Summary File ONLY

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Note: This file may contain a brief scope statement, or an extract from the RFT documents, or a full exhibited copy – depending on the specific circumstances.

To participate in this tender process you MUST first download or order a full copy of the Request for Tender (RFT) documents, including the respondable components, and any addenda issued to date.

To do this return to the RFT web page on this web site and copy the RFT documents to your own computer or network – the blue "DOWNLOAD A SOFT COPY" link at the bottom provides access to the page from which you can do this.



1 Introduction

1.1 Purpose

Consultants are invited to submit a consultancy proposal for a project entitled Central West CMA MERI Evidence project "the Project."

For the Project, an open tender process will be used with a public call for consultancy proposals through the media.

CW CMA	Central West Catchment Management Authority		
САР	Catchment Action Plan		
MERI	Monitoring, Evaluation, Reporting and Improvement		
PSC	Project Steering Committee		
Evidence	Data, publications, information, research etc. The term "evidence" affirms the association with the management practice on, knowledge, or monitoring		
KEQ	Key Evaluation Questions		
PR	Principals Representative		
ARG	Aboriginal Reference Group		
LGRG	Local Government Reference Group		
NRM RG	Natural Resource Management Reference Group		

1.2 Abbreviations and Terminology

Date of closing	5 August 2009			
Time of closing	2:30 am			
	Tenders must be submitted electronically at the NSW Government e-Tenders website https://tenders.nsw.gov.au			
Place of closing	Written proposals or proposals submitted by fax, or email will not be accepted.			
Code of conduct	The successful Consultant will be required to adhere to the CW CMA Code of Conduct. This includes provisions relating to disclosure of conflicts of interest.			
Consultation protocols	The successful Consultant will be required to adhere to CW CMA protocols for any consultation involving Aboriginal people.			
Consultancy agreement	The successful Consultant will be required to enter into a standard form of agreement with the CW CMA.			
	Steve Pearson - Catchment Officer (Monitoring and Evaluation)			
Contact Officer	Central West Catchment Management Authority PO Box 1344 39 William Street ORANGE NSW 2800			
	Phone 02 6363 8604 Mobile 0427 402 331 Fax 02 6363 8601 Email steve.pearson@cma.nsw.gov.au			

1.3 Summary details

2 Background

2.1 The CW CMA

The CW CMA is one of thirteen CMAs that were established in 2004 as part of a package of natural resource management reform in NSW. CMAs are statutory authorities with Boards that report directly to the Minister for Environment and Climate Change. They are funded by the NSW government, with additional support from the Australian government.

The CMAs have responsibility for a range of natural resource management functions including:

- Preparing a Catchment Action Plan (CAP) that sets the ten year direction for the catchment;
- Managing investments in natural resource management and delivering on ground outcomes to implement the CAP;
- On ground vegetation management through the Native Vegetation Act 2003. This includes preparing statutory Property Vegetation Plans (PVPs);
- Providing education, training and other capacity building activities to improve the management of natural resources; and
- Handling disputes related to the CAP and mediating on other issues of contention.

In partnership with key stakeholders, the Central West CMA sets the agenda for natural resource management in the Central West. The organisation delivers real improvements in the management of our natural resources.

Central West CMA Vision

Vibrant communities and healthy landscapes.

Our mission

To work with the community to conserve, improve and manage natural and cultural resources.

Our values

Our decisions and actions are based on the following values:

- Leadership we are committed to, and will lead, NRM improvements in the catchment.
- Integrity we are ethical, honest, fair, courageous and loyal.
- Transparency we communicate well and are open, accessible and accountable internally and to our stakeholders and customers.
- Focus we deliver on our commitments internally and to our stakeholders and customers.
- Quality we are strategic, innovative and continually improve.
- Collaboration we operate in partnership internally and with our stakeholders and customers.
- Enjoyment we recognise our successes and provide a safe, rewarding and family friendly workplace.

2.2 The Catchment

The Central West Catchment includes the catchments of the Macquarie, Cudgegong, Bogan and Castlereagh Rivers. The Catchment covers 85,000 km² from the central tablelands around Oberon, Bathurst and Rylstone to the western plains around Nyngan and Coonamble. Around 240,000 people live in a vibrant and diverse region that includes the towns of Orange, Bathurst, Dubbo, Wellington, Mudgee, Gilgandra, Coonamble and Nyngan (Figure 1).

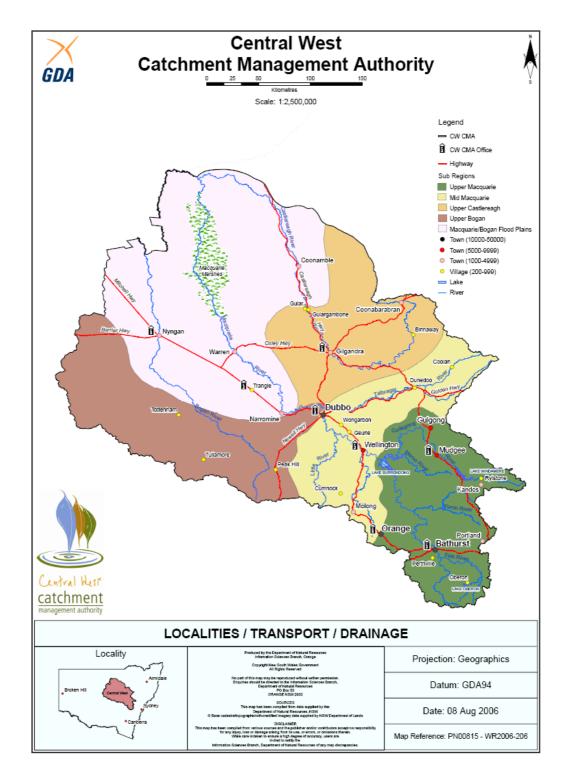


Figure 1: Central West Catchment.

The Catchment covers a diversity of landforms, vegetation species and communities, from semialpine areas to rangelands. The geology of the region is complex and has a significant impact on the natural resource management options available. Soil types vary considerably, ranging from robust durable soils to very fragile soils. This also creates significant management issues for erosion control, nutrient management and salinity management. Climate varies significantly, resulting in ecosystems which range from sub-alpine in the east, to semi-arid rangeland ecosystems in the west of the catchment.

The landscape of the Central West catchment varies markedly from east to west, and can be split into three general divisions: the headwaters or tablelands, the slopes and the plains. The tablelands are characterised by fast to moderately flowing streams with sandy and pebbly beds,

steep, densely vegetated ranges to extensively cleared grazing lands. The slopes feature undulating to hilly cleared lands, graduating to flatter areas, with pockets of remnant vegetation. The plains contain broad flat landscapes with occasional rocky ranges. The land flattens to the west, with wetlands and rich alluvial river flats becoming increasingly evident.

Agriculturally, the region is highly diverse which adds to the complexity of natural resource management issues. Grazing industries dominate the eastern highlands and western plains; extensive winter cropping on the central west slopes and inner plains, intensive viticulture and horticulture around Mudgee, Orange and on the Bell River flood plain; irrigated cotton and other summer crops on the Macquarie River floodplain. Forestry industries based on softwood plantations in the eastern highlands and native hardwood stands (mainly white cypress) on the plains, are also important. Mining activities are carried out in the eastern highlands (gold, copper, coal) and on the western margin (copper, gold, base metals).

Major threats to the health of natural resources in the Central West Catchment include dryland salinity, declining surface water quality, declining health and abundance of native vegetation and biodiversity, degradation of riparian and wetland ecosystems and deterioration of soils.

2.3 The Project

The Central West Catchment Action Plan (CAP) is the peak document guiding NRM investment in the Central West between 2006 and 2016. Its targets were identified with significant community participation to focus planning and the implementation of major NRM investment by Australian and NSW governments over this period.

The Central West CMA has subsequently developed a Monitoring, Evaluation, Reporting and Improvement (MERI) program with the multi-faceted objective of demonstrating progress against the CAP, reporting investment performance, and promoting continuous improvement within the CMA business cycle.

The purpose of this project can be broadly summarised as reviewing the evidence requirements of the MERI program, providing a comprehensive review of the available evidence, and supporting the purchase of priority information to supplement that evidence which is assessed as being of the highest priority.

This project will incorporate the following key items

- Review and update the CMA's MERI documentation
- Undertake and document a comprehensive review of the evidence required by the CMA.
- Documented Evidence Plan with analysis and prioritisation of that evidence.
- Consultant support for the CMA in securing priority evidence contracts.

The engagement and support of professional consultants with extensive experience in both NRM and MERI is considered essential for the successful delivery of this project.

In addition to the above achievements, companies submitting a proposal for this project should be aware that the central West CMA has recently committed to implementing the "inffer" methodology for identifying and prioritising NRM investment, and is shortly to commence staff training and community consultation components. This process will provide some inputs into the MERI evidence process.

3 Project Objectives

The objectives for the Project are as follows:

- i. Review and finalisation of the CMA's MERI program to better identify the existing knowledge requirements of the current program activities. Detail knowledge requirements, knowledge gaps and a candidate listing of evaluation questions to inform the CMA's programs and investments. Program development should identify a prioritised listing of the candidate evaluations.
- ii. Undertaking a comprehensive evidence review to clarify the information required by the CMA to conduct its business, or is incumbent upon the CMA to collect, and necessary to demonstrate progress against CAP targets.
- iii. Development of an Evidence Plan that details the CMA's evidence requirements for the CAP period (from 2006 to 2016) The Evidence plan will include program design and prioritisations of evidence products to be obtained through objective iv.
- iv. Support the CMA to establish evidence contract with suppliers that will best allow the CMA to meet its business requirements, allow measurement of progress against CAP targets and fulfil monitoring obligations. The consultant will provide advice and brokerage support for the establishment of evidence contracts, to the value of \$800,000 by the end of the contract period.

4 Specific Deliverables

The primary outcomes of this project will be an operational MERI program, including an evaluation schedule, a comprehensive evidence plan and the establishment of best available and priority evidence contracts.

The successful Consultant must deliver the specific deliverables listed below:

- 1. <u>Project Plan:</u> The project plan will itemise the products to be delivered during the course of the project, the resources that will be committed for their delivery and the project management within the timeframe specified. The project plan will need to be endorsed by the PSC and will include detailed provisions for deliverables listed below, plus other tasks/deliverables that the consultant considers are required to achieve the objectives of the project, including communication arrangements.
- 2. <u>Evaluation Schedule</u>: This deliverable will require review and assessment of the Central West CMA's MERI program modules including the Strategy, program logics, evidence and assumptions in light of changing government programs (CfoC and Catchment Action NSW) and modifications to the CAP review being undertaken currently as part of the programmed mid-term review of all NSW Catchment Action Plans. The review should develop a candidate list of evaluation questions and analyse and prioritise them according the CMA program requirements. The resulting listing of priority key evaluation questions should then be documented and programmed into the evaluation schedule to be ideally funded and undertaken over the next 4-5 years.
- 3. <u>Evidence Plan:</u> This project product will be an evidence plan detailing the information required by the CMA to inform its business and CAP targets. The Evidence plan will result from a comprehensive evidence review of existing publications, research, data and other relevant information sources. The plan will include the program design for information products that will satisfy the CMA evidence needs, and include a prioritisation of those

products. The evidence plan will be the basis of the CMA's information requirements for the remainder of the CAP period.

- 4. Evidence Gathering Contracts: will be established by the CMA with the direct and active support of the consultant. The evidence contracts will inform the CMA's evidence plan established under this project, and be prioritised to bring maximum evidence program benefit to the CMA, and be cost effective. All evidence that is acquired for the evidence plan should be made publicly accessible preferably in electronic format All contracts will be executed with direct support and advice of the consultant, and shall be required to comply with all State Government probity and procurement guidelines, using standard CMA contract templates. The value of these contracts will exceed \$800,000, with the consultant to provide advice and technical expertise as appropriate in developing contract specifications and objectives.
- 5. <u>Final Report:</u> The final report will detail the completion of all project objectives, deliverables and tasks. In particular the achievement of deliverables four "Evidence gathering contracts", and possible outstanding outcomes of the evidence plan. The final report will also make recommendations that relate to assessment of and program improvement for the CMA's MERI strategy. A copy of the final report on CD-ROM in Microsoft Word XP and/or Adobe Acrobat (PDF) format.

5 Tasks required

To achieve the specific deliverables, the Consultant must at least undertake the following tasks:

- Scoping and final signoff of the project method in consultation with the Principal's Representative and the PSC;
- Consult with PSC throughout the whole project.
- Engage with CMA staff and board to finalise MERI program components.
- Review and analyse existing MERI program components for progress and improvement.
- Collection, collation and review of relevant evidence and literature as a primary input into developing the evidence plan and sign off by the PSC.
- Provide detailed project management provisions to ensure the smooth and timely delivery of project products and outcomes.

The following face to meetings/presentations will be required and must be costed in the Consultancy Proposal:

- An initial "start up" face to face meeting with the PSC and any additional CW CMA Staff/representatives as determined by the CW CMA.
- Frequent Bi monthly PSC meeting and progress reports to advise regarding project, delivery of all reports including amendments and up-coming activities.
- A presentation of the draft final report to the PSC at the end of the project and any additional CW CMA Staff/representatives as determined by the CW CMA.

6 Resources

6.1 Budget

The value of the project budget will be fixed at the time that project contracts are signed. No additional funds will be available. The tenderer shall bear all the costs of developing its tender. The CW CMA will not be liable for any costs incurred by the tenderer in the preparation of its tender.

The tenderer will provide a budget breakdown using the "returnable tender schedule" provided as an attachment to this brief. The budget will indicate the entire cost of achieving the project objectives, deliverables and tasks required by the project, on time and with all project activities completed.

Individual costings in the budget will be to achieve the specific deliverables and tasks detailed in sections 4 and 5 of this brief, by the scheduled milestones indicated in sections 7.2. The specific items that will require costing include

- Project Plan finalised and agreed
- Evaluation schedule developed
- Evidence Plan finalised and agreed by PSC
- Support provided to establish evidence contracts with appropriate providers**
- Final report completed and agreed

**NOTE: Minimum expenditure related to project deliverable "4 -evidence gathering contracts"

Under this contract, funds to be disbursed on priority evidence contracts by the Central West CMA will amount to a minimum of \$800,000 by 31 Nov 2009.

6.2 CW CMA Resources

It is expected that data, information and reports required to complete the Project would primarily be provided by the successful Consultant. Where the successful Consultant requires access to documentation, reports and files held by the CW CMA, or needs access to CW CMA Staff, these resources will be made available by mutual arrangement.

The CW CMA will make the following resources specifically available for the Project:

- Access to the CMA's reference groups ARG, LGRG, NRM RG
- MERI Strategy and other MERI related documents.

The CW CMA will not provide any office accommodation or other facilities for the successful Consultant to undertake the evaluation project.

All CW CMA documentation, reports, support material, etc. used for the purposes of the Project remain the property of the CW CMA and must be returned to the Principal's Representative at the conclusion of the Project.

7 Project management arrangements

7.1 General

The consultant must agree to and sign a standard Central West CMA contract. This contract cannot be varied and the contract template is attached for your information.

The PSC must approve changes to project deliverables, milestones & payments, the final content of reports presented including the detailed Project Plan, Evaluation Schedule and Evidence Plan, Evidence contracts and final project report.

Principal's representative should be consulted as an initial point of contact for CMA staff and the PSC. The PR can approve minor content changes or draft report content, provided the changes are minor in impact on project deliverables only. The PR can not approve changes to milestones or payments.

The Consultant is responsible for the project management of the delivery of project objectives, tasks, and deliverables, within the project budget and on-time.

7.2 Milestones and Variations

The Consultant must manage and report based on the milestones below. These may be varied as agreed at the start up meeting.

Date Milestone

- 15/07/09 Open Tender process commenced.
- 05/08/09 Bids close 9:30 am
- 07/08/09 Assessment of proposals and successful consultant notified
- 15/08/09 Contracts executed (1st Milestone & payment)
- 19/08/09 Start up meeting with Consultant and CW CMA.
- 15/09/09 2nd Milestone Deliverables 1 and 2 completed. Provision and acceptance by PSC of detailed project plan and the finalisation of the CMA's Evaluation schedule.
- 15/10/09 3rd Milestone Deliverable 3 finalised Evidence Plan

Date Milestone

31/11/09 Final Milestone - deliverables 4 (establishment of more than \$800,000 in evidence contracts) and 5 (Final Report - MERI Evidence project) completed. The Final Project report must be accepted and endorsed by the PSC.

The Principal's Representative must approve variations from the above timeframe or these Terms of Reference, in writing.

7.3 Intellectual and other property

The CW CMA maintains copyright and ownership of all material, including intellectual property arising from the Project.

8 Submission and assessment of Consultancy Proposals

Consultants submitting proposals must outline the Project objectives to achieve the required deliverables. This will at least include the following selection criteria:

- All information that has been requested in the attachment "returnable tender schedule" which includes the following specific pages:
 - o Tender form
 - o Tenderer Identification
 - Schedule of prices
 - o Agreement information Items
 - o Schedule of key personnel (including sub Consultants) and experience
 - o Schedule of information on recent similar engagements
- A broad capability statement, including specific reference to an ability to deliver on time and on budget;
- Specific details of method and approach the Consultant proposes to deliver on the Project objectives and deliverables and tasks;
- The proposed work plan. This should include a Gantt chart indicating milestones;
- Specified personnel for the project, together with an outline of their responsibilities, a
 description of their expertise, the nature of their proposed involvement and total cost
 per day;
- A risk assessment relating to the risk management by the consultant during the Project.
- Demonstrated ability to ensure that the Project is presented in a technically accurate format that is also error free, in plain English and has professional layout and design. This may include examples of similar work provided for other organisations.
- A fee schedule for the project. This must include a schedule of total Staff days for the project, a breakdown of days per Staff member and the total cost per Staff member, a breakdown of total cost for per Project milestone, expenses, travel, accommodation and disbursements and administration fees;
- A declaration any conflicts of interest in undertaking the Project;

In addition to the above, the following *technical* selection criteria apply:

- Demonstrated strong interpersonal and communication skills, including the ability to engage with a wide range of professionals and community groups.
- Extensive experience in the design, development and delivery of MERI programs and products within NRM.

• Demonstrated experience delivering NRM/MERI products that are directly relevant to the CW CMA would be considered highly desirable

The CW CMA will assess Consultancy Proposals in line with the general and technical selection criteria. This may include involvement of CW CMA Board Directors and individuals or organisations external to the CW CMA.

Consultancy proposals will be assessed against their broad compliance with the requirements of the evidence project brief, their ability to meet each project objective and their demonstrated capacity (skills, knowledge and experience) in similar work.

The CW CMA may appoint a successful consultant to only one or more of the separate deliverables for this project. The CW CMA reserves the right not to appoint a Consultant to this project.

9 Terms of Payment

The following terms of payment apply:

- PAYMENT 1: on the execution of the contracts (1st Milestone)
- PAYMENT 2: on the satisfactory completion of deliverables 1 and 2 (2nd Milestone)
- PAYMENT 3: at satisfactory completion of deliverable 3 (3rd Milestone)
- FINAL PAYMENT: at satisfactory completion of the deliverables 4 and 5 and the acceptance by the project steering committee of the final report detailing the successful completion of the project (Final Milestone)

The CW CMA normal payment terms are 30 days from submission of a complete and correct tax invoice.

