% of higher degree students completing	June 2014
Output 7.2: Profitable Perennials™ accredited training program	June 2014
• National training program in place	June 2011
• 250 completed training and accredited to minimum Certificate III	June 2014

Research and Development Programs – Outputs and Milestones

1. Productivity growth in existing industries (\$350 million NPV new perennial plant-based farming systems on 7.4 million hectares (mha) of agricultural land)

Program 1 - Future Livestock Production	
Output 1.1: EverGraze Plus – More livestock from perennial\$ and More livestock from native perennial\$ grasses in the high rainfall zone (>500 mm)	June 2011
<ul style="list-style-type: none"> • Experimental sites with high output meat and perennial pasture systems completed in 3 states 	June 2008
<ul style="list-style-type: none"> • Redesign of the integration of native and improved pastures to produce catchment health through profitable grazing in the high rainfall zone 	June 2008
<ul style="list-style-type: none"> • Commercial scale field experiments to evaluate redesigned native pasture systems completed and interpreted at 3 sites 	June 2011
Output 1.2: Forage cultivars (chicory, Lotus or perennial Medicago) – from PastureSearch	June 2014
<ul style="list-style-type: none"> • Develop breeders lines from elite plants in existing trials 	June 2009
<ul style="list-style-type: none"> • Commence evaluation of elite germplasm (selected and multiplied at Genetic Resource Centres) compared to breeders lines and existing cultivars at 4 sites. 	June 2010
<ul style="list-style-type: none"> • Field evaluation completed and potential cultivars identified 	June 2012
<ul style="list-style-type: none"> • Seed produced from best individuals (within superior lines) for cultivar release 	June 2014
Output 1.3: New acid-tolerant perennial forage cultivars – from PastureSearch	June 2011
<ul style="list-style-type: none"> • Extensive field testing for development and utilisation packages completed. 	June 2010
Output 1.4: A new herbaceous forage for the warm season, summer dominant or high rainfall zone with a management and utilisation package commercially released - from PastureSearch with application in EverGraze	June 2014
<ul style="list-style-type: none"> • Field testing of assembled elite germplasm undertaken in 3 key target environments 	June 2008
<ul style="list-style-type: none"> • Finalisation of field performance testing delivering a cultivar for commercial release 	June 2012
Output 1.5: Enrich – new shrub-based livestock production system for landscape and natural resource health in the low/medium rainfall zone	June 2014
<ul style="list-style-type: none"> • Laboratory experiments on the use of second plant compounds (in situ) to improve gut health and function completed for 50 candidate shrubs. In vivo assessment for 10 shrubs 	June 2010

