GB CMA 'Knowledge Inventory':
State, National or International projects that GB CMA is involved with

Updated 1 June 2010

	Project	GB CMA primary contact	Information updated
	Cross-investment area projects		
1	**Landscape Logic** is a research hub under the Commonwealth Environmental Research Facilities scheme, managed by the Department of Environment, Water, Heritage and the Arts. It is a partnership between six regional organisations, five research institutions and state land management agencies in Tasmania and Victoria. The aim of Landscape Logic is to improve the way decisions are made about land use and the resulting effects on water and vegetation. Further information: www.landscapelogic.org.au. Lanscape Logic will conclude in June 2010. Projects within Landscape Logic that GB CMA is heavily involved with include:	Bill O'Kane	15 Oct 2009
1a	The **Victorian and Tasmanian Retrospective studies** (Projects 3 and 4) is testing the effectiveness of past environmental management programs using the information from the Spatial and Social projects. The emphasis in Victoria is on the effectiveness of past programs directed at **native vegetation** condition, while in Tasmania it is on the effects of land use and land management on **water yield, river condition** and estuarine health. The retrospective projects are led by Dr Bill Cotching (TIAR/CSIRO) in Tasmania and Adam Hood (DSE Victoria).	Vanessa Keogh (native vegetation) Wayne Tennant (water)	15 Oct 2009
1b	**Decision Networks (Project 6) – objectives are** • to develop the capacity of regional NRM bodies to build and use decision networks. So that the decision networks are relevant and useful to the end-users, partner NRM and CMA organisations will be involved in their construction, and will be trained in how to build and alter decision networks. • to undertake complementary research to incorporate a wide range of behaviours into the decision networks (for example, time series responses, feedback, uncertainty and spatial scales), and reduce unnecessary complexity in the decision networks.	Vanessa Keogh	15 Oct 2009
2	**Resilience thinking** – GB CMA has a close relationship with the multi-national Resilience Alliance (www.resalliance.org). GB CMA has been represented at an international conference and a major paper on resilience related to the GB CMA region is being prepared by eminent scientists. GB CMA participed in a multi-sector Radio National Program on 18 Aug 2008 and a GB regional workshop is was conducted in November 2008. GB CMA's involvement in resilience thinking evolved out of its close relationship with CSIRO on 'sustainability' and 'ecosystem services' thinking.	Bill O'Kane	15 Oct 2009
3	The **Farms Rivers and Markets Project** has been developed by Uniwater (a joint initiative of the University of Melbourne and Monash University). The project will use the University of Melbourne Dookie Campus and the surrounding Broken River in the Goulburn Valley, to develop new methods to efficiently manage surface and groundwater resources for both agriculture and the environment. In direct response to the National Water Initiative, the Project's inter-disciplinary program will create opportunities to 'do more with less water', using new technology and knowledge that will enable operational innovations to improve level of service, reduce losses and boost efficiency. The project will take a whole-of-system approach, recognising that the management of farms, rivers and water markets must be integrated in order to achieve the best possible outcomes. It will encompass three components: • Farms - which use rain water and irrigation water as part of the production system. • Rivers and groundwater - which need to be managed together to meet environmental and production needs. • Markets - which require greater sharing of information to promote choice, innovation and efficiency.	Wayne Tennant	1 June 2010
	River health projects		
4	**Streamlining River Health** involves a range of sub-projects to streamline the development of river health projects, develop targets, forecasting, monitor progress and reporting mechanisms. Current projects include: development of riparian response curves, works monitoring (initially within Large Scale River Restoration Iniatives)	Wayne Tennant, Simon Casanelia, Vanessa Keogh	1 June 2010
5	**Victorian Strategy For Healthy Rivers, Wetlands and Esturaries (VSHREW)**– A number of project Steering and advisory committees has been established to develop frameworks and content of the next strategic framework for future directions in river health.	Wayne Tennant	1 June 2010
6	**Riparian Rehabilitation Experiment** – is evaluating effectiveness of habitat reconstruction for stream rehabilitation or rehabilitation. The project involves setting up a dedicated experiment that is designed to run for at least ten years, with sites established in the North Central and Goulburn Broken regions. For further information see: http://www.mdbc.gov.au/subs/rip-res-ex/RRE.html	Wayne Tennant	1 June 2010
7	**MDBC Pest Fish Plan Taskforce** - A plan is being developed under the Native Fish Strategy..	Wayne Tennant	1 June 2010
8	**eWater CRC - Northern Application Project** aims to answer two key management questions: *What are the Ecological value and benefits (and dis-benefits) of rewetting off-channel habitats (e.g. terrestrial vegetation, aquatic vegetation, birds, resident fish, spawning/recruitment habitats and refuge); and How are these assets affected by potential changes to the watering of off-channel habitats under various water supply scenarios', by trialling a range of tools and models developed. Trialling: Ecological Modeller; Causal Criteria Analysis (CCED) to develop/evaluate ecological response models; WaterCast models* ***(eWater Source Catchments)****, on key Ovens and Goulburn*	Wayne Tennant	1 June 2010