Attachments

- 1. Catchment Action Plan
- 2. Monitoring, Evaluation, Reporting and Improvement Strategy
- 3. Standard CMA Contract Template
- 4. Resource Condition Monitoring Requirements
- 5. Returnable Tender Schedule

Returnable Tender Schedules

The following Tender Schedules must be completed and submitted as part of the tender:

- Tender Form
- Open Tenderers Identification Form
- Schedule of Prices
- Agreement Information Items
- Schedule of QMS information
- Schedule of Key Personnel (including Sub Consultants) and Experience
- Schedule of Information on Recent Similar Engagements

Tender Form

Tenderer's details

Legal Entity Name: (in block letters)			
	ABN		
Trading Name (Optional)			
Address:			
Contact Details for			
this Tender			
Telephone number:			
Facsimile number:			
e-mail address:			
	hereby tender(s) to perform the services for		
Tender details			
Agreement name:	Central West Catchment Management Authority – MERI Evidence Project		
RFT ID number:	CW MERI 001		
	in accordance with the following documents:		
	MERI Evidence Project Brief		
For the Fee, being the total sum of:			

.....

.....

(\$.....) including GST.

Authorised for the Tenderer by:

Date:

In the Office Bearer capacity of:

Open Tenderer Identification

Type or write your identification details as required below:

1) If a company, Company Legal Entity Name/s *	
2) If a partnership, Partnership Name	
 If an individual, individual's full name 	
4) Trading Name (if applicable)	
5) Australian Business Number (ABN)	
6) Australian Company Number (ACN) (if applicable)	
7) Business 'street' address	
8) Postal Address	
9) Contact Name - regarding this tender	
10) Contact telephone number - regarding this tender	
11) Contact Fax No.	
12) Company email:	
Extra notes (if any)	

* If jointly and severally

Authorised for the Tenderer by:

In the Office Bearer capacity of:

Contract No:

Schedule of Prices - Lump Sum

(SUBMIT WITH TENDER FORM)

Insert the amount allowed for each of the following items.

This Schedule is for information only and does not form part of the Agreement. Its purpose is to assist in making valuations of services carried out but the Principal is not bound to use it. All amounts must include GST.

Deliverable Number.	Description (all costs GST exclusive)	Amount
1	Detailed final Project Plan:	
2	Evaluation schedule	\$
3	Evidence Plan	\$
4	Support for Evidence Contracts	\$
5	Final Project Plan	\$
	Total of tendered amount (GST inclusive)	\$

Authorised for the Tenderer by:

In the Office Bearer capacity of:

Agreement Information items

(SUBMIT WITH TENDER FORM)	
2 The Consultant	
The Consultant is:	 ABN
7 Consultant's Representative	
The Consultant's Representative is:	
17 Notices Notices to the Consultant	
For notices to the Consultant the intend	ed recipient is the Consultant's Representative:
Office address: (for delivery by hand)	
Postal address: (for delivery by post)	
Facsimile number	
E-mail address	

Authorised for the Tenderer by:

In the Office Bearer capacity of:

Schedule of Key Personnel & Experience

(SUBMIT WITH TENDER FORM)

Provide a list of Key Personnel proposed for this Agreement. Clearly identify their role and responsibility in providing the service, recent relevant experience and capacity to provide this service.

- name and title;
- roles, responsibilities and authorities in performing the Services;
- qualifications and recent relevant experience; and
- expected timing and duration of involvement in the Services.

Key Personnel (incl SubConsultants)	Responsibilities	Previous Relevant Experience	Duration of Involvement

Authorised for the Tenderer by:

In the Office Bearer capacity of:

Schedule of Information on Recent Similar Engagements

(SUBMIT WITH TENDER FORM)

Greatest consideration will be given to engagements completed in the last two years and substantially completed current engagements.

Where engagements have been completed more than two years prior to the date of application, those engagements will only be considered where supporting evidence is provided that the Tenderer has retained expertise.

Project		
Overall value \$		
Client, Contact Person and Phone No.		
Engagement Details		
Actual or Anticipated Completion Date		
Value of work constructed resulting from engagement \$		
Fee \$ or % or range		

Authorised for the Tenderer by:

Date:

In the Office Bearer capacity of:

Premier's Department New South Wales Guidelines for the Engagement and Use of Consultants Version 4 Attachment

CONSULTANCY AGREEMENT Issued March 2005

The Crown Solicitor's Office has amended and updated a Consultancy Agreement which had previously been used by the Premier's Department and a number of agencies as a precedent. This updated document may assist agencies in preparing their own agreements.

It is strongly recommended that any agency intending to use this Agreement seek legal counsel in formalising and finalising the final Agreement.

The updated document takes into consideration recent changes in the law dealing with privacy, disclosure of personal information and moral rights. Matters such as liability caps, levels of insurance, questions of indemnity and intellectual property rights are just a few issues that need consideration in relation to specific clauses. The Agreement also contains clauses regarding dispute resolution reflective of the Government's policy in this regard. This is another issue that may or may not be appropriate depending on the particular consultancy.

The Crown Solicitors Office has prepared Guide Notes to assist the use of the updated Consultancy Agreement. Please read through these Guide Notes before using the updated Consultancy Agreement as a base.

[200]

[Government Agency or Department]

("Principal")

and

[Insert name of Consultant]

("Consultant")

CONSULTANCY AGREEMENT

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THIS AGREEMENT is made on the

- **BETWEEN** CENTRAL WEST CATCHMENT MANAGEMENT AUTHORITY **ABN** [*insert ABN*] of [*insert address*] (the "Principal"),
- AND [Insert name of Consultant] ABN [insert ABN] of [insert Consultant's address] (the "Consultant").

RECITALS

- A. The Commonwealth and the State of New South Wales ("NSW") are parties to a bilateral agreement with respect to the National Action Plan for Salinity and Water Quality ("NAP") made under the Inter-governmental Agreement on a National Action Plan for Salinity and Water Quality dated 17 May 2002 ("the NAP Bilateral Agreement") and a bilateral agreement for the delivery of the Natural Heritage Trust Extension ("NHT") made under s 19 of the *Natural Heritage Trust of Australia Act 1997* dated 14 August 2003 ("the NHT Bilateral Agreement") (together referred to as "the Bilateral Agreements").
- B. NSW and the Commonwealth are parties to a financial agreement dated 20 June 2005 which deals with the provision of funds by the Commonwealth and NSW for activities approved under the Bilateral Agreements ("the Financial Agreement").
- C. On behalf of NSW, the Department of Environment and Climate Change ("DECC") is the lead agency which administers NAP/NHT funds under the Bilateral Agreements.
- D. DECC, on behalf of the NSW, and the Principal are parties to a head agreement dated 25 February 2008 under which the Principal administers the application of certain of the funds provided under the Financial Agreement within its area of operation ("the Head Agreement").
- E. The Principal is undertaking [describe the bigger picture project that the Principal is undertaking], a NAP/NHT project activity approved for funding by the Steering Committee, undertaken in accordance with the terms of the Head Agreement. The Services are approved to be performed and funded under the NAP/NHT program.
- F. The Principal has issued the Request for Tender for the engagement of a consultant to provide the Services for the Project.
- G. The Consultant submitted the Proposal that was selected by the Principal.

H. The Consultant has agreed to provide the Services upon the terms and conditions set out in this Agreement, and acknowledges that the Principal has obligations under the Head of Agreement and Rules of Program for the manner in which the Services are undertaken/ performed in accordance with this Agreement.

OPERATIVE PROVISIONS

1. INTERPRETATION PROVISIONS

1.1 In this Agreement including the Recitals, unless the context otherwise require:

"ACDC" means the Australian Commercial Disputes Centre;

"Agreement" means this Agreement including:

- (a) the Schedules and Annexures;
- (b) the Request for Tender; and
- (c) the Proposal;

"Annexure" means an annexure to this Agreement;

"Commencement Date" means the date specified in Item 1 of Schedule 1.

"the Commonwealth" means the Crown in right of the Commonwealth of Australia.

"Confidential Information" means any information and all other knowledge at any time disclosed (whether in writing or orally) to the Consultant by the Principal, or acquired by the Consultant in performing the Services which:

- (a) is by its nature confidential;
- (b) is designated, or marked, or stipulated as confidential;
- (c) the Consultant knows or ought to know is confidential;

and includes but is in no way limited to

(d) the Contract Material;

- (e) the Principal's Material;
- (f) any material which relates to the affairs of a third party;

but does not include information which:

- (g) must be disclosed to perform the Services;
- (h) is or becomes public knowledge other than by breach of this Agreement;
- (i) is in the lawful possession of the Consultant without restriction in relation to disclosure before the date of receipt of the information from the Principal or a third party;
- (j) has been developed or acquired by the Consultant independently of the carrying out of the Services;
- (k) is ascertainable through independent enquiries;
- may be or is required to be disclosed pursuant to Memorandum No. 2000-11 Disclosure of Information on Government Contracts with the Private Sector dated 27 April 2000, as amended or updated from time to time; or
- (m) is required to be disclosed pursuant to law, regulation, legal process or a regulatory authority;

"Consultant" means [*insert name of Consultant, ACN (if applicable) and ABN*] and includes the officers, employees, agents and sub-contractors of the Consultant;

"Consultant's Representative" means the person named in Item 4 of Schedule 1 or such other person as the Consultant may, from time to time, nominate in writing;

"Contract Material" means:

 (a) any Material created, written or otherwise brought into existence by or on behalf of the Consultant in the course of performing this Agreement in which subsists newly created Intellectual Property rights ("New Contract Material"); and (b) any Material which exists at the date of this Agreement and which is incorporated with the New Contract Material ("Existing Contract Material");

"Existing Contract Material" has the meaning given to this term in the definition of "Contract Material";

"Fee" means the fee as referred to in Clause 6.1 and Item 6 of Schedule 1;

"GST" has the meaning given to this term in the GST Law;

"GST Law" means A New Tax System (Goods & Services Tax) Act 1999, related legislation and any delegated legislation made pursuant to such legislation;

"Intellectual Property" includes patent, know-how, copyright, design, semiconductor or circuit layout rights, trade mark, trade, business or company names or other proprietary rights and any rights to registration of such rights, whether created before or after the Commencement Date in Australia or elsewhere;

"Material" includes, but is not limited to, software, documentation, information or data, whether or not in material form;

"Moral Rights" means the right of integrity of authorship, the right of attribution of authorship and the right not to have authorship falsely attributed, more particularly as conferred by the *Copyright Act 1968* (Cth), and rights of a similar nature anywhere in the world whether existing at the Commencement Date or which may come into existence on or after the Commencement Date;

"New Contract Material" has the meaning given to that term in the definition of "Contract Material";

"Party" means the Principal or the Consultant as the context dictates and "Parties" mean both of them;

"Payment Schedule" means the schedule for the payment of the Fee set out in Schedule 4;

"Personal Information" means information or an opinion (including information or an opinion forming part of a database) whether true or not and whether recorded in a material form or not, about an individual whose identity is apparent or can reasonably be ascertained from the information or opinion;

"Principal's Material" means any Material supplied by the Principal to the Consultant by whatever means in relation to this Agreement;

"Principal's Representative" means the person named in Item 5 of Schedule 1 or such other person as the Principal may, from time to time, nominate in writing;

"Project" means [*insert description of the project*] referred to in [Recital A] which is more particularly described in the Request for Tender;

"Project Objectives" mean the objectives of Project set out in Schedule 2;

"Proposal" means the proposal or tender submitted by the Consultant in answer to the Request for Tender dated [*insert date*], a copy of which is annexed to this Agreement and marked "B";

"Request for Tender" means the [insert the name and date of the document issued by the Principal calling for the tender or invitation to submit a proposal for the provision of the Services] annexed to this Agreement and marked "A";

"Rules of Program" means the Rules of Program for all activities under the NAP and NHT, with which the Principal is bound to comply under the Head Agreement in respect of all activities undertaken in pursuance of that Head Agreement, including the Services undertaken by the Consultant.

"Services" mean:

- (a) the services to be provided by the Consultant described in the Request for Tender, the Proposal and in this Agreement;
- (b) all reports and other services to be provided by the Consultant to achieve the Project Objectives; and
- (c) any other service relating to the Project required by the Principal from time to time;

"Schedule" means a schedule to this Agreement;

"Specified Personnel" means the key personnel specified in Item 3 of Schedule 1 required to undertake the Services or part of the work constituting the Services or such other personnel as the Principal agrees in writing, to perform the Services;

"Specified Timeframes" means the timeframe for the performance of the Services specified in Schedule 3;

"Steering Committee" means the steering committee established by the Commonwealth and NSW under clause 6.7 of the NAP Bilateral Agreement and clause 7.5 of the NHT Bilateral Agreement, which must give approval for certain actions under clause 8 of the Head Agreement.

"State of New South Wales" or "NSW" means the Government of the State of New South Wales.

"Supply" has the same meaning given to it in the GST Law; and

"Term" means the period referred to in Item 2 of Schedule 1.

- 1.2 All Annexures to this Agreement shall be deemed to form part of, and be incorporated into this Agreement. In the event of any conflict or inconsistency between this Agreement, the Schedules, the Request for Tender, the Proposal and any other Annexures (or any parts thereof), such conflict or inconsistencies will be determined by the Principal in its absolute discretion.
- 1.3 Except where the context otherwise requires a reference in this Agreement to:
 - (a) the singular number includes a reference to a plural number and vice versa;
 - (b) a gender includes a reference to the other genders and each of them;
 - (c) any person or company shall mean and include the legal personal representative, successor in title, and permitted assigns of such person or company as the circumstances may require;
 - (d) a company includes a corporation and person and vice versa;
 - (e) any organisations, associations, societies, groups or bodies shall, in the event of them ceasing to exist or being reconstituted, renamed or replaced or if the powers or functions of any of them are transferred to any other entity, body or group, refer respectively to any such entity, body or group, established or constituted in lieu thereof or succeeding to similar powers or functions;
 - (f) statutes, regulations, ordinances or by-laws shall be deemed for all purposes to be extended to include a reference to all statutes,

regulations, ordinances or by-laws amending, consolidating or replacing same from time to time; and

- (g) a month shall be construed as a reference to a calendar month.
- 1.4 Monetary references are references to Australian currency.
- 1.5 A business day means any day which is not a Saturday, Sunday or public holiday in the State of New South Wales.
- 1.6 Where any time limit pursuant to this Agreement falls on a Saturday, Sunday or public holiday in the State of New South Wales then that time limit shall be deemed to have expired on the next business day.
- 1.7 Where any covenant, condition, agreement, warranty or other provision of this Agreement expressly or impliedly binds more than one person then it shall bind each such person separately and all such persons jointly.
- 1.8 Where a word or phrase is given a defined meaning in this Agreement, any other part of speech or other grammatical form in respect of such word or phrase shall unless the context otherwise requires have a corresponding meaning.
- 1.9 The headings used in this Agreement are for convenience only and shall not affect the interpretation of this Agreement.
- 1.10 No rule of construction operates to the detriment of a Party only because that Party was responsible for the preparation of this Agreement or any part of it.
- 1.11 Where there occurs a reference to the doing of anything by the Principal including giving any notice, consent, direction or waiver, this may be done by any duly authorised officer of the Principal.
- 1.12 Where the Principal is required to act reasonably in the performance of this Agreement, that shall be read as a requirement to act as would a party in the position of the Principal which is acting reasonably in its own best interests.

2. TERM

2.1 This Agreement commences on the Commencement Date and will continue for the Term.

2.2 The Principal engages the Consultant during the Term to provide the Services, to achieve the Project Objectives and to carry out other tasks described in the Request for Tender in accordance with this Agreement.

3. THE CONSULTANT'S OBLIGATIONS

Due Diligence and Rules of Program

- 3.1 The Consultant shall perform the Services diligently, in accordance with the Specified Timeframes and with all necessary skill and care expected in the provision of such Services.
- 3.2 The Consultant shall perform the Services in accordance with the Rules of Program as amended from time to time and notified to the Consultant under Clause 4.1(c).

Methodology

3.3 In the performance of the Services, the Consultant shall use the methodology, if any, described in the Request for Tender and in the Proposal.

Knowledge of Principal's Requirements and Co-operation

- 3.4 The Consultant must:
 - (a) use all reasonable efforts to inform itself of the ongoing requirements of the Principal in performing the Services;
 - (b) regularly liaise, consult and/or meet with the Principal or its representatives in order for the Principal to inspect, discuss or assess the provision of the Services; and
 - (c) consult, co-operate and confer with others as reasonably directed by the Principal.
 - (d) Obey all reasonable directions and instructions issued by the Principal in relation to the Services, provided they are within the reasonable contemplation of this Agreement.

Specified Personnel

3.5 (a) The Consultant shall engage the Specified Personnel to carry out the Services.

- (b) The Consultant will ensure that the Specified Personnel (and any other personnel approved by the Principal and undertaking work in respect of the Services) will not be hindered or prevented in any way in the performance of their duties including but not limited to being removed from the performance of the Services or being requested to perform services which in any way interfere with their due performance of the Services.
- (c) Where any Specified Personnel or other personnel is unable to undertake work due to illness or other incapacity or resignation from employment with the Consultant, the Consultant will notify the Principal immediately and the Consultant will (at its own cost) provide replacement personnel at the earliest opportunity. All temporary or substitute personnel must be approved in writing by the Principal, which approval may be given or withheld in the Principal's absolute discretion. In giving its approval, the Principal may impose such conditions as it sees fit.
- (d) Notwithstanding any other provision contained in this Agreement, the Consultant acknowledges and agrees that subclause (a) is a fundamental term of this Agreement and in the event of termination or resignation of a member of the Specified Personnel, the Principal has the right to terminate this Agreement in accordance with Clause 19.1.

Reports

- 3.6 Consultant agrees to provide:
 - (a) [*monthly/quarterly/half yearly*] progress reports of the Project containing such information as may be agreed between the Consultant's Representative and the Principal; and
 - (b) such other reports, containing the information, in the format and on such dates as are specified in [*Schedule 5*].

Principal's Material

3.7 The Consultant accepts all responsibility for the secure guardianship of the Principal's Material and agrees that it will not[, except in the course of or as a necessary or desirable part of the Services,] make any (or any substantial) alteration to the Principal's Material without the prior written consent of the Principal.

Assignment and Sub-contracting

- 3.8 (a) Subject to Clause 3.5, the Consultant acknowledges and agrees that it may not assign and/or sub-contract the whole or any part of this Agreement without the prior written approval of the Principal, which approval may be given or withheld in the Principal's absolute discretion. Any approval given by the Principal to sub-contract any part of the Services does not relieve the Consultant from its liabilities or obligations under this Agreement and the Principal may, in giving its approval, impose such conditions as it sees fit.
 - (b) Without limiting the generality of subclause (a), notwithstanding any consent given by the Principal, the Consultant will be responsible for ensuring the suitability of any sub-contractor for the work proposed to be carried out and for ensuring that the work proposed to be carried out by the sub-contractor meets the requirements of this Agreement.
 - (c) The Consultant agrees and acknowledges that it will be liable to the Principal for any negligent, wilful or reckless acts, defaults or omissions of any sub-contractor or any employee or agent of the subcontractor as fully as if they were the negligent, wilful or reckless acts, defaults or omissions of the Consultant or the employees or agents of the Consultant.
 - (d) Prior to any sub-contractor or any employee or agent of the subcontractor commencing work in respect of the Services, the Consultant will obtain from that person, and provide to the Principal, a written assignment from the person to the Principal of the Intellectual Property created as a result of the person performing that work.
 - (e) The Consultant will ensure that a sub-contractor is aware of all the terms and conditions of the Agreement relevant to the sub-contractor's part in the performance of the Agreement. If so requested by the Principal, the Consultant will seek to obtain from the sub-contractor a signed statutory declaration substantially in the form appearing at [*Schedule 6*] prior to the commencement of any work under this Agreement by that sub-contractor and upon request by the Principal, will provide any statutory declaration so obtained to the Principal.