<ul style="list-style-type: none"> Experimental sites on shrub systems with strong stakeholder input completed at 3 sites 	June 2012
<ul style="list-style-type: none"> Climate risk analysis, forced de-stocking, supplementary feeding, soil erosion, water use and soil health quantified. 	June 2013
Output 1.6: New shrub cultivar (Atriplex) – from FloraSearch.	June 2012
<ul style="list-style-type: none"> Target shrubs with the potential to decrease climate risk, improve animal health, production and welfare, and improve water use, soil health, perenniality and biodiversity. 	June 2008
<ul style="list-style-type: none"> Clonal shrub nursery established 	June 2008
<ul style="list-style-type: none"> Superior shrub clones tested extensively in laboratory and field for growth, nutritive and anti-nutritive value and persistence 	June 2010
Program 2 - Future Cropping Systems	
Output 2.1: EverCrop – new farming system in each of 3 agro-climatic zones	December 2013
<ul style="list-style-type: none"> Systems program designed to optimise profit, diversity of enterprises and environmental outcomes following identification and active participation of key partners (including adoption pathways) 	March 2009
<ul style="list-style-type: none"> Pre-experimental economic and catchment modelling completed 	December 2009
<ul style="list-style-type: none"> Research program completed 	June 2013
<ul style="list-style-type: none"> Profit and hydrologic impacts predicted through modelling 	December 2013
Output 2.2: Drought tolerant forage legume cultivar – from PastureSearch	June 2014
<ul style="list-style-type: none"> Field testing (from 3 key sites) used to identify potential cultivars for more intensive testing. 	June 2010
<ul style="list-style-type: none"> Cultivars selected on the basis of multi-site field performance 	June 2012
Output 2.3: EverCrop Decide – new crop systems analysis tools that integrate production and conservation objectives	December 2013
<ul style="list-style-type: none"> Analytical tools assembled and pre-experimental modelling, production economic and hydrologic completed 	December 2008
<ul style="list-style-type: none"> Report on key existing species and system constraints and spatially explicit opportunities in target landscapes 	December 2009
<ul style="list-style-type: none"> Model development completed and preliminary tested 	December 2011
Output 2.4: Feed grain quality salt/waterlogging-tolerant wheat	June 2014
<ul style="list-style-type: none"> Lines with high fertility and in Australian backgrounds available for field trials 	December 2009
<ul style="list-style-type: none"> Field evaluations completed 	December 2012
Output 2.6: Breeding material for bread quality salt/waterlogging-tolerant wheat	June 2014
<ul style="list-style-type: none"> Most tolerant bread wheat germplasm identified from world collections 	December 2010
<ul style="list-style-type: none"> Most tolerant lines from progeny of wide-hybridizations identified 	December 2012
<ul style="list-style-type: none"> Field and other evaluation of most tolerant advanced breeding lines completed 	June 2014
Output 2.7: Prospectus for development of perennial wheat	June 2012

• Acquire access to preliminary germplasm for field assessment	June 2008
• Complete field assessment of potential of unadapted 'perennial wheat' to deliver against production, yield and water use targets	June 2011
• Use data, modelling and analysis of breeding opportunities and strategies to assess the potential scale and economic impact of a future perennial wheat industry.	June 2012
Program 6 - Economic, Social and Policy Analysis	
Output 6.1: Adoptability index – assessment tool for the potential adoption of FFI CRC products	June 2012
• Identify and quantify components of the adoptability index.	June 2008
• Complete analysis of anticipated property turnover in the Murray-Darling Basin. Develop simple risk assessment tool for inclusion in AI.	December 2010
• Analysis of implications of changes in agriculture for CRC adoption and commercialisation	December 2011
• New economic modeling to inform the AI.	December 2009

2. Profitable new regional industries (\$170 million NPV new woody crops on 0.1 mha agricultural land feeding new processing industries)

Program 2 - Future Cropping Systems	
Output 2.5: Salt/waterlogging-tolerant wheat suitable for biofuel	January 2015
• Lines with high fertility and in Australian backgrounds available for field trials	December 2009
• Field evaluations and selections for biofuel quality traits completed	December 2012
Program 3 - New Woody Crops and Products	
Output 3.1: 'Wyalong' mallee seed – from FloraSearch	December 2012
• Establish breeding and selection infrastructure -seed nurseries and field progeny test sites.	December 2007
• Establish clonal seed orchards.	December 2008
• Establish genetic gain experiments.	June 2011
Output 3.2: Prospectus for prototype commercial harvester for short-cycle woody crops	June 2012
• Review biomass supply chain options, prepare conceptual specification of preferred option and estimate development cost.	December 2007
• Prepare business case for private and public investment in operational prototype.	June 2008
Output 3.3: Client feasibility reports for biomass supply and processing industry investment	December 2010
• Use economic analysis and water/growth model yields to show local and regional scenarios where biomass supply from short and long	June 2008

