## GB CMA 'Knowledge Inventory': State, National or International projects that GB CMA is involved with Updated 7 August 2008

|          | Project   | GB CMA<br>primary<br>contact   | Information<br>updated |
|----------|---|--|------------------------|
| 1        | Cross-investment area projects<br>Landscape Logic is a research hub under the Commonwealth Environmental Research Facilities<br>scheme, managed by the Department of Environment, Water, Heritage and the Arts. It is a partnership<br>between six regional organisations, five research institutions and state land management agencies in<br>Tasmania and Victoria. The aim of Landscape Logic is to improve the way decisions are made about<br>land use and the resulting effects on water and vegetation. Further information:<br>www.landscapelogic.org.au. Projects within Landscape Logic that GB CMA is heavily involved with  | Bill O'Kane  | 15 Oct 2008            |
| 1a       | include:<br>The Victorian and Tasmanian Retrospective studies (Projects 3 and 4) will test the effectiveness of<br>past environmental management programs using the information from the Spatial and Social projects.<br>The emphasis in Victoria will be the effectiveness of past programs directed at native vegetation<br>condition, while in Tasmania it will be on the effects of land use and land management on water yield,<br>river condition and estuarine health. The retrospective projects are led by Dr Bill Cotching<br>(TIAR/CSIRO) in Tasmania and Adam Hood (DSE Victoria).  | Vanessa<br>Keogh (native<br>vegetation)<br>Wayne<br>Tennant<br>(water) | 5 Aug 2008             |
| 1b       | <ul> <li>Decision Networks (Project 6) – objectives are</li> <li>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.</li> <li>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.</li> </ul>   | Mark Cotter  | 5 Aug 2008             |
| 2        | <b>Resilience thinking</b> – 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 participation in a multi-sector Radio National Program is planned for 18 Aug 2008 and a GB regional workshop is planned for the first half of 2008-09. GB CMA's involvement in resilience thinking evolved out of its close relationship with CSIRO on 'sustainability' and 'ecosystem services' thinking.  | Bill O'Kane  | 5 Aug 2008             |
| 3        | Pathways to Good Practice in Regional NRM Governance<br>(www.geol.utas.edu.au/geography/nrmgovernance). An interdisciplinary collaborative project run by<br>the University of Tasmania that will assess the effectiveness of regional NRM governance; identify<br>correlations between particular governance arrangements and sustainability; and develop guidelines<br>for good-practice NRM governance.  | Megan<br>McFarlane   | 21 May 2008            |
| <u> </u> | River health projects   |  | 15 Oct 2008            |
| 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 a project brief, with Melbourne and Monash universities for an adaptive management project (including before and after monitoring, forecasting, monitoring design).  | Wayne<br>Tennant,<br>Simon<br>Casanelia,<br>Vanessa<br>Keogh           | 15 Oct 2008            |
| 5        | Victorian (DSE) Scientific Advisory Panel – has been established to develop frameworks and<br>knowledge pathways to increase knowledge and look at future directions in river health. Current focus<br>of work focus on evaluation and monitoring. Key themes include; ISC remote sensing; VEFMAP;<br>Review of RRHS, Streamlining River Health and FLOWS revision.   | Wayne<br>Tennant   | 19 Jun 2008            |
| 6        | <b>Riparian Rehabilitation Experiment</b> – 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. The initial experimental design was based on an MBACRI model (Multiple Before After Control Reference and Impact (Downes et al., 2002)). This design meets the so-called 'gold meda' level of evaluation (Rutherfurd, Ladson and Stewardson, 2004), including replicated sampling, replicated control and reference locations, and sampling before and after rehabilitation.<br>http://www.mdbc.gov.au/subs/rip-res-ex/publications/CatchwordArtlicle2005.pdf http://www.mdbc.gov.au/subs/rip-res-ex/RRE.html                                   | Wayne<br>Tennant   | 15 Oct 2008            |
| 7        | MDBC Pest Fish Plan Taskforce - to be determined.   | Wayne<br>Tennant   | 15 Oct 2008            |
| 8        | eWater CRC - Project P6 aims to develop decision systems will help catchment management<br>organisations to prioritise their natural resource management activities by quantifying the ecological<br>benefits of alternative strategies, and will provide specific guidance on how to implement those<br>solutions at a reach scale.<br><i>Key outputs</i><br>The Catchment Planning Tool is designed to allow the prioritisation of natural resource management<br>activities on a whole of catchment basis.<br>The Asset Prioritisation Tool will allow the identification of high value ecological assets at a catchment<br>or broader scale.<br>The Restoration Prioritisation Tool will allow stream managers to design reach-specific restoration<br>solutions.<br>http://www.ewatercrc.com.au/ | Wayne<br>Tennant   | 15 Oct 2008            |