Compliance with Law

3.9 The Consultant must:

- (a) comply with all applicable standards, laws and regulations including but not limited to complying with its obligations (if any) under or arising pursuant to the *Privacy Act 1988* (Cth), *Privacy and Personal Information Act 1998* (NSW) and other State legislation relating to privacy to the extent that such legislation is relevant to this Agreement and/or the performance of the Services; and
- (b) not do anything that would cause the Principal to breach its obligations under any such legislation.
- 3.10 The Consultant must hold all necessary approvals, licences and permits required to provide the Services and otherwise fulfil its obligations under this Agreement.
- 3.11 [insert any special conditions specific to the Project, for example, compliance with ethical or other guidelines]

Contract Material

3.12 The Consultant must permit the Principal, the Commonwealth or NSW at any time and on the provision of such notice as may be reasonable in the circumstances, through their respective officers, agents or advisers authorised on their behalf, to examine and inspect any Contract Material including any books and records, and to provide all necessary facilities for that purpose.

4. **PRINCIPAL'S OBLIGATIONS**

- 4.1 The Principal will as soon as practicable, or as required by this Agreement:
 - (a) make or arrange to make available to the Consultant all relevant instructions, information, documentation or data or any other material as is necessary for the performance of the Services;
 - (b) provide assistance to the Consultant, as reasonably required, so that the Consultant may competently perform its duties under this Agreement; and
 - (c) without limiting subclause (a) and (b), the Principal shall provide to the Consultant a copy of the Rules of Program and promptly notify the Consultant in writing of any alteration to those Rules with which the Consultant must comply in the undertaking/ performance of the Services.

4.2 The Consultant agrees and acknowledges that the Principal's provision of information and assistance in accordance with Clause 4.1 is by way of assistance only and cannot in any way be deemed to give rise to a duty of care on the part of the Principal. The Consultant must rely on its own professional and personal expertise in providing the Services.

5. **REPRESENTATIVES**

- 5.1 The Consultant's Representative is the representative of the Consultant in respect of the provision of the Services and will, except to the extent otherwise provided for in this Agreement, liaise with the Principal in all matters relating to this Agreement. Any substituted representative must be agreed to in writing by the Principal.
- 5.2 The Principal's Representative will act as the Principal's representative in connection with this Agreement.

6. FEE

- 6.1 Subject to Clauses 6.2 to 6.5, the Principal will, in consideration of the Consultant performing the Services, pay to the Consultant the Fee in accordance with the Payment Schedule.
- 6.2 Payment of the Fee or any instalment thereof by the Principal is subject to:
 - (a) satisfactory progress in the performance of the Services (including, without limitation, the provision of any progress reports) in accordance with the Specified Timeframes or otherwise as agreed between the Consultant's Representative and the Principal's Representative; and
 - (b) the provision of an appropriate tax invoice before the due date for the payment of the Fee or the relevant instalment of the Fee.
- 6.3 The Consultant acknowledges that payment of the Principal by DECC under the Head Agreement is conditional upon approval of the Steering Committee. The Consultant agrees that Payment of the Fee or any instalment thereof to the Consultant is conditional upon the Principal's receipt of funds under the Head Agreement.
- 6.4 The Principal will only reimburse the Consultant any reasonable costs, expenses, fees or charges incurred by the Consultant in this Agreement [and not already included in the Consultant's proposed budget [set out in the Proposal/Annexure "C"/provided to the Principal]] where the Consultant has obtained the Principal's prior written approval to incur

such costs, expenses, fees or charges. The Principal's approval may be given or withheld in the Principal's absolute discretion.

6.5 The Consultant agrees and acknowledges that the Principal may deduct from the amounts otherwise payable to the Consultant any amount due from the Consultant to the Principal in connection with the provision of the Services.

7. GST

- 7.1 In the event that any of the prices for Supplies made under this Agreement are expressed as being inclusive of GST, Clause 7.2 will not apply in respect of those Supplies.
- 7.2 If any Party to this Agreement (the "GST Supplier") is or becomes liable to pay GST in connection with any Supplies made under this Agreement:
 - (a) the GST Supplier may add to the price of all Supplies the amount of GST for which the GST Supplier is or becomes liable in respect of those Supplies, as calculated by the GST Supplier in accordance with the GST Law;
 - (b) the Party providing consideration for the Supplies (the "Recipient") will pay the amounts or provide any other consideration required to be provided under other provisions of this Agreement for the Supplies ("agreement price") plus the calculated amount in respect of GST;
 - subject to subclause (d), the additional amounts shall be payable at the same time or times as the agreement price is required to be provided to the GST Supplier under the other provisions of this Agreement;
 - (d) if the time required by subclause (c) for payment of the additional amounts is at a time prior to the commencement of the tax period in respect of which the GST Supplier will be required to include the GST on that supply in the GST Supplier's GST return, subclause (c) will not apply to that additional amount and instead the additional amount will be payable not less than ten (10) business days prior to the date upon which the GST Supplier is required to lodge its GST return for that tax period.
- 7.3 The GST Supplier will issue a tax invoice which enables the Recipient, if permitted by the GST Law, to claim a credit or refund of GST on or before the date that the Recipient is required to pay the additional amounts

calculated pursuant to Clause 7.2 or the GST component of the price for the Supplies referred to in Clause 7.1.

- 7.4 If, for any reason, the GST Supplier's GST liability in respect of a particular Supply is varied from the additional amount paid by the Recipient under Clause 7.1 or Clause 7.2, the GST Supplier shall repay to the Recipient the amount of any excess paid by the Recipient above the GST Supplier's GST liability or the Recipient shall pay the deficiency in the amount previously paid by the Recipient to the GST Supplier for that Supply as appropriate.
- 7.5 Each Party warrants that at the time any taxable Supplies are made under this Agreement, that Party is or will be registered under the GST Law.

8. EXTENSION OF TIME

- 8.1 Where the Consultant becomes aware of anything that will or may cause an obligation under this Agreement not to be completed by any completion date, timetable or milestone the Consultant will:
 - (a) promptly, after becoming aware of the possibility of such a delay, notify the Principal, in writing, of the facts and circumstances which the Consultant considers will give rise to such a delay and the extent or likely extent of the delay and develop strategies to manage the consequences of the delay; and
 - (b) immediately after the circumstances causing the delay have ceased, notify the Principal, in writing, of the period of delay so caused, give details of the likely effect on this Agreement and request an extension of time which the Consultant considers reasonable in all the circumstances.
- 8.2 Where the Principal:
 - (a) agrees that the delay has reasonably arisen from a cause beyond the reasonable control of the Consultant, the Principal will not refuse a request for extension of time without reasonable grounds for doing so; or
 - (b) considers that the delay has arisen from a cause within the reasonable control of the Consultant, the Principal may refuse the Consultant's request for extension of time and reserves its rights under Clause 19.1 without prejudice to any accrued rights or remedies of the Principal.

9. VARIATIONS

- 9.1 The Principal may, in writing, request the Consultant to vary the Services. The Consultant must respond within a reasonable time and subsequently provide a quotation in accordance with Clause 9.2.
- 9.2 Before approving a variation requested under Clause 9.1 the Principal must have been provided by the Consultant with a written quotation of the time, cost and programming effects of the proposed variation. On receipt of a quotation, the Principal, if it wishes the variation to proceed, must approve the variation in writing to the Consultant.
- 9.3 Fees for varied Services will be in accordance with the quotation supplied by the Consultant under Clause 9.2 or as otherwise agreed in writing between the Parties.

10. CONFIDENTIALITY

- 10.1 The Consultant:
 - (a) must not disclose any Confidential Information to any person without the prior written consent of the Principal; and
 - (b) must take reasonable steps to ensure that the Confidential Information in its possession is kept confidential and protected against unauthorised use and access.
- 10.2 The Consultant agrees to use the Confidential Information solely for the purposes of the Services and for no other purpose.
- 10.3 Notwithstanding Clause 10.1, the Consultant may disclose Confidential Information to its officers, employees and permitted sub-contractors ("permitted recipient") where such disclosure is essential to carrying out their duties or in accordance with this Agreement.
- 10.4 Before disclosing the Confidential Information to a permitted recipient, the Consultant will ensure that the permitted recipient is aware of the confidentiality requirements of this Agreement and is advised that he, she or it is strictly forbidden from disclosing the Confidential Information or from using the Confidential Information other than as permitted by this Agreement. The Principal may, at its sole discretion and at any time, require the Consultant to arrange for a permitted recipient to execute a deed (in the form set out in [*Schedule 7*] or in such form as may be required by the Principal) relating to the non-disclosure and use of the

Confidential Information and the Consultant will promptly arrange for such deed to be executed and provided to the Principal.

- 10.5 The Confidential Information must not be copied or reproduced by the Consultant and/or the permitted recipient without the express prior written permission of the Principal, except for such copies as may be reasonably required to accomplish the purpose for which the Confidential Information was provided pursuant to this Agreement.
- 10.6 If any person, being any partner, officer, agent, consultant, sub-contractor or employee of the Consultant, who has had access to the Confidential Information in accordance with this Agreement leaves the service or employ of the Consultant then the Consultant will procure that that person does not do or permit to be done anything which, if done or permitted to be done by the Consultant, would be a breach of the obligations of the Consultant under this Agreement.
- 10.7 The Consultant agrees that it shall not make any public statement with respect to the Services without the Principal's written consent which consent shall not be unreasonably withheld.

11. PRIVACY AND DISCLOSURE OF PERSONAL INFORMATION

- 11.1 Where the Consultant has access to Personal Information in order to fulfil its obligations under this Agreement, it must:
 - (a) where the Consultant is responsible for holding the Personal Information, ensure that Personal Information is protected against loss and against unauthorised access, use, modification or disclosure and against other misuse;
 - (b) not use Personal Information other than for the purposes of the Agreement, unless
 - (i) required or authorised by law; or
 - (ii) authorised in writing by the individual to whom the Personal Information relates but only to the extent authorised;
 - (c) not disclose Personal Information without the prior written agreement of the Principal or the prior written agreement of the individual to whom the Personal Information relates, unless required or authorised by law. The Principal may, at its sole discretion and at any time, require the Consultant to arrange for a permitted recipient to execute a deed (in

the form set out in [*Schedule 7*] or in such form as may be required by the Principal) relating to the non-disclosure and use of the Personal Information and the Consultant will promptly arrange for such deed to be executed and provided to the Principal;

- (d) ensure that only authorised personnel have access to Personal Information;
- (e) immediately notify the Principal if:
 - (i) the individual to whom the Personal Information relates authorises the Consultant's to use his/her Personal Information for other purposes;
 - (ii) the individual to whom the Personal Information relates consents to the Consultant's disclosing of his/her Personal Information; and/or
 - (iii) it becomes aware that a disclosure of Personal Information is, or may be required or authorised by law;
- (f) make its employees, agents and sub-contractors aware of the Consultant's obligations under this clause including, when requested by the Principal, requiring those employees, agents and sub-contractors to promptly sign a suitable privacy deed relating to Personal Information; and
- (g) comply with such other privacy and security measures as the Principal reasonably advises the Consultant in writing from time to time.
- 11.2 The Consultant must immediately notify the Principal upon becoming aware of any breach of Clause 11.1.

ALTERNATIVE PRIVACY CLAUSE WHICH CAN BE SUBSTITUTED FOR CLAUSES 11.1 & 11.2 ABOVE

11.1 The Consultant must, and must ensure that its officers, employees, agents and sub-contractors, comply with the Principal's privacy policy in respect of any Personal Information disclosed to the Consultant by the Principal or acquired by the Consultant in performing the Services. A copy of the Principal's privacy policy can be obtained at [*insert website or other place where a copy of the Principal's privacy policy can be obtained*].

12. COPYRIGHT, INTELLECTUAL PROPERTY AND DATA ACCESS

- 12.1 The Parties agree and acknowledge that ownership of Intellectual Property rights in or in relation to New Contract Material vests jointly upon its creation in NSW and the Commonwealth. The Consultant, upon request by NSW, the Commonwealth or the Principal, undertakes and agrees, at its own cost, to do all things necessary and execute all documents to permit the vesting of ownership and title of Intellectual Property in NSW and the Commonwealth including, without limitation, obtaining from any sub-contractor, a written assignment to NSW and the Commonwealth of the Intellectual Property rights created as a result of the person performing any part of the Services.
- 12.2 If ownership of, or title in, Intellectual Property in relation to New Contract Material is not capable of being vested in NSW and the Commonwealth under Clause 12.1 because the Consultant itself does not own, and is unable at a reasonable cost to obtain ownership of, that Intellectual Property, the Consultant must at its own cost ensure that NSW, the Commonwealth, and the Principal are suitably and irrevocably licensed to use and to sub-license the use of that New Contract Material or that Intellectual Property.
- 12.3 This Agreement does not affect the Intellectual Property rights of the Consultant and/or third parties in Existing Contract Material and the Consultant hereby grants, and ensures that relevant third parties grant to NSW, the Commonwealth, and the Principal, without additional cost, an unlimited, perpetual, non-exclusive, royalty free, irrevocable, transferable licence to use, reproduce, adapt, communicate to the public, exploit and adapt for its own purposes all those Intellectual Property rights but only as part of the Contract Material and any development of that material
- 12.4 The Consultant must ensure all licence fees and/or consents required under law are paid and/or obtained as a result of any reproduction, adaptation or use of any Intellectual Property or Contract Material necessary for the provision of the Services.
- 12.5 Unless it has obtained the prior written approval of the Principal to do otherwise, the Consultant must ensure that the Contract Material is used, copied, supplied or reproduced only for the purposes of this Agreement. The approval of the Principal may be given or withheld in its absolute discretion and may be subject to such terms and conditions as the Principal considers appropriate.

- (a) The Consultant must hold or obtain consents from all authors of Existing Contract Material to its use and adaptation by the Consultant, NSW, the Commonwealth and the Principal, without restriction and without any requirement to attribute the Existing Contract Material to its authors.
 - (b) Where the Consultant is an individual, the Consultant consents to any acts or omissions of NSW, the Commonwealth or the Principal in the exercise of the rights granted under Clauses 12.1 to 12.6 that might otherwise constitute an infringement of the Consultant's Moral Rights.
 - (c) Without limiting subclause (b), the Consultant consents, in relation to the New Contract Material:
 - not to be named as the author or creator of the works comprised in the New Contract Material or, at the Principal's discretion, to being attributed as author of the works comprised in the New Contract Material in a form and manner acceptable to the Principal; and
 - (ii) to the specific acts or omissions set out in Item 7 of Schedule 1.
 - (d) Prior to an individual commencing work in respect of the New Contract Material on behalf of the Consultant, the Consultant must obtain from that individual, in writing, and provide to NSW, the Commonwealth and/ or the Principal, upon request:
 - (i) all consents, permissions and assignments to enable NSW, the Commonwealth, and the Principal to exercise in full, without cost to NSW, the Commonwealth or the Principal and without impediment, the rights granted under this Clause 12.6; and
 - (ii) without limiting paragraph (i), a consent to any act or omission (including the specific acts or omissions set out in Item 7 of Schedule 1) which might otherwise infringe the Moral Rights of that individual. If requested by NSW, the Commonwealth, or the Principal, such consent will be in a form specified by NSW, the Commonwealth or the Principal.
 - 12.7 The Consultant must provide data products which comprise or are a component of the Contract Material with metadata (documentation about data) that meets the most recent standards specified by ANZLIC the Spatial Information Council (www.anzlic.org.au).

- (a) Where the Contract Material comprises Material reasonable considered by NSW to be the cultural and/or intellectual property of a particular Indigenous/Aboriginal person(s) or community(s), the Principal and the Consultant agree that they will not disclose such material unless authorised or required by law, to other persons or bodies without prior written and informed consent of the relevant Indigenous/Aboriginal person(s) or community(s).
 - (b) For the purposes of this clause, the cultural and/or intellectual property of a particular Indigenous/Aboriginal person(s) or community(s) includes the following:
 - traditional Indigenous/Aboriginal knowledge which in the opinion of these groups or individuals should not be in the public domain; and/or
 - (ii) material which is culturally sensitive to Indigenous/Aboriginal communities.

13. CONFLICT OF INTEREST

- 13.1 The Consultant undertakes that at the date of this Agreement, no conflict of interest exists or is likely to arise in the performance of the Services. The Consultant must notify the Principal, in writing, immediately upon becoming aware of the existence, or possibility, of a conflict of interest.
- 13.2 On receipt of a notice under Clause 13.1 the Principal may:
 - (a) approve the Consultant continuing to perform the Services, which approval may be subject to reasonable conditions to ensure appropriate management of the conflict; or
 - (b) where in the Principal's reasonable view the conflict of interest cannot be appropriately managed, exercise its rights of termination under this Agreement.

14. WARRANTIES, INDEMNITY AND RELEASE

- 14.1 (a) The Consultant warrants that all personnel engaged in the performance of the Services are appropriately qualified, competent and experienced.
 - (b) The Consultant warrants that it will not, in carrying out the Services, infringe or breach or permit or suffer to be infringed or breached any Intellectual Property rights of any third party.

- (c) The Consultant warrants and undertakes that all work done in connection with the Services will comply and conform with all applicable legislation and any regulations, by laws, ordinances, or orders made under such legislation as well as any applicable codes of conduct, policies, guidelines, quality assurance standards and all relevant Australian standards applicable to the Services.
- 14.2 Subject to Clause 14.3 below, the manner of performance of the Services shall be at the Consultant's risk.
- 14.3 The Consultant shall not be liable for any instructions, directions, standards, criteria or benchmarks notified in writing by the Principal with which the Consultant must comply in performing/ undertaking the Services.
- 14.4 The Consultant indemnifies and keeps the Principal indemnified against any loss or damage to the property of the Principal and against any legal liability for injury, death or damage to property of others arising from the performance/ undertaking of the Services.
- 14.5 The Consultant's liability to indemnify the Principal shall be reduced pro rata to the extent that the Principal's negligence has contributed to the loss, damage or liability as the case may be.

[NOTE – these amendments are optional. They are intended to reduce liability to CMAs. It is a policy / risk management decision for the CMA as to whether this change be made – refer to notes. If these amendments are not used ensure the deleted indemnity provisions are re-inserted]

15. MINIMUM INSURANCE REQUIREMENTS

- 15.1 Without limiting the Consultant's obligations under this Agreement, the Consultant will, during the continuance of this Agreement and for a period of [*twelve (12) months*] after its expiration or termination, take out and maintain with a reputable insurance company the following insurance policies:
 - (a) a broad form public liability policy of insurance in the amount of not less than [*Twenty Million Dollars* (\$20,000,000)] in respect of each and every occurrence and unlimited in the aggregate for any one period of cover;
 - (b) workers' compensation insurance in accordance with applicable legislation in respect of all employees of the Consultant; and

- (c) a professional [*liability / indemnity*] policy of insurance in the amount of not less than [*Five Million Dollars (\$5,000,000)*] in respect of each and every occurrence [*and unlimited in the aggregate*] for any one period of cover.
- 15.2 The Consultant will, on request, produce to the Principal satisfactory evidence that the Consultant has effected and renewed the insurance policies referred to in Clause 15.1.

16. KEEPING OF RECORDS AND AUDIT

- 16.1 The Consultant must:
 - (a) keep proper accounts, records (including information stored by computer and other devices) and time sheets in accordance with the accounting principles generally applied in commercial practice in respect of its time charge billing, its expenditure and fees and amounts payable to others properly engaged pursuant to this Agreement and retain the same for a period of seven (7) years; and
 - (b) keep the operational records and project data relating to the provision of the Services securely and in a form and manner as to facilitate access and inspection under Clause 16.2 and retain the same for a period of [two (2) / five (5)] years.
- 16.2 The Consultant must during the Term and for the periods specified in Clause 16.1(a) or 16.1(b) following the expiration or termination of this Agreement in relation to the materials specified in the relevant Clauses:
 - (a) make available to or provide the Principal (or its nominee) with access to or copies of any Contract Material, records or other information relating to the Project which may be required by the Principal within a reasonable time of any request; and
 - (b) participate promptly and cooperatively in any external review or audits conducted or instigated by the Principal or a NSW or Commonwealth Government department or agency.