cycle woody crops is economically competitive with annual plant agriculture.	
<ul style="list-style-type: none"> Use GIS and model outputs to predict volume, distribution and cost of biomass supply for proposed industry development. 	December 2009
<ul style="list-style-type: none"> Conduct feasibility investigation of biomass supply for industry developers 	December 2009
<ul style="list-style-type: none"> Prepare case study material for regional NR managers and economic planners. 	December 2009
Output 3.4: Prediction capability with woody crop production from farm layouts with access to variable water inputs.	June 2012
<ul style="list-style-type: none"> Selection of suitable modelling framework and case study sites to link local surface water run-off with yield of woody crop belts, and explore interface with CAT. 	June 2008
<ul style="list-style-type: none"> Preliminary model calibrations and outputs produced based on data from study sites and outputs for early application. 	December 2010
<ul style="list-style-type: none"> Final calibrated, validated model outputs including sensitivity tests for key parameters 	June 2012

3. Salinity damage reduced (\$350 million NPV assumed conservatively that 1.6 mha of agricultural land will have the onset of salinity delayed or prevented)

Program 4 - Farming Saline Landscapes

Output 4.1: HIGHPak – improved performance livestock and pasture management packages for saline land	June 2014
<ul style="list-style-type: none"> Engage 1250 strong SGSL network in the problem definition and planning of proof and support sites to develop new saltland pasture /livestock technologies 	December 2007
<ul style="list-style-type: none"> Test and demonstrate the next generation of saltland technologies for fine wool production, cattle backgrounding, supplementation and foetal programming (commence 2008) 	June 2013
<ul style="list-style-type: none"> Output of whole farm models used to quantify profitability impact of new technologies and pathways for optimum integrating in farms with diverse salinity status. 	December 2013
Output 4.2: New salt tolerant pasture legume and grass cultivars – from PastureSearch	December 2013
<ul style="list-style-type: none"> Complete salt, waterlogging and nutritive value screening of target species (commencing 2007) 	June 2009
<ul style="list-style-type: none"> Complete field testing and duty of care requirements for first commercial release 	December 2010
<ul style="list-style-type: none"> Complete field testing and duty of care procedures for remaining cultivars 	December 2013

Output 4.3: New salt tolerant halophytic shrub cultivars – from FloraSearch	June 2014
<ul style="list-style-type: none"> Develop methods for screening halophytic shrubs for nutritive value and active plant compounds and apply to germplasm under test. 	December 2009
<ul style="list-style-type: none"> Elite material cloned into nurseries for further screening of palatability and productivity (commence 2009) 	December 2011
<ul style="list-style-type: none"> Use seed production nurseries for prerelease testing including seed viability of potential cultivars 	June 2013
Output 4.4: National Saltland Service Centre - Providing a path to impact	December 2010
<ul style="list-style-type: none"> Social and environmental surveys completed 	June 2008
<ul style="list-style-type: none"> Stage 1 - producer supporting sites (20) established in support of sub-program proof sites applying agreed protocols 	June 2008
<ul style="list-style-type: none"> Stage 2 - producer supporting sites established in support of sub-program proof sites according to the agreed protocols. Data is collated from the original 20 sites and incorporated into joint analyses of proof and supporting sites. 	June 2009
<ul style="list-style-type: none"> Ten whole-farm producer case studies completed and incorporating full economic analyses. 	June 2010
<ul style="list-style-type: none"> Data from all 40 sites incorporated into joint analyses of proof and supporting sites. Best management guidelines for optimizing production from saltland pastures and managing livestock on saltland pastures; options for improved halophytic shrubs 	December 2010
Output 4.6: SALTDecide – hydrological modelling tool to measure the impact of water management using integrated plant-based and engineering interventions both on-site and off-site	December 2013
<ul style="list-style-type: none"> Scope of model and capability established based around the need for prediction of impact of interventions (recharge prevention, drainage plant impacts) and their integrated application and application constraints. 	June 2008
<ul style="list-style-type: none"> Model development and validation based on existing component data sets 	June 2011
<ul style="list-style-type: none"> Model robustness evaluated for a range of regional and drivers for intervention 	June 2013
Program 6 - Economic, Social and Policy Analysis	
Output 6.3: Farm business/NRM simulation game (extension of "Salty Business")	December 2010
<ul style="list-style-type: none"> Adaptation of Salty Business/ Risky Business to include additional NRM issues 	December 2008
<p><i>4. Other environmental benefits (Un-priced benefits including enhanced habitat values and ecosystem services, protection of off-site biodiversity values and management of weed risk)</i></p>	