| 9        | MDBC Native Fish Strategy Community Stakeholder Taskforce is one of three groups to assist the<br>Commission with the development and Implementation of the Native Fish Strategy (NFS). Roles<br>include: coordinate information and education activities; promote the preparation of material to inform<br>the community on native fish management issues; and provide input from and develop links with<br>catchment groups, special interest groups and educational institutions.  | Wayne<br>Tennant   | 15 Oct 2008            |

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| 10 | eWater P6 and RiVERS(II) project Steering Committee - project has been initiated to align the review of RiVERS (a tool for prioritising River Health Initiatives) and the development of a Catchment Planning Tool (CPT) - an eWater project. This work will be undertaken in preparation of a review (midterm) of the Regional River Health Strategies.<br>Committee to oversee the completion of the RiVERS(II) conceptual framework: environmental/social and economic attributes, metrics and measures (for rivers, wetlands and estuaries); threats and impact measures and risk assessment process.  | Wayne<br>Tennant                        | 15 Oct 2008            |
| 11 | MDFRC Community Advisory Committee (CAC)<br>http://www.mdfrc.org.au/   | Wayne<br>Tennant                        | 15 Oct 2008            |
| 12 | <b>Goulburn Broken Regional Sustainability Project</b> led by Monash University through the Biodiversity<br>and Ecosystem Processes and Water (UniWater) themes of the Monash Sustainability Institute, aims<br>to addresses the question of planning for the sustainable management of the Goulburn-Broken region.  | Wayne<br>Tennant                        | 15 Oct 2008            |
| 13 | Bayesian Modelling – Index of Stream Condition includes the development of a Bayesian decision-<br>support tool for mapping assumptions between river management actions and environmental<br>outcomes'.   | Wayne<br>Tennant,<br>Simon<br>Casanelia | 15 Oct 2008            |
| 14 | (LWA Project UMO49) Delivering Sustainability through Risk Management (Steering<br>Committee) - This Land & Water Australia funded project aims to develop and test Bayesian decision<br>network (BDN) models that will assist decision-makers in making environmental flow allocations for<br>Australian rivers and wetlands, taking into consideration both environmental and regulatory factors.<br>The project will run for two-years from February 2007 to January 2009.  | Wayne<br>Tennant                        | 15 Oct 2008            |
| 15 | Trialling the Application of HCVAE To Victorian Rivers (Steering Committee) -<br>The key objective of this project is trial how the draft "High Conservation Value Aquatic Ecosystems"<br>HCVAE criteria can be applied to existing Victorian river health databases to determine river reaches of<br>high conservation value.<br>http://www.environment.gov.au/water/publications/environmental/ecosystems/hcvae.html   | Wayne<br>Tennant                        | 15 Oct 2008            |
| 16 | <b>E2 modelling</b> – participant within the G-MW application project (water quality / catchment landuse scenarios). E2 is a software product for whole-of-catchment modelling. It is designed to allow modellers and researchers to construct models by selecting and linking component models from a range of available choices. E2 enables a flexible modelling approach, allowing the attributes and detail of the model to vary in accordance with modelling objectives<br><u>http://www.toolkit.net.au/cgi-bin/WebObjects/toolkit.woa/2/wa/productDetails?productID=1000036&amp;wosid=2EUbqlWpIELN98hNBK</u> T3mg  | Wayne<br>Tennant                        | 15 Oct 2008            |
|    | 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.<br>A paper on <b>Bush Returns</b> 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" <u>http://www.publish.csiro.au/pid/5915.htm</u>  | Carla Miles                             | 7 Aug 2008             |
| 10 | Climate change projects  | Kata Davist                             | 15 Jul 2008            |
| 18 | Information and communication on vulnerability of NRM regions to climate change, in forms<br>and scales relevant to natural resource managers was a project identified by the National Natural<br>Resource Management Ministerial Council and implemented by the National Climate Change in<br>Agriculture and Natural Resources working group (CLAN). The GB CMA is one of 13 trial regions<br>involved in the project, the purpose of the project is to disseminate regionally relevant information and<br>raise awareness on the vulnerability of NRM regions to climate change and assist building climate<br>change into NRM planning and programs, it also aims to identify the capacity building of NRM regions<br>to adapt to climate change on an on-going basis. | Kate Brunt                              | 15 Jul 2008            |