17. DISPUTE RESOLUTION

17.1 The Parties shall attempt to settle a dispute in relation to this Agreement using the dispute resolution process provided for in this Agreement before resorting to court proceedings, provided however, nothing in this Clause will preclude either Party from seeking urgent interlocutory relief.

- 17.2 If the Principal requests it, the Consultant must continue performing this Agreement while a dispute is being dealt with in accordance with this Clause 17, other than the Services (or part thereof) the subject of the dispute, to the extent practicable to do so.
- 17.3 A Party claiming that a dispute has arisen must give written notice of the dispute to the other Party. The Parties must endeavour in good faith to resolve the dispute within fourteen (14) days of receipt of a notice of dispute.
- 17.4 If a dispute is not resolved within the fourteen (14) day period or such further period as the Parties agree in writing, the dispute shall be referred to the ACDC for mediation in accordance with the ACDC's 'Mediation Guidelines for Commercial Mediation' which are operating at the time the matter is referred to the ACDC. The ACDC's mediation guidelines set out the procedures to be adopted, the process of selection of the mediator and the costs involved. The terms of the ACDC's mediation guidelines are hereby deemed incorporated into this Agreement .
- 17.5 The Parties shall do all things reasonably required to refer the dispute to mediation by ACDC.
- 17.6 In the event that the dispute has not been settled within twenty eight (28) days (or such other period as agreed to in writing between the Parties) after the appointment of a mediator, or if no mediator is appointed within twenty eight (28) days of the referral of the dispute to mediation, the Parties are free to pursue any other procedures available at law for the resolution of the dispute.

ALTERNATIVE CLAUSE 17.6 WHICH PROVIDES FOR REFERRAL TO ARBITRATION - USE ONLY IF BELIEVED NECESSARY - OTHERWISE DELETE.

17.6 In the event that the dispute has not been settled within twenty eight (28) days (or such other period as agreed to in writing between the Parties to the dispute) after the appointment of a mediator, or if no mediator is appointed within twenty one (21) days of the referral of the dispute to mediation, the dispute shall be submitted to arbitration conducted by ACDC in accordance with ACDC arbitration rules as administered by ACDC which are incorporated by reference. The arbitrator shall not be the same person as the mediator in respect of the particular dispute. The Parties to a dispute shall do all things reasonably required for the dispute to be referred to arbitration by ACDC.

18. TERMINATION FOR CONVENIENCE

- 18.1 The Principal may, at any time terminate this Agreement for convenience, by giving fourteen (14) days' notice in writing to the Consultant, such termination being effective upon expiry of this fourteen (14) day period.
- 18.2 If the Principal terminates this Agreement for convenience, the Principal will pay the Consultant any unpaid Fees which relate to Services properly performed up to the date of termination, less any amounts payable by the Consultant to the Principal under Clause 20.1 in relation to pre-paid amounts.

19. TERMINATION FOR CAUSE

- 19.1 The Principal may, by notice in writing to the Consultant, immediately terminate this Agreement if the Consultant:
 - (a) commits a material breach of this Agreement which, in the Principal's opinion, is not capable of being remedied;
 - (b) fails to remedy a material breach which, in the Principal's opinion is capable of being remedied, within seven (7) days of receiving notice from the Principal requiring it to remedy that breach, or such longer period as the Principal may reasonably allow having regard to the nature of the breach and a reasonable time to remedy it;
 - (c) is declared bankrupt or bankruptcy proceedings have commenced against the Consultant or it becomes subject to any form of insolvency administration; or
 - (d) is the subject of proceedings or investigations commenced or threatened by the Independent Commission Against Corruption, the police service or similar public body.
- 19.2 If the Principal terminates this Agreement for cause the Principal may:
 - (a) contract with any other person to complete the provision of Services;
 - (b) deduct any loss or damages arising from or in connection with the termination (which may be as ascertained and certified by the Principal) from any money due, or which may become due, to the Consultant (whether under this Agreement or otherwise); and/or

- (c) recover in an appropriate court the balance of any outstanding loss or damage remaining unpaid as a debt due and payable by the Consultant to the Principal.
- 19.3 For the purposes of the termination provisions in the Agreement, the Consultant acknowledges that a series of minor breaches may constitute a "material breach".

20. CONSEQUENCE OF TERMINATION

- 20.1 Without limiting the Principal's rights in relation to this Agreement, if the Principal pre-paid any amounts to the Consultant for Services to be performed which at the date of termination have not been performed and this Agreement is terminated for any reason:
 - (a) the Consultant must refund to the Principal such prepaid amounts, within seven (7) days of termination of this Agreement; and
 - (b) the Principal may recover in an appropriate court the balance of any prepaid amount not refunded as a debt due and payable by the Consultant to the Principal.
- 20.2 The Consultant must, except to the extent approved by the Principal in writing, deliver to the Principal, within seven (7) days of termination or expiry of this Agreement all Confidential Information of the Principal, all Personal Information, all the Principal's Material and Contract Material including copies of the same.
- 20.3 The provision dealing with the return of Materials upon termination or expiry of this Agreement does not prevent the Consultant from keeping a bona fide copy of the Contract Material for its records, subject to the confidentiality and privacy requirements contained in this Agreement.
- 20.4 Any termination of this Agreement is without prejudice to any accrued rights or remedies of either Party.
- 20.5 The covenants, conditions and provisions of this Agreement which are capable of having effect after the expiration of this Agreement shall remain in full force and effect following the expiration or termination of this Agreement.

21. GENERAL

- 21.1 The Consultant agrees to provide such assistance as may be reasonably requested by the Principal to publicise and promote the Project.
- 21.2 No failure or delay by the Principal in exercising any right, power or remedy under this Agreement and no course of dealing or grant by the Principal to the Consultant of any time or consideration or other indulgence, will operate as a waiver of the breach or a default by the Consultant. Any waiver by the Principal of a breach of this Agreement must be in writing and will not be construed as a waiver of any further breach of the same or any other provision.
- 21.3 If any part of this Agreement is prohibited, void, voidable, illegal or unenforceable, then that part is severed from this Agreement but without affecting the continued operation of the remainder of the Agreement.
- 21.4 Unless otherwise specifically provided for under this Agreement, any variation to the Agreement, including any variation to the Schedules, must be in writing and signed by both Parties.
- 21.5 The Consultant acknowledges and agrees that neither the Consultant or any of the Consultant's officers, employees, agents and/or sub-contractors:
 - (a) are or will be officers, employees, agents and/or partners of the Principal; and
 - (b) will represent that they are officers, employees, agents and/or partners of the Principal.
- 21.6 Any communication to a Party to this Agreement:
 - (a) must be in writing addressed to the intended recipient at the address shown in Item 8 of Schedule 1 or the address last notified by the intended recipient to the sender; and
 - (b) will be deemed to be served:
 - (i) in the case of delivery in person when delivered to the recipient's address for service and a signature received as evidence of delivery;
 - (ii) in the case of delivery by post, it will be deemed received within three business days of posting;

- (iii) if a communication is sent by facsimile and the sender's facsimile machine produces a transmission confirmation report indicating that the facsimile was sent to the addressee's facsimile machine, the report will be prima facie evidence that the facsimile was received by the addressee at the time indicated on that report; or
- (iv) in the case of delivery of email, on receipt of confirmation by the sender that the recipient has received the email,

provided however, if delivery or receipt of a communication is on a day which is a Saturday, Sunday, bank holiday or public holiday in the place to which the communication is sent or is later than 5 pm (local time in that place) it will be deemed to have been duly given or made at 9 am (local time at that place) on the next day which is not a Saturday, Sunday, bank holiday or public holiday in that place.

- 21.7 The Agreement constitutes the entire agreement between the Parties. Any prior arrangements, agreements, representations or undertakings are superseded.
- 21.8 This Agreement will be governed and construed in all respects in accordance with the laws of the State of New South Wales and the Parties hereby submit to the non exclusive jurisdiction of the Courts of the State of New South Wales.

EXECUTED AS AN AGREEMENT

[Execution clause for a Governmen Agency with no separate legal status]	•
SIGNED BY [<i>insert name & title</i>] of [<i>insert name of Government Department or Government Agency</i>] for and on behalf of the Crown in right of State of New South Wales but not so as to incur any personal liability in the presence of:))))
Signature of Witness	
Print name of Witness	[insert name]
EXECUTION CLAUSE FOR A STATE CORPORATION CONSTITUTED UNDE	
THE [SEAL/COMMON SEAL] of [<i>insert name of Government corporation</i>] is affixed in accordance with its Constitution in the presence of:)))
Signature of Authorised Person	Signature of Authorised Person

Print name of Authorised Person

Print name of Authorised Person

Office Held

Office Held

[ALTERNATE EXECUTION CLAUSE FOR THE PRINCIPAL]

SIGNED on behalf of [*insert name of*) *Principal*] by [*insert name of person signing*) *on the Principal's behalf*] but not so as to) incur any personal liability in the presence of:)

Signature of Witness

Print Name of Witness

[insert name of person signing on the Principal's behalf]

[EXECUTION CLAUSE FOR THE CONSULTANT IF THE CONSULTANT IS A COMPANY]

THE COMMON SEAL of [insert)Consultant's name] is affixed in accordance)with its Constitution in the presence of:)

	• • •	•••	•••	••	••	• •	•	••	•••	•	••	• •	••	••	• •	•	••	•	••	•	••	•	•	• •	•	•	 •	•
Signa	tur	e	of	A	u	tŀ	ıc	r	is	e	d	P	e	rs	0	n												

Signature of Authorised Person

Print name of Authorised Person

Print name of Authorised Person

Office Held

Office Held

[EXECUTION CLAUSE FOR THE CONSULTANT IF THE CONSULTANT IS AN INDIVIDUAL]

SIGNED BY [*insert name of Consultant*] in the presence of:

)

Signature of Witness

Print name of Witness

Signature of Consultant

Item 1 <u>Commencement Date (Clause 2.1)</u>

[insert date]

Item 2 <u>Term</u> (Clause 2.1)

[] to [] or such other later date as may be agreed between the Parties.

Item 3 Specified Personnel (Clause 3.4)

[insert name]

Position Category: Telephone: Mobile: Facsimile: Email:

[insert name]

Position Category: Telephone: Mobile: Facsimile: Email:

[insert name]

Position Category: Telephone: Mobile: Facsimile: Email:

Item 4 The Consultant's Representative (Clause 5.1)

Name:

Address:

Telephone: Mobile: Facsimile: Email:

Item 5 <u>Principal's Representative</u> (Clause 5.2)

Name:

Address:

- Telephone: Mobile: Facsimile: Email:
- Item 6 <u>Fee</u> (Clause 6.1)

[] [*exclusive/inclusive*] of GST

Item 7 <u>Consent to acts/omissions which otherwise</u> <u>infringe Moral Rights</u> (Clause 12.6(c)(ii) and Clause 12.6(d)(ii))

- [complete as appropriate, if applicable]
- •
- •
- •
- •

Item 8 Notices (Clause 21.6)

To the Consultant:

Name: Address: Telephone: Mobile: Facsimile: Email:

To the Principal:

Name: Address: Telephone: Mobile: Facsimile: Email:

PROJECT OBJECTIVES

(Clause 2.2)

SPECIFIED TIMEFRAMES

(Clause 3.1)

DATE/MONTH	ACTIVITY

PAYMENT SCHEDULE

(Clause 6.1)

DATE/MILESTONE	\$
TOTAL FEE	

REPORTS TO BE PROVIDED BY THE CONSULTANT

(Clause 3.5(b))

STATUTORY DECLARATION BY SUB-CONTRACTOR

(Clause 3.7(e))

I	
,	(insert name)
of ,	
	(insert address)

do solemnly and sincerely declare as follows:

- 1. *[insert full sub-contractor company name and its ACN or ABN]* ("the Sub-contractor") has been selected as a sub-contractor to *[insert full name of Consultant]* (the "Consultant") for the performance of a contract with *[insert full name of Principal]* (the "Principal") dated *[insert date]* for the *[insert short description of Project/Consultancy Services]* ("the Agreement").
- 2. The sub-contractor is aware of the relevant contractual terms and conditions of the Agreement and will be entering into a sub-contract with the Consultant in the near future on terms that will not be inconsistent with the Agreement for *[insert short description of the sub-contract]* ("the Sub-Contract").

[insert additional provisions to be included in the Statutory Declaration, as applicable]

3. There are not reasons of which I am aware that would prevent the Sub-Contract from being signed and performed in a manner that would allow the satisfactory and timely performance of the Agreement and the Sub-contract.

And I make this declaration conscientiously believing the same to be true by virtue of the provisions of the *Oaths Act 1900* (NSW).

Subscribed and declared at)thisday of200)before me:)

Signature of Justice of the Peace/Solicitor

Signature of person making the declaration

(Print name)

CONFIDENTIALITY AND PRIVACY DEED

(Clauses 10.4 & 11.1(c))

THIS DEED dated t	he day of	[200]
BETWEEN	[insert name of Government Agency of [insert ABN] of [insert address] ("the Principal address") ("the Princ	· ·
AND	[insert name of the person required to "Recipient").	o sign the Deed] (the

RECITALS:

- A. The Recipient is an officer, employee, agent or sub-contractor of the Consultant.
- B. The Consultant has entered into the Consultancy Agreement with the Principal.
- C. In the course of the Recipient performing certain services for the Principal (whether directly or indirectly) pursuant to the Consultancy Agreement, the Recipient will have access to and may become aware of Confidential Information and Personal Information belonging to or in the possession of the Principal.
- D. Improper use or disclosure of the Confidential Information or the Personal Information could damage the Principal's ability to perform its governmental/statutory functions and could result in irreparable harm to the Principal.

E. The Recipient gives the undertakings contained in this Deed to, and for the benefit of the Principal on the terms and conditions herein contained.

OPERATIVE PROVISIONS

1. DEFINITIONS & INTERPRETATION

- 1.1 Unless specified in Clause 1.2 of this Deed, capitalised terms have the meaning given to them in the Consultancy Agreement.
- 1.2 In this Deed including the Recitals, unless the context otherwise requires:

"Confidential Information" means any information and all other knowledge at any time disclosed (whether in writing or orally) to the Recipient by the Principal or the Consultant or acquired by the Recipient in the course of the Recipient performing certain services for the Principal (whether directly or indirectly) pursuant to the Consultancy Agreement that:

- (a) is by its nature confidential;
- (b) is designated by the Principal as confidential; or
- (c) the Recipient knows or ought to know is confidential;

and includes but is in no way limited to:

- (d) the Contract Material;
- (e) the Principal's Material;
- (f) any material which relates to the affairs of a third party;

but does not include information which:

- (g) is or becomes public knowledge other than by breach of this Deed;
- (h) is in the lawful possession of the Recipient without restriction in relation to disclosure before the date of receipt from the Principal or the Consultant, as the case may be; or
- (i) is required to be disclosed pursuant to law, regulation, legal process or a regulatory authority;

"Consultancy Agreement" means the Consultancy Agreement between the Principal and the Consultant dated [*insert date*] for the provision of [*insert short description of the Project/Consultancy Services*];

"Express Purpose" means [complete as appropriate. The nature of the services to be performed by the Recipient should be specifically identified]; and

"Personal Information" means information or an opinion (including information or an opinion forming part of a database) whether true or not and whether recorded in a material form or not, about an individual whose identify is apparent or can reasonably be ascertained from the information or opinion.

- 1.3 Except where the context otherwise requires:
 - (a) a reference to a person which has ceased to exist or has been reconstituted, amalgamated or merged, or other functions of which have become exercisable by any other person or body in its place, shall be taken to refer to the person or body established or constituted in its place by which its said functions have become exercisable;
 - (b) no rule of construction operates to the detriment of a party only because that party was responsible for the preparation of this Deed or any part of it;
 - (c) the headings and index in this Deed are for convenience only and do not affect the interpretation of this Deed;
 - (d) words importing a gender include any other gender;
 - (e) persons will be taken to include any natural or legal person; and
 - (f) where a word or phrase is given a defined meaning in this Deed, any other part of speech or other grammatical form in respect of such word or phrase shall unless the context otherwise requires have a corresponding meaning.

2. CONFIDENTIAL INFORMATION

2.1 The Recipient must keep the Confidential Information in confidence and must not disclose the Confidential Information to any person without the prior written consent of the Principal.

- 2.2 The Principal may grant or withhold its consent in its absolute and unfettered discretion and may impose conditions on that consent, as the Principal sees fit. If the Principal grants consent subject to conditions, the Recipient must comply with those conditions.
- 2.3 Without limiting the generality of Clause 2.1, the Principal may require that the Recipient procures the execution of a deed by the person to whom the Recipient proposes to disclose the Confidential Information, on terms substantially similar to the terms of this Deed.
- 2.4 The Recipient:
 - (a) may use the Confidential Information for the Express Purpose only and must not use the Confidential Information for any other purpose;
 - (b) must not copy or reproduce the Confidential Information without the prior approval of the Principal;
 - (c) must take all necessary precautions to prevent unauthorised access to or copying of the Confidential Information; and
 - (d) must comply with any direction of the Principal regarding the safekeeping and storage of Confidential Information.
- 2.5 (a) Immediately upon request, the Recipient must deliver to the Principal all documents and any material in the possession or control of the Recipient containing Confidential Information.
 - (b) If the Principal makes a demand for the return of documents or any material containing Confidential Information, and the Recipient is aware that documents containing the Confidential Information are beyond his or her possession or control, then the Recipient must provide full details of where the documents containing the Confidential Information are, and the identity of the person in whose custody or control they lie.
 - (c) A reference to "documents" or "materials" in this Clause 2.5 includes material in any form of storage of information, whether visible to the eye or not.

3. PRIVACY AND DISCLOSURE OF PERSONAL INFORMATION

3.1 Where the Recipient has access to Personal Information in order to perform the services for the Principal referred to in Recital 'C', it must:

- (a) where the Recipient is responsible for holding Personal Information, ensure that Personal Information is protected against loss and against unauthorised access, use, modification or disclosure and against other misuse;
- (b) not use Personal Information other than for the Express Purpose only unless
 - (i) required or authorised by law; or
 - (ii) authorised in writing by the individual to whom the Personal Information relates but only to the extent authorised;
- (c) not disclose Personal Information without the prior written agreement of the Principal or the prior written agreement of the individual to whom the Personal Information relates, unless required or authorised by law;
- (d) ensure that only authorised personnel have access to Personal Information;
- (e) immediately notify the Principal if:
 - the individual to whom the Personal Information relates authorises the Recipient's to use his/her Personal Information for other purposes;
 - (ii) the individual to whom the Personal Information relates consents to the Recipient's disclosing of his/her Personal Information; and/or
 - (iii) it becomes aware that a disclosure of Personal Information is, or may be required or authorised by law; and
- (f) comply with such other privacy and security measures as the Principal reasonably advises the Recipient in writing from time to time.
- 3.2 The Recipient must immediately notify the Principal upon becoming aware of any breach of Clause 3.1

ALTERNATIVE PRIVACY CLAUSE WHICH CAN BE SUBSTITUTED FOR CLAUSES 3.1& 3.2 ABOVE

3.1 The Recipient must, and must ensure that its officers, employees, agents and sub-contractors, comply with the Principal's privacy policy in respect of any

Personal Information disclosed to the Recipient by the Principal or acquired by the Recipient in performing the services for the Principal referred to in Recital 'C'. A copy of the Principal's privacy policy can be obtained at [*insert website* or other place where a copy of the Principal's privacy policy can be obtained].

4. CONFLICT OF INTEREST

- 4.1 The Recipient warrants that before entering into this Deed it has disclosed to the Principal all the past, current and anticipated interests of the Recipient which may conflict with or restrict the Recipient in performing the services for the Principal referred to in Recital 'C' fairly and independently.
- 4.2 The Recipient shall not during the course of performing the services, engage in any activity or obtain any interest likely to conflict with or restrict the Recipient in providing services to the Principal fairly and independently and shall immediately disclose to the Principal such activity or interest.