Program 5 - Biodiversity, Water, Land and Climate	
Output 5.1: Management and decision packages that promote farming systems that integrate production and biodiversity outcomes	June 2014
<ul style="list-style-type: none"> Conceptual models developed that link biota and farming practices with ecological resources and related ecosystem processes. 	June 2008
<ul style="list-style-type: none"> Models tested and refined through quantification of ecological resources and rates of related ecosystem processes. 	June 2011
<ul style="list-style-type: none"> Completion of management and decision packages for integrating production and biodiversity outcomes. 	June 2013
<ul style="list-style-type: none"> Package and its adoption evaluated. 	June 2014
Output 5.2: BioRisk – risk-based decision tool for hydrological ecosystem services	June 2014
<ul style="list-style-type: none"> Catchment modeling packages selected, and conceptual framework for ecohydrology of salinity threatened plants developed. 	June 2009
<ul style="list-style-type: none"> Testing of modeled scenarios and framework completed. 	June 2011
<ul style="list-style-type: none"> Completion of management and decision tools 	June 2013
<ul style="list-style-type: none"> Tools refined in response to field experience 	June 2014
Output 5.3: CAT Plus – catchment decision tool for perennial vegetation strategies to protect water resources in water supply catchments	June 2014
<ul style="list-style-type: none"> Catchment modelled packages selected, and conceptual framework for ecohydrology of salinity threatened plants developed. 	June 2009
<ul style="list-style-type: none"> Testing of modelled scenarios and framework completed. 	June 2012
<ul style="list-style-type: none"> Completion of management and decision tools 	June 2013
<ul style="list-style-type: none"> Tools refined in response to field experience. 	June 2014
Output 5.4: Risk assessment products and management strategies to protect biodiversity from weeds and genetic pollution and to minimise weed control costs.	June 2014
<ul style="list-style-type: none"> CRC scientists trained in application of environmental risk framework. 	June 2011
<ul style="list-style-type: none"> CRC scientists trained in application of decision tools. 	June 2012
<ul style="list-style-type: none"> Weed risk assessment process from previous CRC refined, and genetic risk assessment framework developed 	June 2010
<ul style="list-style-type: none"> Weed and genetic risk assessments combined into a single environmental risk process. 	June 2011
<ul style="list-style-type: none"> Decision tools for management of environmental risks in production systems completed. 	June 2012
<ul style="list-style-type: none"> Package and its adoption evaluated. 	June 2014

5. Capacity building (\$360 million NPV attributable to more effective government

policy and national/regional investment programs)

Program 6 – Economic, Social and Policy Analysis

Output 6.2: NRM Investment Framework – decision tool for selection of priority natural resource management investments	July 2013
<ul style="list-style-type: none"> • Complete development of NRMIF including biodiversity 	December 2009
<ul style="list-style-type: none"> • Complete development of NRMIF including water quality 	December 2011

Education and Training Program – Outputs and Milestones

1. Productivity growth in existing industries (\$350 million NPV new perennial plant-based farming systems on 7.4 million hectares (mha) of agricultural land)