	Project	GB CMA primary contact	Information updated
	River tributaries; and River Manager Modelling, trial use on Goulburn River *Key outputs* Models and a Report summarising the likely response on key ecological indicators to alternative future flow scenarios and their likely influence on the frequency and duration of floodplain wetting events along the lower Goulburn and Ovens Rivers (see http://www.ewatercrc.com.au/)		
9	**MDBC Native Fish Strategy Community Stakeholder Taskforce** is one of three groups to assist the Commission with the development and Implementation of the Native Fish Strategy (NFS). Roles include: coordinate information and education activities; promote the preparation of material to inform the community on native fish management issues; and provide input from and develop links with catchment groups, special interest groups and educational institutions.	Wayne Tennant	15 Oct 2008
10	**AVIRA (RiVERS II) -** project has been initiated to align the review of RiVERS (a tool for prioritising River Health Initiatives) and the development and trialling of a conceptual framework: environmental/social and economic attributes, metrics and measures (for rivers, wetlands and estuaries); threats and impact measures and risk assessment process.	Wayne Tennant	1 June 2010
11	**MDFRC Community Advisory Committee (CAC)** http://www.mdfrc.org.au/	Wayne Tennant	15 Oct 2008
12			
13			
14			
15			
16			
	Biodiversity projects		
17	**Natural Regeneration** research – The GBCMA has been working in partnership with The University of Melbourne and Arthur Rylah Institute over the last 3 years to better understand the factors influencing successful regeneration of native vegetation. This has included monitoring and experiments at participating properties of the Bush Returns program. A paper on **Bush Returns** was presented at a national biodiversity conference in Launceston in June 2007. The paper "Testing market-based instruments for conservation in northern Victoria" can be found in a CSIRO publication, "Biodiversity: integrating conservation and production, case studies from Australian Farms, Forests and Fisheries" http://www.publish.csiro.au/pid/5915.htm	Carla Miles	7 Aug 2008
18	**The Carbon Project: carbon, biodiversity and water consequences of carbon farming for a whole of catchment.** 5-year research project to predict the effect of reforestation on the Goulburn Broken catchment in terms of water use, carbon storage and biodiversity value. The project will build on the Environmental Systems Modelling Platform (EnSym) developed by DSE and produce a detailed land use map, revealing knowledge gaps to be addressed in the project by field surveys. Models will help to explore 1) how government incentives might be used to influence uptake of biodiversity carbon farming 2) how the interaction of future climates will affect the productivity of carbon farming and 3) how the interaction of future climates and pricing scenarios drive establishment of carbon farming across the catchment. Further info: Dr Shaun Cunningham shaun.cunningham@sci.monash.edu.au	Tim Barlow Wayne Tennant	9th Sept 2009
	Climate change projects		
19	**Information and communication on vulnerability of NRM regions to climate change, in forms and scales relevant to natural resource managers** was a project identified by the National Natural Resource Management Ministerial Council and implemented by the National Climate Change in Agriculture and Natural Resources working group (CLAN). The GB CMA is one of 13 trial regions involved in the project, the purpose of the project is to disseminate regionally relevant information and raise awareness on the vulnerability of NRM regions to climate change and assist building climate change into NRM planning and programs, it also aims to identify the capacity building of NRM regions to adapt to climate change on an on-going basis.	Kate Brunt	15 Jul 2008
	Miscellaneous projects		
20	Landcare in the Goulburn Broken Catchment received funding from the National Landcare Program to assist the introduction and spread of beneficial **dung beetles**. This project built on several smaller dung beetle projects conducted by Landcare over previous years and concluded in 2009. There are two species of introduced dung beetles that are widespread in the Goulburn Broken Catchment and both are summer active. The aim is to introduce many more types of dung beetles to our catchment (to spread dung beetle activity across all seasons), for the benefit of soil health, animal health and water quality.	Tony Kubeil	15 Oct 2009
21	**Pasture cropping:** the Gecko CLaN has been trialling the use of pasture cropping principles as a method of increasing ground cover, improving soil health, soil organic carbon and water retention and providing more feed on the ground for more of the year. The project commenced as a result of overwhelming farmer interest and is working with groups in New South Wales and Victoria.	Tony Kubeil	15 Oct 2009
22	The **Rural Extension Program** is a local community-scale approach to regulation developed over the last few years to address weeds through extension partnerships between community groups and agencies.	Tony Kubeil	15 Oct 2009