5. SURVIVAL

8.1 This Deed will survive termination of the services referred to in Recital 'C' and the expiry or termination of Consultancy Agreement.

6. **NOTICES**

6.1 A notice under this Deed must be in writing and forwarded to the address, facsimile number or the email address of the intended recipient as specified below or the address last notified by the intended recipient to the sender:

The Recipient's contact name and address:

Name:

Address:

Facsimile:

Email:

Telephone:

Mobile:

The Principal's contact name and address:

Name:

Address:

Facsimile:

Email:

Telephone:

Mobile:

6.2 A notice under this Deed will be deemed to be served:

- (a) in the case of delivery in person when delivered to the recipient's address for service and a signature received as evidence of delivery;
- (b) in the case of delivery by post within three business days of posting;
- (c) in the case of delivery by facsimile at the time of dispatch if the sender receives a transmission report which confirms that the facsimile was sent in its entirety to the facsimile number of the recipient; and
- (d) in the case of delivery by email, on receipt of confirmation by the recipient that the recipient has received the email.
- 6.3 Notwithstanding Clause 6.2, if delivery or receipt of a communication is on a day which is not a business day in the place to which the communication is sent or is later than 5 pm (local time in that place) it will be deemed to have been duly given or made at 9 am (local time at that place) on the next business day in that place.

7. GENERAL

- 7.1 This Deed must not be construed to exclude the operation of any principle of law or equity intended to protect and preserve the confidentiality of the Confidential Information.
- 7.2 The rights and remedies provided under this Deed are cumulative and not exclusive of any rights or remedies provided by law or any other such right or remedy.
- 7.3 No failure or delay by the Principal in exercising any right, power or remedy in relation to this Deed and no course of dealing or grant by the Principal to the Recipient of any time or other consideration, will operate as a waiver of the breach or a default by the Recipient. Any waiver by the Principal of a breach

of this Deed will not be construed as a waiver of any further breach of the same or any other provision.

- 7.4 All amendments to this Deed must be in writing, signed by both parties and executed in the form of a deed.
- 7.5 All consents, approvals and waivers given under this Deed must be writing.
- 7.6 This Deed is governed by, and must be construed in accordance with, the laws in force in the State of New South Wales.
- 7.7 Each party submits to the exclusive jurisdiction of the Courts exercising jurisdiction in the State of New South Wales and the courts of appeal therefrom.

EXECUTED AS A DEED

Execution by the Principal:

SIGNED, SEALED AND DELIVERED on) behalf of [*insert name of Principal*] by [*insert*) *name of person signing on the Principal's*) *behalf*] not so as to incur any personal liability) in the presence of:

Signature of Witness

Print Name of Witness

[insert name of person signing on the Principal's behalf]

Execution by the Recipient:

SIGNED, SEALED AND DELIVERED by)

[*insert name of Recipient*] in the presence of:

Signature of Witness

.....

Signature of Recipient

Print name of Witness

)

ANNEXURE "A"

REQUEST FOR TENDER

ANNEXURE "B"

CONSULTANCY PROPOSAL

ANNEXURE "C"

CONSULTANT'S PROPOSED BUDGET



Monitoring, Evaluation, Reporting and Improvement Strategy

Mar 2009

Version

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1. Purpose of a MERI Strategy Document

The purpose of this document is to provide a concise and relatively static description of the underlying philosophy, drivers and objectives for the CWCMA MERI Program.

The strategy described in this document provides the overall guide for how the elements of the MERI Program are integrated. This is described further in section 3 below.

2. What do we mean by monitoring, evaluation, reporting and improvement (MERI)

2.1.Meaning of MERI

MERI provides for a systematic and objective review of either (or a combination of) the appropriateness, efficiency or effectiveness of a program. Where:

- appropriateness addresses questions related to suitability of a program
- efficiency addresses questions related to how the program was implemented and
- effectiveness addresses questions related to whether the desired program outcomes were achieved

Monitoring provides information to address the evaluation questions and describes *what* is occurring over the monitoring period. The monitoring information may include a mixture of qualitative and quantitative information that generates insights gained from either existing information sources or new monitoring programs.

Evaluation makes judgements about why a particular outcome is occurring or how well an activity was undertaken or whether it was a good activity to do through addressing the specific evaluation questions.

Reporting and Improvement is the process of communicating and of using the results and findings of an evaluation.

The basis for undertaking MERI is to have information that will guide the CWCMA's continuous improvement processes as it plans and implements investment designed to meet the CAP targets.

2.2.MERI Terminology

The MERI program for the CWCMA aims to apply consistent terminology.

There have been numerous terms used to describe the evaluation process for the CMAs over a period of time:

Evaluation:	All encompassing term to include monitoring,
	evaluation, reporting and adaptive management
	stages

M and E: Monitoring and evaluation, with an assumption

	that reporting the information was a component of the task
MER:	Monitoring, evaluation and reporting, to acknowledge the importance of communicating the findings
MERI:	Monitoring, evaluation, reporting and improvement, to acknowledge the importance of using the findings from an evaluation in a continuous improvement sense.

The term MERI will be adopted as the term to describe all the processes within the CWCMA MERI Program. This will then ensure consistency with the National MERI Framework.

Furthermore the CWCMA will distinguish the evaluations it undertakes at a whole of CAP scale and program or project scale in the following way:

Program evaluation can be used to describe evaluation at a project or program scale. It would be used to describe evaluations that the CWCMA may undertake on their systems and processes. If strategically selected the evaluations will not only enhance the delivery of the program, but will also inform the CAP evaluation.

The term **CAP evaluation** is used to describe the mid-term and 10 year evaluations of progress towards the management and catchment targets within the CAP. These evaluations need to consider the contribution of the CWCMA's investments towards the targets, as well as a measurement of progress against the targets.

The other type of evaluation the CWCMA will undertake, that can be used to inform a program evaluation, are **audits** of individual incentives through a risk based approach.

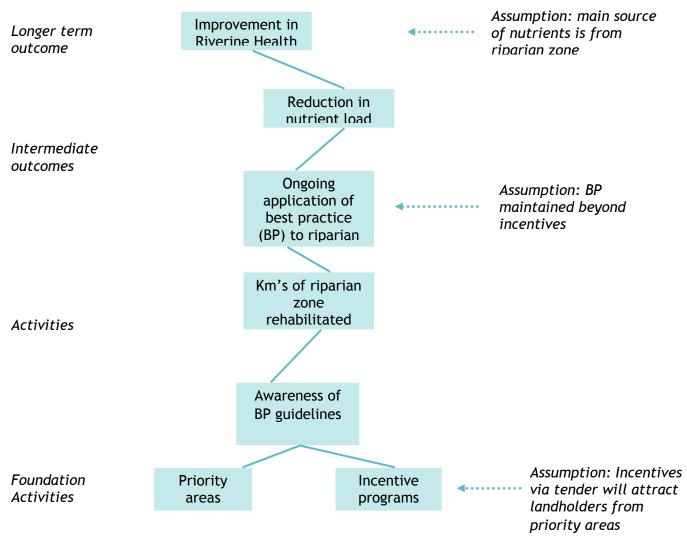
A hypothetical example of program logic is provided in **Error! Reference source not found.** below and discussed in the dot points as a means of further illustrating the difference between the CAP evaluation and program evaluations but also how they can be used to strategically design the MERI program:

- CAP evaluations require the CWCMA to provide evidence that there is a logical linkage between inputs to catchment targets, as well as a measure of progress against the targets. In addition CMA's need to make judgements through their CAP evaluation as to what contribution their investment is having on the catchment target.
- To enable this, the CMA will commence by confirming the evidence that has been used to support the logic between investment and outcomes as described by their CAP as well as ensure, often in partnership, longer term monitoring programs to support their management and catchment targets have been established.

- The linkages in the logic will be based on supporting evidence, from say existing literature, and may be local catchment studies. Some linkages may be based on anecdotal observations and local catchment expertise. The rigour of the evidence can be tested by the CMA as part of their MERI program.
- Investment reporting on resources and outputs will support the monitoring at the activity levels of the logic as illustrated in Figure 1. An incentive audit program can also be used to support the information at this level of the logic.
- Some of the assumptions in the CMA's logic maybe weaker than others. For example if the evidence to support part of the logic is not strong and the CMA may need to investigate some of these high risk assumptions as part of their CAP evaluation process.
- At the same time the CMA may be looking at opportunities to further improve the delivery of their incentives, more from a business improvement perspective.
- The CMA can be more strategic in their choice of evaluations by analysing their logic and undertaking program evaluations that will provide multiple benefits, by supporting both the overall CAP evaluation as well as the more immediate business improvements.
- In the example provided in Figure 1, the CMA may decide to undertake a
 program evaluation of the effectiveness of the delivery model for incentives
 to test the assumption that it is targeting their priorities. In addition the
 information from the program evaluation can be used as one of the lines of
 evidence to support the CAP evaluation in the longer term.

Therefore, the CMA will analyse their logic across the CAP so that the whole MERI program is strategically designed to remain focussed and cost-effective (ie adding value and not just collecting information at random).

Figure 1: Relationship between CAP and Program Evaluations



Document ID

3. Description of whole MERI Program

The CWCMA's MERI Program is made up of several interrelated components as described below and illustrated in Figure 2.

3.1.MERI Program

The CWCMA recognises the importance of having an active and effective MERI Program to inform their whole management cycle. The MERI Program is considered to be an integral component of CWCMA operations and refers to all the CWCMA activities under MERI.

3.2.MERI Strategy

As a document it provides a concise overarching statement of what the CWCMA's MERI Program consists of.

The strategy is a static document that describes the underlying CWCMA philosophy and drivers for MERI. The strategy includes descriptions of MERI objectives, principles and the broad program structure for delivering MERI.

3.3.CAP and Program Evaluation Schedule

This is a brief document that provides a timeline of the strategic program evaluations and major milestones for the CAP evaluation.

3.4. MERI Plans

These plans are developed on an as needs basis and provide the detail associated with the design and implementation of an evaluation. The MERI plan for an evaluation will reflect the scope, complexity and budget for the evaluation process.

Therefore the MERI plan for the CAP evaluation would be in place for longer than the program evaluation MERI plans and it would develop more detail over time as elements of the plan are further developed and implemented.

MERI plans are basically project plans.

3.5.MERI Program Products

The program products would consist of templates, procedures, evaluation reports, report cards, conceptual models, logic hierarchies, evaluation evidence etc.

The products would be stored and accessed from the relevant Business Management System web pages for MERI. These products would be developed on an as needs basis.

Figure 2 illustrates the relationship of the elements of the MERI Program described above.

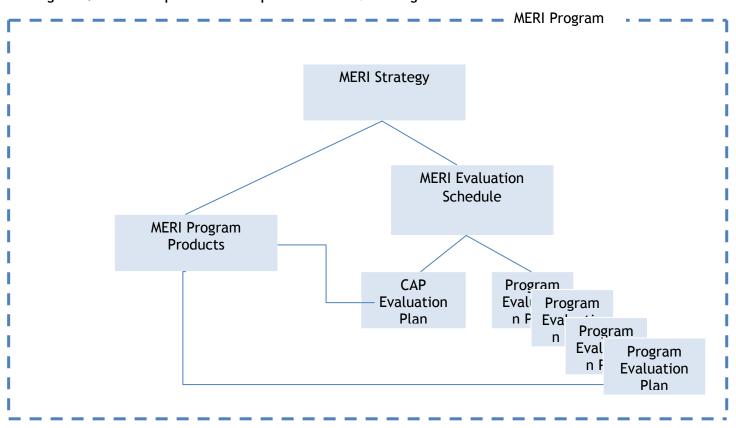


Figure 2: Relationship between components of the MERI Program

4. Relationship between MERI Activities

The detail of what monitoring, evaluation, reporting and adaptive management processes to be undertaken will be different for every evaluation due to the evaluation questions, temporal and spatial scale of the program, budget and timeframes. Given the likely differences there are still common elements across all MERI activities that will be implemented by the CWCMA. These include:

The **determination of context** - the process of understanding what the drivers for the evaluation are and the associated stakeholders.

Understanding the program logic - the process of defining the logic of the program and analysing it to determine assumptions and key evaluation questions within the context of what has been requested.

Determining information requirements - based on key evaluation questions determine what existing evidence may support the evaluation and establish monitoring programs to address any gaps.

Undertake evaluation - collate and analyse the evidence against the key evaluation questions and make interpretations and judgements about the program.

Communicating and using the findings - based on the determination of context, report the information in the required format to stakeholders for the evaluation and ensure a process to adaptively manage the program has been established.

The CWCMA has established within their MERI program a process that will inform the CAP evaluation as well as identify strategic or higher priority program evaluations. This process is based on the:

- development of logic hierarchies for each of the CAP themes
- the analysis of this logic to identify assumptions and prioritise that are based on the risk to achieving the targets and existing evidence
- determination and scheduling of the priority program evaluations based on the analysis of logic
- ensuring that the longer term monitoring requirements for the CAP targets are established
- using the CWCMA's business management system to support the information management needs of the MERI program
- undertaking priority program evaluations through the relevant collation and analysis of evidence and
- the appropriate reporting and actioning of the evaluation findings to support the CWCMA's ongoing adaptive management processes, including the annual NRM review.

5. The drivers for the CWCMA's MERI Program

The CWCMA has identified three very relevant guiding principles that are internal drivers for their MERI Program:

- an organisation that will adaptively manage their business to achieve their desired outcomes
- to be able to measure and report their performance against their desired outcomes and
- to use their evaluation findings to assist in strategic investment decisions.

There are three main external drivers for the CWCMA's MERI Program:

- 1. The NSW Catchment Management Authorities Act, 2003 which requires
 - regular review of CAPs by all CMAs
 - the audit of CAPs every five years by the NRC or an independent audit panel, and
 - annual reports to the Minister that include information on progress towards targets and management actions and compliance with the State Standard.
- 2. Reporting requirements of funding agreements with Australian and State Governments that require CMAs to report on accountability issues as well as progress towards catchment targets as part of a mid-term and end of term evaluations. Includes the The Australian Government Caring for Our Country outcomes and NRM MERI Framework requirements.
- On the recommendation of the Natural Resources Commission (NRC), the NSW Government has adopted the State-wide Standard for Quality Natural Resource Management (NRC, 2005). The audit process that the NRC will undertake includes:
 - an ongoing audit process of the CWCMA's compliance with the State Standard and
 - an assessment of the CAP implementation prior to the mid-term and end of term reviews. While not confirmed, this is likely to include a review of the logic that underpins the CAP.

There are other State and Federal agency policies and reports that while they do not have a regulatory impact on the CWCMA, will also be considered when designing and implementing elements of the MERI Program:

• the State MER Strategy (2006) and State Plan (2007)

the recent Australian National Audit Office report on NHT and NAP (ANAO, 2008).

6. Central West CWCMA's objectives for their MERI Program

The CWCMA's longer term objectives for their MERI Program can be summarised as:

- the maintenance of a culture for continuous improvement within the CWCMA
- the CWCMA's ability to evaluate their 10 year performance against the CAP and
- the maintenance of a robust MERI Program to determine performance.

The attainment of the longer term outcomes will be a result of achieving a series of shorter and medium term outcomes for the MERI Program. These are listed in Appendix 10.2.

7. Principles of MERI

A MERI Program will consist of different types of evaluations associated with the CAP or program evaluations. The evaluations will require the collection, analysis, use and communication of a wide range of information from many sources and with consideration of financial, ethical and practical issues. A set of principles can guide these processes, particularly when dealing with complex evaluations.

The following principles will be applied by the CWCMA:

Strategically plan and integrate the MERI Program across whole CWCMA business cycle

There is the potential for evaluation information to be used to inform other evaluations, where technically valid. The early analysis of program logic will help identify the opportunities to strategically plan evaluations.

Complement and consolidate relevant existing systems

A MERI Program should integrate and complement relevant existing systems and programs, where feasible.

Be cost-effective

The benefits of the information gained from undertaking an evaluation must outweigh the costs of planning and implementing the evaluation. That is, there will be various evaluations undertaken and the design and implementation for each should be "fit for purpose".

The MERI monitoring requirements must be relevant to evaluation questions being asked

The evaluation design for the CAP, and in particular the selection of performance indicators and monitoring requirements for the targets, must be relevant to the targets of the plan so that judgements on the performance of the CAP can be made. Additionally, any program evaluations should ensure that the monitoring implemented will satisfy the evaluation questions.

Apply ethical practices to MERI

Ethics is about the perception of what is right and wrong. In the context of MERI, ethics covers issues such as informed consent, appropriate behaviour, and storage and retrieval of study data. Ethical issues should be considered at the beginning of any evaluation and throughout all phases of the evaluation, whether an individual is commissioning, undertaking or participating in the MERI process.

Ensure the MERI Program is flexible

Natural resource management is an evolving discipline and is based on current "best practice" and best available information. Therefore the MERI Program will ensure that there is flexibility and review opportunities built in to manage new understandings or changes in the implementation of the CAP.

Develop MERI in partnership

Partnership approaches will greatly benefit capacity building and management of expectations for MERI, within or external to the CWCMA. In addition, the sources of evidence to meet the evaluation needs are likely to come from a variety of collaborators. As MERI and the CAP are both long-term processes, it is essential that these partnerships are also seen as long term.

Link to the adaptive management cycle

A MERI Program should be primarily used as a tool for the CWCMA to adaptively manage the implementation of their CAP.

Be consistent with the state-wide standard

The CWCMA is required to apply the elements of the State-wide Standard for Quality Natural Resource Management (NRC, 2005) in all aspects of its business, including the MERI Program. The MERI Program should always be considering the elements of the standard in its design and application.

8. MERI and the State Standard

The CWCMA's MERI Program will address all elements of the State Standard in various ways. Appendix 10.3 highlights how each of the elements of the Standard will be addressed by the MERI Program.

9. Risk Management for the MERI Program

Some of the strategic risks confronting the CWCMA that could be mitigated or adaptively managed by a robust MERI Program include:

- the need to have effective implementation of programs to meet targets
- lack of sufficient data and information
- discontinuation of Australian Government funding
- projects selected may not be aligned to the outcomes/targets of the CWCMA
- a project does not achieve the outcomes expected. This could be a result of :

- best science may not have been applied underlying assumptions to the project may be flawed
- audit processes are not in place to verify that contractors have delivered in line with agreements
- externalities, such as climatic changes, have lead to the project not delivering on desired outcomes
- systems and processes are not in place to facilitate the effective reporting and monitoring of projects and
- time-frame to measure achievement of change is beyond the time scale of the project/CAP.

The CWCMA's risk framework and risk register will provide more detail on the management of the risks listed.

10. Reviewing the MERI Strategy

Whilst the MERI strategy is a static document the CWCMA intends to review the information in this strategy every five years following the CAP evaluations. The review will consider the current CWCMA operating environment and associated government policies and strategies.

11. Appendices

- 11.1. Key Documents
- 11.2. The CWCMA's objectives for their MERI Program
- 11.3. The MERI Program's relationship with the State Standard

11.1. Key Documents

- ANAO. 2008. Regional Delivery Model for the Natural Heritage Trust and the National Action Plan for Salinity and Water Quality. Commonwealth of Australia, Audit Report No.21 2007-08.
- Central West Catchment Management Authority. 2006. Catchment Action Plan: Summary of Targets. Accessed from www.cw.cma.nsw.gov.au in February 2008.
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- Commonwealth of Australia. 2003a. National framework for natural resource management standards and targets. Accessed from http://www.nrm.gov.au/monitoring/index.html, in 2005.
- Commonwealth of Australia. 2003b. National natural resource management monitoring and evaluation framework, Accessed from http://www.nrm.gov.au/monitoring/index.html, in 2005.
- DECC. 2008. MER Framework for NSW CWCMAs (in publication)
- Natural Resources Commission. 2005. Standard for Quality Natural Resource Management. NSW Government, September 2005.
- NSW Government. 2006. The State Plan. From <u>www.nsw.gov.au/stateplan in 2008</u>.
- NSW Natural Resources and Environment CEO Cluster Group. 2006. NSW natural resources monitoring, evaluation and reporting strategy. Department of Natural Resources, NSW Government, Sydney.