Output 1.1: EverGraze Plus – More livestock from perennial\$ and More livestock from native perennial\$ grasses in the high rainfall zone (>500 mm)	June 2011
<ul style="list-style-type: none"> • Education and training package delivered to farmers, advisors, consultants and CMAs resulting in practice change on 500 farms 	June 2009
<ul style="list-style-type: none"> • Site design through initial workshops with regional producer groups followed by continuous feedback via the extension network 	June 2011
<ul style="list-style-type: none"> • One PhD student completed within EverGraze 	June 2011
<ul style="list-style-type: none"> • EverGraze package delivered to at least 3000 end users through field demonstrations, technical forums and commercial partners 	June 2011
Output 1.2: Forage cultivars (chicory, Lotus or perennial Medicago) – from PastureSearch	June 2014
<ul style="list-style-type: none"> • Management package detailing cultivar management and integration into crop systems in the hands of private and public sector agronomists. 	June 2014
Output 1.3: New acid-tolerant perennial forage cultivars – from PastureSearch	June 2011
<ul style="list-style-type: none"> • Management package, developed and delivered with commercial partner 	June 2011
Output 1.4: A new herbaceous forage for the warm season, summer dominant or high rainfall zone with a management and utilisation package commercially released - from PastureSearch with application in EverGraze	June 2014
<ul style="list-style-type: none"> • Training of extension agronomists completed with the new cultivar technology package 	June 2014
<ul style="list-style-type: none"> • Management package and cultivar release to farmers 	June 2014
Output 1.5: Enrich – new shrub-based livestock production system for landscape and natural resource health in the low/medium rainfall zone	June 2014
<ul style="list-style-type: none"> • One PhD student completed within Enrich 	June 2014
<ul style="list-style-type: none"> • Enrich package delivered to at least 3000 end users through field 	June 2014

demonstrations, technical forums and commercial partners	
Output 2.1: EverCrop Decide – new crop systems analysis tool tools that integrate production and conservation objectives	December 2013
<ul style="list-style-type: none"> • Network of extension providers and relevant CMA staff with the skills for analysing the impacts of innovative systems 	December 2012
Output 2.2: Drought tolerant forage legume cultivar – from PastureSearch	June 2014
<ul style="list-style-type: none"> • Training of extension agronomists undertaken on cultivar and crop integration package 	June 2014
<ul style="list-style-type: none"> • Cultivars and management package delivered (Field days and 1:1 advice) to adopting producers by trained private and public sector agronomists 	June 2013
Output 2.3: EverCrop – new farming system in each of 3 agro-climatic zones	December 2013
<ul style="list-style-type: none"> • Systems training conducted for all project participants 	June 2009
<ul style="list-style-type: none"> • ‘Demand-driven’ management packages released in format that assists longevity and flexibility beyond the program life 	December 2013
Output 2.4: Feed grain quality salt/waterlogging-tolerant wheat	June 2014
<ul style="list-style-type: none"> • Agronomic packages developed and available for grain growers (with Program 4) 	December 2012
<i>2. Profitable new regional industries (\$170 million NPV new woody crops on 0.1 mha agricultural land feeding new processing industries)</i>	
Output 2.5: Salt/waterlogging-tolerant wheat suitable for biofuel	June 2014
<ul style="list-style-type: none"> • Agronomic packages developed and available for grain growers (with Program 4) 	December 2012
<i>3. Salinity damage reduced (\$350 million NPV assumed conservatively that 1.6 mha of agricultural land will have the onset of salinity delayed or prevented)</i>	
Output 4.1: HIGHPak – improved performance livestock and pasture management packages for saline land	June 2014
<ul style="list-style-type: none"> • At least 1 postgraduate student completes PhD on livestock management of saline land 	December 2013
Output 4.2: New salt tolerant pasture legume and grass cultivars – from PastureSearch	December 2013
<ul style="list-style-type: none"> • Postgraduate student submits and passes thesis 	June 2011
Output 4.3: New salt tolerant halophytic shrub cultivars – from FloraSearch	June 2014
<ul style="list-style-type: none"> • Postgraduate student complete study of the nutritive value of saltbush 	June 2013
Output 4.4: National Saltand Service Centre - Providing a path to impact	December 2010
<ul style="list-style-type: none"> • Network staff established (6) to support participation and group activities; producer support sites, training modules and publications and field days, contributions from third parties. 	June 2009
<ul style="list-style-type: none"> • The results of the whole-farm case studies are utilised as the basis for producer network workshops (10) 	June 2010