Document ID

Short term (over next 12 months)

To develop a process for further development of the CWCMA's MERI Program that ensures:

- there is an increased awareness of the benefits of MERI
- there is a process to enable and promote continuous improvement culture throughout the CWCMA
- there is a process to inform future investment planning, based around the program logics for each theme and
- that there is 2-way engagement with theme teams on MERI issues.

To identify strategic program evaluations, their needs and implementation plans.

To ensure greater integration of the MERI elements within the CWCMA's MERI Program.

To have concise procedures and mechanisms to help initiate and implement evaluations.

That longer term monitoring needs against targets have been identified

To have an operational MERI plan

Medium term (2 to 5 years)

A culture for continuous improvement is embedded within the CWCMA

That the CWCMA is able to evaluate their five year performance (mid-term review) against the CAP

That the CWCMA has a robust MERI Program in place to determine performance

That staff are more comfortable with MERI concepts and undertaking evaluations

That processes for MERI, while formal, has demonstrated cost-benefits for the CWCMA

That there is a collaborative and co-operative approach to MERI across the CWCMA

That the CWCMA is using innovative ways to communicate performance to their various stakeholders

That MERI processes have been firmly embedded within the investment planning and implementation

That CAP targets have been reviewed and updated

Longer Term (5 to 10 years)

That a culture for continuous improvement is maintained within the CWCMA

That the CWCMA is able to evaluate their 10 year performance against the CAP

That the CWCMA maintains a robust MERI Program to determine performance

11.3. Relationship between the MERI Program and the State Standard

The standard's required outcome:	The MERI Program Components:
Collection and use of knowledge: Use of the best available knowledge to inform decisions in a structure and transparent manner.	Information collection Assessing the relevance of the different sources of evidence to address the evaluation questions Information management Reporting and using findings
Determination of scale: Management of natural resource issues at the optimal spatial, temporal and institutional scale to maximise effective contribution to broader goals, deliver integrated outcomes and prevent or minimise adverse consequences.	Evaluation context Information management Assessing the relevance of the different sources of evidence to address the evaluation questions Evaluation design Reporting and using findings
Opportunities for collaboration: Collaboration with other parties to maximise gains, share or minimise costs, or deliver multiple benefits is explored and pursued wherever possible.	Evaluation context - stakeholder analysis Program Logic analysis Information management Analysis of information Assessing the relevance of the different sources of evidence to address the evaluation questions Reporting and using findings
Community engagement: Implementation of strategies sufficient to meaningfully engage the participation of the community in the planning, implementation and review of NRM strategies and the achievement of identified goals or targets.	Evaluation context - stakeholder analysis Information management - external login to the Business Management System Assessing the relevance of the different sources of evidence to address the evaluation questions Information collection - using information from investment monitoring by landholders or community groups Reporting using findings
Risk management: Consideration and management of all identifiable risks and impacts to maximise efficiency and effectiveness, ensure success and avoid, minimise or control adverse impacts.	Evaluation context including stakeholder analysis Program Logic analysis Information management Assessing the relevance of the different sources of evidence to address the evaluation questions Evaluation design Reporting using findings
Monitoring and evaluation: Quantification and demonstration of progress towards goals and targets by	Implementation of the MERI Program

Document ID

The standard's required outcome:	The MERI Program Components:
means of regular monitoring, measuring, evaluation and reporting of organisational and project performance and the use of the results to guide improved practice.	
Information management: Management of information in a manner that meets user needs and satisfies formal security, accountability and transparency requirements.	Implementation of the MERI Program

Resource Condition Monitoring Requirements

Prepared for

Central West Catchment Management Authority

Final June 2009



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Resource Condition Monitoring Requirements for Central West CMA

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Acronyms and Abbreviations

- AG Australian Government
- ANAO Australian National Audit Office
- CAP Catchment Action Plans
- CMA Catchment Management Authority
- CWCMA Central West CMA
- DECC Department of Environment and Climate Change
- DPI Department of Primary Industries
- DWE Department of Water and Energy
- MERI Monitoring, Evaluation, Reporting and Improvement
- NRC Natural Resources Commission
- NRM Natural Resource Management

1. Introduction

Purpose of the review

The Central West Catchment Management Authority (CWCMA) requested a review of their resource condition monitoring needs be undertaken. The aim of the study is to identify longer term resource condition monitoring requirements and make recommendations on how best to address these requirements.

To achieve this aim, the review addressed several tasks:

1. The analysis of the CWCMA's revised logics to analyse the relevance of the existing evidence against the logics

2. The identification of key evaluation questions and the drivers for those questions and

3. The identification of the resource condition measures against the longer term outcomes in the CWCMA's revised logics

Current changes in the CWCMA's operating and strategic environment

During this review, the CWCMA identified several processes that were likely to influence the way they managed natural resource management (NRM) strategically and operationally. The operational changes may be influenced by the Australian Government funding model for NRM, "Caring for our Country" while the strategic influences maybe associated with the review of the CWCMA Catchment Action Plan's targets.

These changes have the potential to impact on both where best to invest and how best to invest. This will in turn influence the approach to some of the monitoring, evaluation, reporting and improvement processes employed by the CWCMA.

A third influence on the CWCMA's investment in relevant resource condition monitoring is the current review of the State Monitoring, Evaluation, Reporting (MER) strategy commissioned by the Department of Environment and Climate change (DECC).

The relevant changes are briefly discussed below in terms of how they may impact on this review.

Caring for Our Country

The CWCMA identified that they may need to re-focus the process for investment of funds received from the Australian Government under the new "Caring for our Country" funding model. The Natural Heritage Trust 2 (NHT2) finished in June 2008 and a new NRM initiative, "Caring for our Country", commenced on the 1 July 2008. The new initiative provides an integrated approach to funding NRM and invites proponents from a larger pool than just the regional NRM bodies. The CWCMA has stated that they are looking at re-focussing their investment plan due to the likelihood of less Commonwealth funding through Caring for Our Country.

The shifting of the investment strategy to focus more on the delivery of training incentives that meet Caring for our Country priorities will change the management intervention model that is expressed in the current program logics. Therefore while the CMA may have CAP targets expressed as desired resource condition outcomes, the evaluation focus to understand the contribution of the CMA's investment towards those targets changes.

Review of the Catchment Action Plan

The CWCMA has noted that they intend to complete the review of their CAP in 2010. There are several drivers for undertaking this review.

Section 26 of the *Catchment Management Authorities Act 2003* No 104 identifies the requirements for the periodic audits of the plans. In 2006 the Natural Resource Commission's recommendation of the CWCMA CAP to the Minister highlighted the need for the CMA to review their CAP within 18 months of Ministerial approval (NRC, 2006).

From the CWCMA's perspective, new knowledge regarding their catchment assets has been gained and the operating environments for CMAs have changed significantly since the CAP was approved by the Minister in 2006.

In 2008 the CWCMA developed program logics as part of their monitoring, evaluation, reporting and improvement (MERI) process. This resulted in logics models for each of their broad natural resource asset classes (land water biodiversity and community themes). These themes are different to the current CAP targets as illustrated in Table 1. The main difference illustrated in Table 1 is the dissemination of salinity activity across the relevant themes and the merger between the people and heritage themes.

2006 CAP Targets	2009 logic targets (longer term
	outcomes)
Vegetation	Biodiversity (including vegetation)
By 2016, 1,200,000ha (13%) of the catchment area is managed primarily to maintain or achieve optimal native vegetation condition, and all vegetation types are represented in the catchment.	Net increase extent and connectivity and improvement in the condition of native vegetation
Biodiversity	Increased extent and improved condition of native fauna habitat (terrestrial & aquatic)
By 2016, 460,000ha (5%) of the catchment is managed primarily for biodiversity outcomes (aquatic and terrestrial) including ecosystem diversity.	Reduced impact of feral animals and environmental weeds
	Support the recovery of threatened species populations & ecological communities
Soil	Land
By 2016, 1,600,000 ha (20%) of agricultural land in the catchment is managed to meet critical thresholds	Increased land area managed within its capability
for a range of landscape specific criteria	Improved soil health and condition in the catchment
Water	Water
By 2016, improve surface and groundwater system health across the catchments, as measured by: A 5% reduction in the modelled result for suspended sediment	Improved condition of riverine ecosystems
Temperature to be maintained or restored to within 2 degrees Celsius of median levels (ANZECC guidelines, 1992)	
A reduction in the duration of blue-green algal blooms duration above the high alert level	
No detection of hazardous chemicals above ANZECC guidelines, 2000	
Faecal coliforms reduced below primary contact levels at key sites in catchment	

2006 CAP Targets	2009 logic targets (longer term outcomes)
Flow rules are in operation to meet the long term extraction limit and environmental water requirements, as defined by Water Sharing Plans.	
	Improved condition of GDEs
	Improved condition of important wetlands
People and Community	Community
By 2016, increase the level of awareness and understanding of NRM within the catchment.	Engaged community practicing and valuing NRM
By 2016, increase the capacity of the community to participate in programs leading to improved NRM.	Increased understanding & stronger relationship between aboriginal and non-aboriginal communities
By 2016, increase the level of engagement between the non- Aboriginal community and the Aboriginal community in NRM.	
By 2016, increase Aboriginal	
community engagement in NRM	
Cultural Heritage	
Increase the protection of Aboriginal and non-Aboriginal significant sites within the catchment	
Salinity	
By 2016, EC readings in the 50 th and 80th percentiles respectively will be: Macquarie River at Carinda 500 EC and 800 EC	
Bogan River at Neurie Plains 550 EC and 1450 EC	
Castlereagh River at Coonamble 315 EC	
By 2016, salt loads in the 50th and 80th percentile respectively will be:	
Macquarie River at Carinda 35,000 tonnes/yr and 65,000 tonnes/yr	
Bogan River at Neurie Plains 30,000 tonnes/yr and 55,000 tonnes/yr	
Castlereagh River at Coonamble 18,000 tonnes/yr	
By 2016, optimum land use practice implemented (minimising leakage) on 300,000ha (5%) of high risk salinity hazard landscapes	

While CWCMA have identified INFER¹ as the main vehicle for the CAP target review, they also acknowledge that the process for CAP review commenced in 2008 with the revised thinking around the organisation of their CAP themes, as illustrated in Table 1.

In relation to this report of resource condition monitoring needs, the CAP review may result in different definition of their targets and hence revision of some specific monitoring requirements in terms of what needs to be monitored or where the monitoring should be focussed.

Review of the State Monitoring, Evaluation and Reporting Strategy

The Natural Resource Commission's (NRC) report on the effective implementation of the catchment action plans (NRC, 2008) recommends that the "NSW Government independently reviews the implementation of the MER Strategy to improve and accelerate its progress."

The State MER Strategy was agreed to by the State Government in 2006 as a cross agency mechanism to re-focus resources and co-ordinate a system for monitoring evaluating and reporting natural resource condition against the state targets (NRC, 2008).

An independent review on the MER Strategy has recently been implemented through the Department of Environment and Climate Change (DECC). It is understood that it is due to be completed by the end of June 2009.

Without pre-empting the MER strategy review findings, there is the potential to influence resource condition requirements of the CMA directly and indirectly through:

• A recommendation to revise the state targets. While this should not impact on target priorities and definitions at the CMA scale, the CWCMA has an obligation to be able to demonstrate how it is contributing to the State targets

• There may be a re-focus on how the targets will be measured and resources committed to the targets. The CWCMA is currently reliant on

¹ INFER – Investment Framework for Environmental Resources, <u>http://cyllene.uwa.edu.au/~dpannell/inffer.htm</u>

the provision of technically valid data from the State theme programs as measures against their catchment targets.

Key Recommendations to inform CAP Review

The key recommendations made within different sections of the report are listed below:

The CMA has regionally derived information that should be collated and made available to the CAP target review process. Currently some of this information is hard to find as, at the time of this project, the CMA was operating off three servers and the documented information had been dispersed. An audit of internal material held across all offices would be useful before the CAP review using INFER

The regional knowledge of staff should be documented and ideally supported by supported with other information.

Table 2 in the body of the report can be used to assist with the INFER process and then supported by some of the other collated evidence suggested in the first recommendation.

If catchment targets are kept broad then the management targets could be used to provide more specificity either regarding priority areas, assets or threats.

The CMA reviews the required measures against the targets once the target review is completed.

Structure of the Report

The report has been presented in a format that is intended to illustrate a logical approach to informing monitoring needs. That is, understanding the context of the situation, determination of key evaluation questions and then analysis of monitoring needs. Therefore the report has been structures as follows:

Section 1	Introduction outlining the purpose of the review and background information (This section).
Section 2	Context for the MERI program and monitoring needs

Section 3	The review of existing evidence against the current program logics
Section 4	Determination of key evaluation questions
Section 5	Identification of resource condition monitoring needs for catchment targets
Section 6	Recommendations for advancing monitoring requirements
Section 7	References for documents reviewed and evidence documents
Section 8	Various Appendices

2. Context for CWCMA MERI and Monitoring Needs

The purpose of this section is to describe conceptually the monitoring needs to address the CWCMA's MERI strategy requirements.

CWCMA drivers for MERI

The CWCMA's MERI Strategy (2009) identified internal and external drivers for their MERI needs. Internally there are three very relevant guiding principles that underpin their MERI Program:

- an organisation that will adaptively manage their business to achieve their desired outcomes
- to be able to measure and report their performance against their desired outcomes and
- to use their evaluation findings to assist in strategic investment decisions.

The main external drivers for the CWCMA's MERI Program include:

The NSW Catchment Management Authorities Act, 2003 which requires

- review of efficiency and effectiveness of the authority (section 12)
- periodic review and auditing of plans (section 26), specifically:
 - o an authority to keep its CAP under regular review
 - The Minister is to ensure that a catchment action plan is audited, at intervals of not more than 5 years, and
- annual reports to the Minister that include information on progress towards targets and management actions and compliance with the State Standard (section 17).

Reporting requirements of funding agreements with Australian and State Governments require that CMAs report on accountability issues as well as catchment targets as part of mid-term and end of term evaluations. This includes the requirements under the recently implemented Caring for our Country initiative.

The NRC has a statutory role to audit whether the CWCMA's CAP is being implemented effectively in terms of its compliance with the Standard for Quality Natural Resource Management and how the implementation of the CAP is contributing to the achievement the state-wide targets (NRC, 2009).

Conceptualising monitoring requirements for MERI

The internal and external drivers listed above provide clear direction as to the minimum requirements for evaluation as illustrated in Figure 1 below. Figure 1 represents a generic CMA program logic on the left. It assumes a natural feedback loop that regularly informs the CMA activities and foundational needs or inputs. The internal and external drivers for evaluation activities have been aligned against the most relevant stage of the logic. For example the need to report performance against the outcomes will evaluate and report against the progress towards the desired outcomes.

The last column on the right provides an overview of what lines of evidence would be used to support the various evaluations.

It is evident from Figure 1 that multiple lines of evidence will be required to inform various evaluation activities and that the multiple lines of evidence will be required at different stages of CAP implementation. That is some will need to be monitored and reported more regularly (eg accountability information) and others monitored less regularly (eg measures for biodiversity outcomes). Multiple lines of evidence may consist of qualitative and quantitative information, may be sourced from existing evidence and may be collected specifically to satisfy an evaluation requirement.

The other aspect illustrated by Figure 1 is that an evaluation on performance against desired outcomes or the contribution to State Targets will not only require relevant monitoring information against the desired outcomes but other evidence to support how the CMA's activities are contributing to the targets and the rationale to support the logic. For example evidence associated with the outputs from investment activities, which is also collected as part of investment and annual reporting.

Generic CMA Logic	MERI Drivers	Examples of Lines of Evidence
Longer term outcomes (catchment targets)	CMA Act	Monitoring programs against targets
↑	Internal drivers	Evidence reviews informing responses to relevant interventions
Intermediate outcomes		Specifically commissioned evaluation studies
↑ Investment outputs		Reporting of annual milestones
	External funding requirements	Reporting of outputs (including spatial information)
	CMA Act	Investments made (\$), how and where
	Internal drivers State Standard	Relevant evidence reviews informing
CMA Investment activities		intervention approaches
↑	Internal drivers State Standard	Relevant evidence to inform threats & assets eg:
Foundation		Existing catchment studies
		Other catchment studies assessed for relevance
		External peer reviewed literature

Figure 1: Generic schematic of relationship between catchment logic, drivers and reporting needs

As outlined in DECC (2009), the use of a process such as multiple lines and levels of evidence, underpinned by sound evidence based practice enables a CMA to be strategic in their investment in monitoring. That is:

- through the analysis of drivers and associated key evaluation questions you know what information needs to be collected (eg catchment targets)
- through a review and synthesis of existing evidence you are able to increase the rigour of your logic and investment decisions

An analysis of the information needs against existing information and monitoring program will then enable the CMA is able to identify relevant information gaps that should be invested in.

3. Evidence review against program logics

This section discusses the relevance of the CWCMA's existing evidence in support of the revised program logics.

It is important to note that this assessment of evidence has focussed on the planning value of the evidence as opposed to the performance evaluation value of the evidence.

Progression towards the 2009 program logics

In January 2008 the CWCMA undertook training in MERI principles but specifically focussed on program logic for each of their CAP themes. Therefore the CWCMA's original program logics were developed in a workshop environment and considered to be incomplete.

Then in May 2008 the CWCMA, through their theme teams, refined the logics from the workshops and undertook an initial analysis of logics through the identification of assumptions and supporting evidence. At this time the CWCMA reduced their number of themes to four.

Finally, the logics were further refined so that there was greater consistency across some the themes. It was the intention of the CWCMA to have the logics generic at this scale with more specific detail particularly regarding interventions or priority areas within project logics.

Approach to review of evidence against logics

The objective of the evidence review was to consider the relevance of the evidence that had been identified in the May 2008 workshops against the logics in general but particularly against the January 2009 logics.

This project did not involve a full critical appraisal of evidence items. This is only possible when the evidence can be appraised against a specific question or assumption such as the relevance of the intervention. Such an assessment is more detailed and would involve an assessment of the study design, potential for bias, spatial relevance etc.

The evidence to support investment rationale will vary between the program and project level. Program level rationale is driven by the understanding of landscape, social and or economic processes and selecting strategies and locations to intervene in those processes. At the project level, evidence to support the rationale relates to the effectiveness and appropriateness of specific interventions that employ those selected strategies to manage specific issues.

Within biophysical programs, evidence at the program level will largely relate to how certain landscape processes are resulting in the reduction of values we associate with natural resources and strategies to manage those processes. For example, with salinity this may lead to strategies of reducing recharge, or in the case of biodiversity, increasing habitat connectivity. Beneath the program level, the evidence will relate to the effectiveness of individual interventions to deliver on those strategies.

Evidence relevant to community program design will most often include social theory at the individual and organisational level. At the project level evidence will relate to the effectiveness of interventions to increase the capacity of individuals and organisations to participate in the management of natural resources and subsequently make behavioural and practice changes.

There is a reference listing at the end of this report for all the items of evidence found and reviewed from the May 2008 listing. The item of evidence and key comments were stored electronically in a web based.

Overall comments about the individual pieces of evidence

The following dot points provide an overview of key observations from the review of existing logic evidence:

- A significant amount of the evidence listed was beneficial to assist in undertaking foundational activities such as prioritising where in the landscape investment should be, but little was suitable against other levels of the logic
- While it is appropriate to associate evidence with theme based program logics at the intermediate outcome to long term outcome level, it is difficult to do so at lower levels of the logic. This is because the output

level of the logic is a group of interventions not a specific intervention and evidence rarely relates to groups of interventions.

• Much of the evidence listed were Best Management Practices (BMPs). While these do document interventions that are supported by the CMA, they cannot in our opinion be considered the best available evidence to justify the selection of interventions made by the CMA (this is explained in more detail below, under BMPs).

• Time spent at the Dubbo office, showed that there are significant amounts of high quality evidence that is not currently used to support the theme level program logics. While assessment of this was outside the scope of this project, it is encouraging to see the value of what is already available.

• Overall, few areas of the generic theme logics have sufficient evidence to justify the selection of interventions, nor the assumed relationships between interventions and intermediate to long term outcomes. This project is however a good first step in achieving this.

The following discussion provides some more detail against some of the critical findings.

BMPs as evidence

While BMPs have a role in informing landholders of good practice to employ in particular situations, they are not useful as lines of evidence against the logic unless supported by the investigations that were used to develop the definition of good practice.

BMPs that were assessed but not documented against the logics because they didn't include the investigative information that supported them were:

- Habitat features of the Central West Forests woodlands and grasslands
- Valuing native vegetation
- Native pasture management
- Aquatic habitat (more evidence related detail in the assessed riparian guide)

- Channel erosion (more evidence related detail in the assessed riparian guide)
- Gully erosion (more evidence related detail in the assessed riparian guide)
- Livestock erosion in riparian zones (more evidence related detail in the assessed riparian guide)
- Riparian vegetation (more evidence related detail in the assessed riparian guide)
- Wetlands (more evidence related detail in the assessed riparian guide)

External evidence to show influencing activities leading to immediate results

The CWCMA's incorporation of influencing activities into its logic structure puts it in a good position to associate evidence regarding practice change. This is difficult when such activities are siloed into a community theme logic and don't relate directly to a physical result.

To show an evidence based approach to the selection of influencing activities, the CMA could consider an assessment of 'barriers to adoption' of specific physical activities. These barriers are then used to justify the investment in influencing activities from incentives through to training.

Experience based evidence

While experience of staff is a valuable source of evidence for decision making, it obviously cannot be used to justify investment decisions without being documented. It is important to make the distinction between evidence drawn from specific experiences (i.e. observation) and opinion. Rigour associated with opinion or oral histories can also be increased through corroboration from other lines of evidence.

We suggest consideration be made to documenting more staff experience once the new investment strategy and CAP revision is completed. The completion of these activities will provide greater clarity on the experiential evidence that should be collated first.

The prevalence of non-referenced summarised information

An observation made during assessment of the evidence is that there is a greater prevalence of summarised information than scientific literature. This is understandable given summarised information presents more concise concepts in a smaller amount of time. However, the majority of information was not referenced. Many pieces of summary had a reading list, but the specific concepts discussed are not referenced. This is an important distinction as it is impossible then to track these claims back to primary source evidence.

The significant amount of evidence at Dubbo not yet documented

There are many pieces of very good quality evidence at the Dubbo office alone that have not been mentioned by staff to support the rationale behind the program logics for each of the themes. An audit of internal material held across all offices would be useful before the CAP review using INFER. This is discussed in more detail below.

Evidence that was identified at earlier workshops but not found for this assessment

There were approximately 14 items that were listed in the logic development workshops that could not be found for this assessment process. These are listed below:

- Rob Taylor project and Tim Baker
- Austen et al 1999
- The long term effects of lime, gypsum and tillage on the physical and chemical properties of a sodic red-brown earth
- On the surface: What kind of soil are you farming
- Bakers 2000 study
- Target project 2003
- Aquifer risk assessment DLWC 1997
- Wetlands mapping
- Groundwater Flow System of CW
- Hydro-Geomorphic landscapes
- EMP for Macquarie Marshes

- Engaging in NRM with aboriginal communities
- Aboriginal cultural values in native vegetation management in the central west DIPNR 2006

Note that complete bibliographic references were not provided for these items, but were developed for evidence that was assessed as part of this review.

Placing evidence against levels of the theme logics

Once the individual pieces of evidence were assessed an attempt was made to start analysing their value against the theme logics. Two main issues were encountered when doing this and are discussed in more detail below:

The low value of categorising evidence as 'foundational' on the logics The vast majority of the evidence assessed would be used by the CMA in the foundational inputs level of the logics.

To provide what we believe to be more value to the CMA, we have categorised the evidence against specific questions that are commonly part of any investment planning framework (Table 2). We are aware that the CMA is about to invest time in applying the INFFER process and this will be directly beneficial to that process but not proposed as the final step. As identified above there were also many references not originally identified for the evidence review.

The generic nature of output to outcome links in theme level logics

Due to the low amounts of evidence being associated with the higher level of the logics this was not a barrier to finalising this project, but is more a comment for consideration with future management of evidence at the CMA.

One requirement to assess the quality of evidence items (i.e. conduct critical appraisal) is an answerable question, or an assumption about a specific cause and effect relationship. As described at the beginning of this section evidence reviews for a more strategic logic (eg generic theme logics) poses slightly different questions to support the rationale than an evidence review associated with project logics where the interventions are more specific.

One other way to satisfy a required level of specificity is the linking of project level logics to the themes. We are aware that the CWCMA has commenced this process

through their annual investment planning, with it now being a requirement of individual project proposals.

A categorisation of evidence against specific planning questions and subject

As discussed above, associating evidence with the foundational level of the logic, where nearly all the evidence is, was not considered valuable for the CMA. What we have done instead, is detailed that level of the logic with specific questions. By doing this, the CMA will be able to refer to this table when undertaking the INFFER process.

Please note that further categorisation of the evidence will be possible (and would be valuable) once the CMA has select asset, threat and intervention classifications as part of the INFFER process. For this exercise however, the themes have been used as the subject classifications.

The itemised evidence listed in Table 2 have been presented in Appendix 1 in numerical order and with a brief description of the item.

Foundational input question	Theme			
	Biodiversity ¹	Community	Land	Water
What and where are our assets?	1, 4, 8, 16, 21, 27	2, 6	5	
What are the values of our assets? ²	1, 4, 8, 11, 16, 18, 21, 27	2, 6	5	7
What processes are threatening the values of our assets?3	1, 3, 8, 11, 12, 19, 22, 26, 28, 29		3, 5, 6, 19, 20	
What is the impact of the threatening processes on the values of our assets over time?	1, 3, 8, 22, 26, 28		3, 5, 6	

Table 2: A categorisation of evidence items against specific questions within the foundational level of theme logics.

Note the numbers relate to the evidence item numbers listed in Appendix 1 ¹Assuming native vegetation falls into this theme and not land or water

²Some evidence in this category would assist to categorise values associated with assets but does not provide data on the values of actual CW region assets (e.g. Item 7, 18)

³Some evidence in this category would assist to categorise threats associated with assets but does not provide data on the actual threats to specific CW region assets (e.g. Item 11, 12)

Some comments on the quantity of evidence

It is important to note that these comments only relate to the evidence assessed as part of this project. It does not necessarily mean the CMA is deficient in evidence in these areas as this is by no means a comprehensive audit of evidence currently available.

- Clearly the theme best supported by foundational evidence is biodiversity.
- The community and water themes are particularly underrepresented.
- There is known to be good evidence for questions related to soil and soil values in the land theme, however the soil mapping was not assessed as part of this project.

• There were very few pieces of evidence that related to the activity level and above in the logics. Those that did mostly related to economic outcomes from the adoption of practices.

4. Key Evaluation Questions

This section describes the key evaluation questions that the CMA will need to plan for and address.

How key evaluation questions are used

Key evaluation questions are the high level questions that provide focus in the evaluation design. Often there will be a set of nested or more specific questions that may then sit under the key evaluation questions. These nested questions may be a result of issues / questions raised within the CWCMA at different phases of CAP implementation or to address priority assumptions within a logic model.

This report was only to identify the key evaluation questions.

Identification of key evaluation questions

Key evaluation questions are typically identified from analysis of the drivers. The drivers for the CWCMA were discussed in Section 2 of this report and Table 3 lists key evaluation questions against different internal and external drivers. The table has also been split to reflect key evaluation questions at the strategic (CAP and investment strategy) and operational (projects implemented).

From Table 3 it is obvious the information that supports the lower level of the logic will be drawn upon to also support an evaluation of contribution to the targets.

Key Evaluation Questions	Driver	Synopsis of types of information required to support question	
CAP & Investment Program			
Did we achieve our catchment targets	CMA Act	Compare desired with actual measures for outcomes	
Or at mid -term :	Internal driver		
How are we progressing towards our targets? (effectiveness)	Audit against state standard		
Did the investment from the CMA contribute to		Use evidence that supports logic	
the targets?(effectiveness)		Lines of evidence from lower in the logic (ie where investment has occurred and outputs for the investment)	
		If evidence is insufficient may require specifically commissioned monitoring to support contribution.	
Could we change the way we deliver our investments (can we further maximise our	Internal Audit against state	Desk top review of investment performance based on accountability/milestone reports	
results through program changes)? (efficiency)	standard	Review of good practice in related interventions	
	CMA Act	Survey of staff and stakeholder grps	
Are we meeting our investment strategy	Internal	Governance/ milestone reports	
milestones and outputs?	CMA Act	Internal reflection process to understand what is working	
	Funding organisation	well, what isn't and opportunities	
Are the CAP targets relevant to the needs? (appropriateness)	Internal Audit against state	Evidence for assets, threats and transparent approach fo defining targets	

Table 3: Key Evaluation Questions for the CMA

Key Evaluation Questions	Driver	Synopsis of types of information required to support question
	standard	
Project		
Did we achieve our project outcomes?	Internal Funding organisation	The direct measurement of project outcomes may depend on the project. Will require information on outputs
Are we meeting our project milestones and outputs	Internal	Rigorous logic supported by evidence Base information that informs accountability / milestone reports Reflection process/discussion of the project team
Will the project contribute to our targets?	Internal CMA Act Funding organisation	Desk top review based on rigorous logic and assessment of linkage to CAP logic

5. Monitoring Needs for Catchment Targets

This section discusses the monitoring needs against the current program logic catchment targets (ie longer term outcomes).

Approach

The initial focus is on identifying potential monitoring attributes against the catchment targets as these require a determination of change over time and longer term monitoring programs will need to be established for these. The other issue is that the Catchment Management Authorities Act 2003 requires that there is reporting against progress towards the catchment targets. Therefore whether the CMA undertakes this monitoring directly, in partnership (ie collaborative or joint funding) or through a commercial agreement, there will be a need to monitor the catchment targets.

The success of any monitoring program depends in part on the choice of attributes or measures. The measures should reflect either directly or as surrogates the purpose of the monitoring program. Without a clear purpose monitoring programs may result in (Bryce et al., 2000):

- the generation of data that will not address the monitoring purpose;
- • in-efficient monitoring programs
- monitoring programs that have the potential to either stop and start or be changed over time to address another need.

Therefore the attributes for the respective catchment targets must reflect the catchment targets either directly or through surrogates. In addition they need to be efficiently monitored over the period of the CAP at least.

As an example Of the above statement:

Target	Direct measure	Surrogate
Improvement in soil	Soil organic	Change in practices that would result
organic carbon	carbon	in improved soil organic carbon

Required measures against current targets

In Section 1 we discussed some of the changes that the CWCMA currently faces that have the potential to impact on the final definition of monitoring needs. While that discussion will not be repeated in this section the CWCMA needs to be aware that it may need to either review what attributes are being monitored and/ or review how the monitoring will be undertaken.

Table 4 identifies the monitoring attributes against the current logic catchment targets. It is apparent from the table that the generic nature of some of the targets makes it difficult to focus on the most important monitoring requirements. For example reduced impact of feral animals and environmental weeds would require a statement of intent documented of what the major threats are and their impact. This would not only drive the focus of investment but also monitoring to determine the impact of that investment. The INFERR process should identify the key assets and threats to enable a prioritisation process. This may be then be reflected by having more specific management targets or in the project logics and hence investment strategies.

Current Logic Catchment Target	Monitoring attributes against logic catchment targets
Net increase extent and connectivity	Current extent of NV and type
and	Current loss of NV and type
improvement in the condition of native vegetation	NV condition over time (based on national vegetation condition classification)
Increased extent and improved condition of native fauna habitat (terrestrial & aquatic)	Need to define habitats of importance for the CWCMA as it would be inappropriate to monitor all
Reduced impact of feral animals and environmental weeds	Assume will focus on Weeds of National Significance due to Cfoc but maybe dependent on INFFER process
	Distribution, abundance and impact of priority invasive species
Support the recovery of threatened species populations & ecological	Would depend on the relevant threat abatement plans
communities	NB ecological communities defined in NLWRA Biodiversity paper

Table 4: Suggested monitoring attributes against the logic catchment targets

Current Logic Catchment Target	Monitoring attributes against logic catchment targets
	NV extent type and condition
Increased land area managed within	Land capability mapping
its capability	Land use and management surveys
Improved soil health and condition in	Change over time of:
the catchment	soil organic carbon
	erosion
	soil pH
Improved condition of riverine	Based on SRA:
ecosystems	Critical: macro-invertebrates, native fish, riverine vegetation
	Contextual: hydrology, physical form
Improved condition of GDEs	Need to first identify existing GDEs and identify priority ones (would probably occur through the INFFER process)
	Would monitor change in condition over time but some of these parameters may change from GDE to GDE
	May consider threats for different categories of GDE and then use change in threat as a surrogate as well as leading indicator.
	Surrogate associated with depth to groundwater could be used
Improved condition of important	Define important wetlands
wetlands	Trend over time of wetland extent and condition:
	Area – change in area over time
	Hydrology – change in water regimes
	Biota – change in wetland vegetation
Engaged community practicing and valuing NRM	Need to define engaged , practicing and valuing
-	Surrogate:
	Change over time of community engaged in NRM
Increased understanding & stronger relationship between aboriginal and non-aboriginal communities	Need to define stronger relationship and the underlying intent of this statement in the context of the CMA's activities.
	Surrogate:
	Change over time of indigenous partnerships

While indices can enable a lot of relevant parameters to be reported in a simple manner, from the CMA perspective they will also need to "unpack" or disaggregate

any indices so that they have a better understanding of what the key parameter maybe that is influencing the indices and whether they can, through CWCMA investment, influence change.

To assist the CMA in their review of CAP targets, the table in Appendix 2 has been developed to illustrate the potential relationship with the current logic targets, state targets and current relevant Caring for our Country 5 year outcomes.

6. Key Documents Reviewed

General

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Evidence Review

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8. Appendices

Appendix 1: Evidence reviewed by item number Appendix 2: Relationship between targets across scale

Appendix 1: Evidence reviewed by item number

ITEM#1: 1: 1:100,000 map sheets of the central west catchment: description and assessment of landscape, habitat, vertebrate diversity, and threatening processes - Volume 4a

Туре	Report
Author	D Goldney
Author	A Kerle
Abstract	This report provides a description of the 1:100,000 mapsheets developed by Goldney and Kerle as part of this project. It importantly lists the evidence used to establish conservation value and other criteria within the mapsheets.
Report Number	Volume 4a
Place	Dubbo
Institution	Western Research Institute Ltd
Repository	CWCMA Dubbo network
Date Added	Monday, 20 April 2009 8:54:25 AM
Modified	Monday, 20 April 2009 9:18:42 AM

This provides evidence of:

• How the mapsheets of this series were produced, including the

evidence used to establish conservation value of habitat and vertebrate

fauna

ITEM#2: Central west awareness and attitudes to natural resource management (NRM) benchmarking survey

Туре	Report
Author	M Fenton
Author	A Rickert
Abstract	The primary objective of this project was to benchmark community awareness, attitudes and beliefs in relation to NRM and the CMA. The project provides the basis for benchmarking the existing level of community attitudes, awareness and involvement in natural resource management in the Central West and provides a reference point for ongoing monitoring and evaluation of the CMA's community engagement and capacity building over the life of the CAP. It is important to recognise that this is a benchmarking study and not an explanatory study which seeks to identify and explain the underlying causes or determinants of community attitudes or beliefs.
Place	Dubbo
Institution	Environment and behviour consultants
Date	2007
Repository	CWCMA Dubbo network
Date Added	Monday, 20 April 2009 9:02:08 AM

Modified Monday, 20 April 2009 9:07:04 AM This provides evidence of:

- Attitudes and awareness of environmental issues in the Central West catchment in 2007
- Beliefs about environmental health
- Willingness to apply for funds
- What landholders would spend funding on
- Community participation in environmental groups
- Awareness of the CMA

ITEM#3: Central west catchment environmental weeds strategy

Туре	Report
Author	SKM
Abstract	The Central West Catchment Environmental Weeds Strategy ('the Strategy') was prepared to assess the current status of environmental weeds in the Central West Catchment, in consultation with the Central West Catchment Management Authority, State Government Agencies, Local Control Authorities and community organisations. This Strategy and the subsequent list of 124 environmental weeds attempts to direct attention to natural ecosystems which are currently under threat from environmental weeds. The Strategy also provides a risk management approach for environmental weeds by identifying potential and emerging environmental weeds, identifying the vectors of weed distribution and determining the environmental conditions which favour some plants becoming environmental weeds.
Place	Dubbo
Institutio n	Sinclair Knight Merz
Date	2008
URL	http://www.cw.cma.nsw.gov.au/pdf/Reports/CWCMA_Report_environm entalweedsstrategy_reports_jun08.pdf
Date Added	Monday, 20 April 2009 10:55:29 AM
Modified	Monday, 20 April 2009 10:58:19 AM

This provides evidence of:

- The range of environmental weeds currently impacting on the central west catchment
- What the priority weeds are for control

• Method for prioritising investment in environmental weeds

(discusses options for this and recommends one)

- Ways to engage the community
- The threatening processes that occur as a result of environmental weeds

ITEM#4: Habitat features of the central west forests, woodlands and grasslands

Туре	Document
Author	CWCMA
Abstrac t	This information sheet helps land managers recognise landscape features that provide important habitat for wildlife. These habitat features are essential to healthy landscapes, native vegetation and ecosystems. By recognising their value and role, we can work together to protect and nurture critical habitats, maintaining functional natural environments for future generations.
Publish er	Central West Catchment Management Authority
Date	Not provided
URL	http://www.cw.cma.nsw.gov.au/pdf/Information/BMPs/CWCMA Information on_BMP_0279_NativeVeg_Habitat_features.pdf
Date Added	Monday, 20 April 2009 3:34:33 PM
Modifie d	Monday, 20 April 2009 3:36:48 PM

ITEM#5: Land and soil capability - how we safely manage the land

Туре	Document
Author	B Murphy
Author	S Taylor
Abstract	A revised rural land and soil capability classification system has been developed for NSW by the NSW Department of Environment and Climate Change. It is part of the Monitoring and Evaluation Program in the State Plan. The revised system is the 'Rural Land and Soil Capability Classification for Monitoring and Evaluation' (LSC). It builds on the earlier 'Rural Land Capability Classification' system produced in the 1950s and retains the eight class structure. The system presented here focuses on modern soil management techniques and cropping and grazing systems to improve catchment health. It has been modified to meet the needs of land managers in the area managed by the Central West Catchment Management Authority.
Publisher	Central West Catchment Management Authority
Date	2008

URL	http://www.cw.cma.nsw.gov.au/pdf/Information/BMPs/CWCMA_Information_BMP_0282_Land%20&%20Soil%20Capability%20.pdf
Date Added	Monday, 20 April 2009 8:53:14 PM
Modified	Monday, 20 April 2009 8:55:51 PM

This provides evidence of:

- What the LSC classification system is
- The classes of the LSC
- How to apply the LSC