<ul style="list-style-type: none"> Field days and other participatory events have occurred at least a second time on each of the 40 producer support sites. 	December 2010
Output 4.5: SALTCAP – land capability assessment tool for plant-based saline land management	December 2007
<ul style="list-style-type: none"> SALTCAP 1- Training course developed, tested and adapted and then delivered to saltland producers 	December 2009
<ul style="list-style-type: none"> SALTCAP 2- Training course developed, tested and adapted and then delivered to saltland producers 	June 2014
Output 4.6: SALTDecide – hydrological modelling tool to measure the impact of water management using integrated plant-based and engineering interventions both on-site and off-site	December 2011
<ul style="list-style-type: none"> Training modules developed for target markets sectors (high value assets, protection of high value natural assets and agricultural land) and training delivered 	June 2011
Output 6.3: Farm business/NRM simulation game (extension of "Salty Business")	December 2010
<ul style="list-style-type: none"> Delivery of 10 workshops with catchment bodies, policy advisors, scientists and students 	June 2009
<ul style="list-style-type: none"> Delivery of workshops with catchment bodies, policy advisors, scientists and students according to demand. 	June 2010
<p>4. Other environmental benefits (Un-priced benefits including enhanced habitat values and ecosystem services, protection of off-site biodiversity values and management of weed risk)</p>	
Output 5.1: Management and decision packages that promote farming systems that integrate production and biodiversity outcomes	June 2014
<ul style="list-style-type: none"> Stakeholders trained in use of packages 	June 2014
Output 5.2: BioRisk – risk-based decision tool for managing hydrology to achieve biodiversity targets and improved production.	June 2014
<ul style="list-style-type: none"> CRC scientists trained in application of environmental risk framework. 	June 2011
<ul style="list-style-type: none"> CRC scientists trained in application of decision tools. 	June 2012
Output 5.3: CAT Plus – catchment decision tool for perennial vegetation strategies to protect water resources in water supply catchments	June 2014
<ul style="list-style-type: none"> Training modules developed for use with stakeholders 	June 2014
Output 5.4: Risk assessment products and management strategies to protect biodiversity from weeds and genetic pollution and to minimise weed control costs.	June 2014
<ul style="list-style-type: none"> CRC scientists trained in application of environmental risk framework. 	June 2011
<ul style="list-style-type: none"> CRC scientists trained in application of decision tools. 	June 2012
<p>5. Capacity building (\$360 million NPV attributable to more effective government policy and national/regional investment programs)</p>	

Output 7.1: Postgraduates – professionally trained for employment in relevant disciplines	June 2014
<ul style="list-style-type: none"> • A program of career training for higher degree students and early career science and extension professionals developed and implemented 	June 2009
<ul style="list-style-type: none"> • 75% participation rate by early career science and extension professionals in career training program 	June 2012
<ul style="list-style-type: none"> • 30 internships commissioned and completed, 75% of higher degree students, early career science and extension professionals awarded certificates in accredited training in NRM 	June 2014
<ul style="list-style-type: none"> • Delivery of 10 workshops with catchment bodies, policy advisors, scientists and students 	December 2009
Output 7.2: Profitable Perennials™ accredited training program	June 2014
<ul style="list-style-type: none"> • System of accredited training programs and knowledge networks functioning effectively implemented and adapting to new FFI CRC products as they become available 	June 2012
<ul style="list-style-type: none"> • 75% participants in NTP accredited to minimum Certificate III in NRM, effective pathway to adoption of FFI products established through agribusiness and wider client networks 	June 2014
<ul style="list-style-type: none"> • Delivery of workshops with catchment bodies, policy advisors, scientists and students according to demand. 	December 2010