ITEM#6: Living land living culture: Aboriginal heritage & salinity

Туре	Book
Author	A English
Author	L Gay
Abstract	This book is about the relationship between land management and the protection of Aboriginal Heritage in NSW. It details findings from the aboriginal and salinity project that was funded under the NSW Salinity Strategy (2000).
Publisher	Department of Environment and Conservation (NSW)
Date	2005
ISBN	174137104X
Repository	CWCMA, Dubbo
Date Added	Friday, 17 April 2009 9:13:06 AM
Modified	Friday, 17 April 2009 10:27:41 AM

This is evidence of:

- How salinity impacts on Aboriginal cultural heritage, including documentation of local knowledge with Wiradjuri prople in the Wellington area.
- Community perspectives about environmental change
- The change that occurs in social groups over time
- The attachment people have to place and the ways they seek to maintain a sense of community and individual identify
- Things that the aboriginal community view as resources and

therefore of value in the landscape (a list provided)

• What indicators may be used to track aboriginal values

ITEM#7: Management and rehabilitation of riparian lands

Туре	Document
Author	C Jenkins
Author	S McCaffrey
Abstract	This riparian BMP explains the environmental services provided by the riparian zone and provides advice to landowners of how to manage riparian issues such as bank erosion and invasive weeds.
Publisher	Central West Catchment Management Authority
Date	2008
URL	http://www.cw.cma.nsw.gov.au/pdf/Information/BMPs/CWCMA_Information_ BMP_0287_CMA_BMPWATER_chapter1.pdf
Date Added	Monday, 20 April 2009 4:16:18 PM
Modified	Monday, 20 April 2009 4:24:28 PM

ITEM#8: Mid Lachlan regional vegetation management plan: draft for public exhibition

Туре	Report
	•
Author	Mid Lachlan Regional vegetation management committee
Abstract	This vegetation plan was developed by the Mid-Lachlan regional vegetation committee under the Native Vegatation Conservation Act 1997. The plan covers the management of all native vegetation, including grasses, trees and shrubs. Any activity which can impact on any of these components falls under the provisions outlined in this plan.
Institution	New South Wales Department of Land & Water Conservation
Date	1999
Repository	CWCMA, Dubbo
Date Added	Friday, 17 April 2009 11:14:22 AM
Modified	Monday, 20 April 2009 8:52:49 AM

This is evidence of:

- The character of native vegetation communities in the mid Lachlan
- Priority plant communities
- Threatened flora and fauna
- Landscape profiles
- Vegetation community profiles

ITEM#9: Native fodder shrubs for pasture enhancement

Туре	Document
Author	CWCMA
Abstrac t	Discusses the benefits of native fodder shrubs and presents species level information to assist selection.
Publish er	Central West Catchment Management Authority
URL	http://www.cw.cma.nsw.gov.au/pdf/Information/BMPs/CWCMA_Informati on_BMP_0279_NativeVeg_Fodder_shrubs.pdf
Date Added	Monday, 20 April 2009 11:58:04 AM
Modifie d	Monday, 20 April 2009 12:00:09 PM

This provides evidence of:

- The CMA is providing appropriate information to assist the uptake of native fodder shrubs
- Specific characteristics of fodder species
- It also provides a summary of the benefits of native fodder shrubs.

ITEM#10: Native pasture management

Туре	Document
Author	CWCMA
Abstract	This information sheet will help you to understand the benefits that native grasses and well managed native pastures can bring to your grazing enterprise. By encouraging native pastures on your property, you can achieve a range of improvements such as greater water holding capacity, more healthy animals, better quality soils and other conservation benefits that can result in an increased profit margin and a healthy landscape.
Publisher	Central West Catchment Management Authority
Date	Not provided
URL	http://www.cw.cma.nsw.gov.au/pdf/Information/BMPs/CWCMA_Inform ation_BMP_0279_NativeVeg_Paturemanagement.pdf
Date Added	Monday, 20 April 2009 3:29:05 PM
Modified	Monday, 20 April 2009 3:30:30 PM

ITEM#11: Native vegetation and regional management: a guide to research and resources

Туре	Book
Author	Jaan Williams

Abstract	The book represents the collective experiences and knowledge of researchers and managers on planning and managing native vegetation at a regional scale. The guide was prepared to assist strategic level planning and management of native vegetation at the catchment and regional scale. It is based around 5 questions: what are the benefits and values of native vegetation? What is the extent and condition of native vegetation? What are the pressures on & threats to native vegetation? What are our responses and how do we measure progress? How do we integrate with other NRM issues
Publisher	Greening Australia Ltd
Date	2005
ISBN	1-875345-74-4
Repository	CWCMA, Dubbo
Date Added	Friday, 17 April 2009 1:10:22 PM
Modified	Friday, 17 April 2009 1:10:22 PM

This project provides evidence of:

- planning framework for native vegetation management
- principles and where to from here against the 5 questions posed by

the document

ITEM#12: Native Vegetation Management and Rehabilitation: Best Management Practice Guidelines

Туре	Report
Author	Anne Dr, Kerle
Author	Donna Dr, Johnston
Abstract	This report was undertaken for the CWCMA and is intended to provide a literature review from a wide range of resources. It provides a consolidation of existing information about management of native vegetation and biodiversity relevant to the CW catchment. This report is then intended to inform the development of BMP brochures for native vegetation management and rehabilitation.
Report Number	Milestone 1: Literature Review
Institution	Western Research Institute Ltd
Date	2008, December
Repository	CWCMA, Dubbo
Date Added	Friday, 17 April 2009 1:10:22 PM
Modified	Friday, 17 April 2009 1:10:22 PM

This is evidence of:

• existing information on vegetation communities and broad habitat

types as well as loss of vegetation & fragmentation

• threatening processes, benefits of native vegetation and general strategies for restoration nb fig 2.1 conceptual model of degrading processes on natural environments due to European ag practices

- native veg mgt techniques to maximise ecological values & function nb fig 3.2 conceptual model re dieback
- prioritising works and tips for achieving these priorities (protect, improve degraded, reconstruct)
- the techniques discussed raise questions of applicability to CW, transferability. The info is presented in generic terms.

ITEM#13: Perennial pastures of the central west plains

Туре	Document
Author	L Ayres
Author	B Clements
Abstract	This publication has been produced to provide landholders with Best Management Practice guidelines for managing and establishing perennial pastures within the Central West Plains region of the Central West Catchment Management Authority. The aim of this document is to provide practical guidelines to help land managers develop whole farm practices that lead to healthy, stable and productive pastures that also have off farm benefits for the wider community. Best practice management of perennial pastures is paramount to the long term survival, persistence and economic viability of the farm. This document is not intended to promote the use of any one particular species, either native or introduced, as the most suitable species will vary with different situations.
Publisher	Central West Catchment Management Authority
Date	2008
URL	http://www.cw.cma.nsw.gov.au/pdf/Information/BMPs/CWCMA_Inform ation_BMP_0291_Perennial%20Pastures%20on%20the%20Central% 20West%20Plains.pdf
Date Added	Monday, 20 April 2009 3:56:04 PM
Modified	Monday, 20 April 2009 3:57:13 PM

ITEM#14: Perennial pastures on the central west slopes

Туре	Document
Author	L Ayres
Author	B Clements
Abstract	This publication has been produced to provide landholders with Best Management Practice guidelines for managing and establishing

	perennial pastures within the Central West Slopes region of the Central West Catchment Management Authority. The aim of this document is to provide practical guidelines to help land managers develop whole farm practices that lead to healthy, stable and productive pastures that also have off farm benefits for the wider community. Best practice management of perennial pastures is paramount to the long term survival, persistence and economic viability of the farm. This document is not intended to promote the use of any one particular species, either native or introduced, as the most suitable species will vary with different situations.
Publisher	Central West Catchment Management Authority
Date	2008
URL	http://www.cw.cma.nsw.gov.au/pdf/Information/BMPs/CWCMA_Inform ation_BMP_0289_Perennial%20Pastures%20on%20the%20Central% 20West%20Slopes.pdf
Date Added	Monday, 20 April 2009 3:43:16 PM
Modified	Monday, 20 April 2009 3:56:44 PM

ITEM#15: Perennial pastures on the central west tablelands

Туре	Document
Author	L Ayres
Author	B Clements
Abstrac t	This publication has been produced to provide landholders with Best Management Practice guidelines for managing and establishing perennial pastures within the Central West Tablelands region of the Central West Catchment Management Authority. The aim of this document is to provide practical guidelines to help land managers develop whole farm practices that lead to healthy, stable and productive pastures that also have off farm benefits for the wider community. Best practice management of perennial pastures is paramount to the long term survival, persistence and economic viability of the farm. This document is not intended to promote the use of any one particular species, either native or introduced, as the most suitable species will vary with different situations.
Publish er	Central West Catchment Management Authority
Date	2008
URL	http://www.cw.cma.nsw.gov.au/pdf/Information/BMPs/CWCMA_Information_BMP_0290_Perennial%20Pastures%20on%20the%20Central%20West%20Tablelands.pdf
Date Added	Monday, 20 April 2009 3:47:59 PM
Modifie d	Monday, 20 April 2009 3:57:27 PM

ITEM#16: Reconstructed and extant distribution of native vegetation in the central west catchment: foundation building for strategic investment in vegetation management at a landscape scale

Туре	Report
Author	DEC
Abstract	This report documents the development of landscape-scale vegetation datasets for the Central West Catchment Management Authority (CMA).
Place	Dubbo
Institution	NSW Department of Environment and Conservation
Date	2006
Repository	CWCMA, Dubbo
Date Added	Friday, 17 April 2009 12:32:35 PM
Modified	Friday, 17 April 2009 12:37:35 PM

This is evidence of:

- What vegetation data is available to the CMA
- What pre-European vegetation was likely looked like
- What the current vegetation is

ITEM#17: Riverways: Shortcuts to River Management Information in Australia

Туре	Book
Author	Lori Gould
Author	James Morris
Abstract	Riverways was developed to help relevant organisations or individuals with an interest in river management to find the best and most information. Riverways provides a quick guide to resources related to river management, covering topics such as rehabilitation & management, policy & planning, monitoring and evaluation.
Place	Yarralumla, ACT
Publisher	Greening Australia
Date	2005
ISBN	1875345779
Repository	CWCMA, Dubbo
Date Added	Friday, 17 April 2009 1:10:22 PM
Modified	Friday, 17 April 2009 1:10:22 PM

This reference is a roadmap to Australian river management resources for:

- planning & policy
- rehabilitation and management
- monitoring & evaluation

ITEM#18: Scattered paddock trees

Туре	Document
Author	CWCMA
Abstrac t	This information sheet will help you to understand why scattered paddock trees are important and how we can protect them for the future.
Publish er	Central West Catchment Management Authority
URL	http://www.cw.cma.nsw.gov.au/pdf/Information/BMPs/CWCMA_Information_BMP_0279_NativeVeg_Scattered_paddock_trees.pdf
Date Added	Monday, 20 April 2009 3:32:18 PM
Modifie d	Monday, 20 April 2009 3:34:17 PM

ITEM#19: Serrated tussock - national best practice manual

Туре	Book
Author	R Osmond
Author	M Veebeek
Author	D McLaren
Author	M Michaelmore
Author	B Wicks
Author	C Grech
Author	P Fullerton
Abstract	A serrated tussock BMP. It discusses the plant, designing a management program and case studies of control.
Series	Weeds of national significance
Repository	CWCMA, Dubbo
Date Added	Friday, 17 April 2009 10:58:36 AM
Modified	Friday, 17 April 2009 11:16:35 AM

This is evidence of:

- The threat that serrated tussock poses to the environment
- How planning of management should be done at different scales
- What the specific control options are
- How to implement different control options

ITEM#20: Sodic surface soil management

Туре	Document
Author	D McKenzie
Abstrac t	This BMP presents a detailed look at what sodic soil is, how to identify it, the management options available and economic data from case studies. It provides more detail to a series of three other factsheets.
Publish er	Central West Catchment Management Authority
Date	2008
URL	http://www.cw.cma.nsw.gov.au/pdf/Information/BMPs/CWCMA_Information_BMP_0280_Sodic%20Surface%20Soil%20Management_v2.pdf
Date Added	Monday, 20 April 2009 8:14:07 PM
Modifie d	Monday, 20 April 2009 8:24:18 PM

This provides evidence of:

- The process that causes sodic soil
- Processes associated with sodic soil
- The range of management options
- How to assess sodic topsoil
- The economic outcomes from treatment

ITEM#21: Status of vertebrate fauna and their habitat in the central west catchment - Volume 1

Туре	Report
Author	D Goldney
Author	A Kerle
Abstract	This report covers: 1. Vertebrate diversity and conservation status: a comprehensive list of vertebrate species occurring across the Central West Catchment and the distribution, relative abundance and conservation status of those species; 2. Habitat definition and availability: The definition of habitats required by the vertebrate species in the catchment, and their conservation status;
Report Number	Volume 1
Place	Dubbo
Institution	Western Research Institute Ltd
Date	2007
Repository	CWCMA Dubbo network
Date Added	Monday, 20 April 2009 8:04:44 AM
Modified	Monday, 20 April 2009 8:47:36 AM

This provides evidence of:

- The diversity and status of vertebrate fauna
- Conservation value of that fauna
- Habitat required to sustain the fauna
- Conservation status of the habitat
- These are all essential elements to the formation of an investment

plan.

ITEM#30: Summary of threatening processes, status of vertebrate fauna and their habitats reporting in the central west catchment and recommendations - Volume 3

Туре	Report
Author	D Goldney
Author	A Kerle
Abstract	Volume 3 in this series summarises volumes 1 and 2 and presents recommendations for management response. The main message is the advocation of a holistic planning effort as opposed to planning approaches that focus on specific species. They argue the status of decline necessitates fundamental landscape scale repair.
Report Number	Volume 3
Place	Dubbo
Institution	Western Research Institute Ltd
Repository	CWCMA Dubbo network
Date Added	Monday, 20 April 2009 8:43:00 AM
Modified	Monday, 20 April 2009 8:47:16 AM

This provides evidence of:

- Recommended management responses to the decline of fauna species and their habitat
- A potential classification of (or part thereof) management actions/ interventions.

Туре	Document	
Author	M Reynolds	
Abstrac t	The intent of this document is to assist with identifying the benefits and costs of landuse management change through the introduction of perennial pastures. Three economic case studies have been produced to provide examples of the diverse nature of perennial pasture enterprises within the Central West catchment area of NSW. They are: 1. No Kill cropping using minimal inputs in the low rainfall zone 2. Pasture cropping for soil health/crop benefits and pasture seed production 3. Pasture cropping for soil health benefits Five gross margin analyses have also been produced as a broader guide to perennial pasture economics. They are: 4. Gross margin example of saltbush establishment in a rangeland pasture 5. Gross margin example of saltland pasture suing both conventional farming and conservation farming techniques 7. The indirect economic benefits of perennial pasture longevity.	
Publish er	Central West Catchment Management Authority	
Date	2008	
URL	http://www.cw.cma.nsw.gov.au/pdf/Information/BMPs/CWCMA_Information on BMP 0293 The%20Economic%20Benefits%20of%20Well%20Mana ged%20Perennial%20Pasture.pdf	
Date Added	Monday, 20 April 2009 3:58:59 PM	
Modifie d	Monday, 20 April 2009 4:02:14 PM	

ITEM#31: The economic benefits of well managed perennial pastures

This provides evidence of:

- The economic benefits to the farmer of adopting good perennial pasture management practices
- How the economic benefits are derived from practices such as no kill cropping, pasture cropping and conservation farming techniques
- The indirect economic benefits of perennial species at a catchment scale

ITEM#32: The economic benefits when managing cropping soils

Туре	Document	
Author	T Farrell	
Author	S Spears	
Author	F Scott	
Abstrac t	This BMP guide will demonstrate the economic advantages of cropping practices (conservation farming) that maintain and improve soil condition	

	and retain crop residues on site. The main points are: 1. Minimising soil disturbance and maintaining soil cover improves soil condition 2. Conservation farming methods enhance soil health 3. Conservation farming provides opportunity for more specific machinery selection and smaller tractors 4. Costs of converting machines can generally be recouped after two seasons of average production 5. In the Central West the average economic advantage after two seasons is \$20.71/ha when conventional cropping and no-tillage are compared. This varies according to climate, soil type and machinery. A series of separate fact sheets is also provided for with more detail of each case study.
Publish er	Central West Catchment Management Authority
Date	2008
URL	http://www.cw.cma.nsw.gov.au/pdf/Information/BMPs/CWCMA_Informati on_BMP_0285_The%20Economic%20Benefits%20of%20Managing%20 Cropping%20Soils.pdf
Date Added	Monday, 20 April 2009 8:37:09 PM
Modifie d	Monday, 20 April 2009 8:42:11 PM

This provides evidence of:

• The economic benefits from the adoption of no-tillage cropping

ITEM#33: The economics of soil management in pasture systems

Туре	Document	
Author	T Farrell	
Abstrac t	The aim of this study was to produce a set of economic analyses for best practice management of pastures, stocking rates and soils for nine locations in the Central West Catchment of NSW. This document is accompanied by a separate factsheet for each case study that contain more detailed information.	
Publish er	Central West Catchment Management Authority	
Date	2008	
URL	http://www.cw.cma.nsw.gov.au/pdf/Information/BMPs/CWCMA_Informati on_BMP_0283_The%20Economic%20Benefits%20of%20Soil%20Manag ement%20in%20Pasture%20Sys.pdf	
Date Added	Monday, 20 April 2009 8:24:44 PM	
Modifie d	Monday, 20 April 2009 8:36:26 PM	

This provides evidence of:

• The economic outcomes from adoption of specific soil management practices using modelling.

• Biophysical changes that occur to deliver the change in economic returns.

ITEM#34: Threatening and degrading processes in the central west catchment management area - Volume 2

Туре	Report
Author	D Goldney
Author	A Kerle
Abstract	This report provides a classification of threatening processes that act on vertebrate fauna and its habitat. Also included is an explanation of these threatening processes and their status.
Report Number	Volume 2
Place	Dubbo
Date	2007
Repository	CWCMA Dubbo network
Date Added	Monday, 20 April 2009 8:30:25 AM
Modified	Monday, 20 April 2009 8:47:44 AM

This provides evidence of:

- The diversity of threatening processes
- The relationships that make up the threatening processes (some not

at great detail however)

• The status of these threatening processes

ITEM#35: Valuing remnant vegetation

Туре	Document
Author	A Kerle
Author	D Johnston
Abstrac t	This fact sheet helps landholders understand the importance of remnant vegetation on their land and its significance in the surrounding landscape.
Publish er	Central West Catchment Management Authority
Date	Not provided
URL	http://www.cw.cma.nsw.gov.au/pdf/Information/BMPs/CWCMA_Informati on_BMP_0279_NativeVeg_%20Valuing_remnant_vegetation.pdf
Date Added	Monday, 20 April 2009 11:22:06 AM
Modifie d	Monday, 20 April 2009 11:26:17 AM

This provides evidence of:

How landholders can conduct value assessments of their native vegetation

ITEM#36: Vertebrate pest animal management strategy for the central west catchment of NSW

Туре	Report	
Author	S Adams	
Abstract	The purpose of this strategy is to guide the Central West Catchment Management Authority's investment over the coming years in vertebrate pest animal management in the Central West Catchment, in accordance with the principles of best practice pest animal management. The strategy has a focus on biodiversity protection, in line with a directive from the Central West Catchment Management Authority (CMA). It prioritises the management actions it proposes, in order that the Central West CMA can invest in vertebrate pest animal management in the Catchment in accordance with its financial capability to do so, with confidence that its money is being spent in accordance with best practice pest animal management principles.	
Place	Dubbo	
Institution	NSW Department of Primary Industries	
Date	2008	
URL	http://www.cw.cma.nsw.gov.au/pdf/Reports/CWCMA_Report_verteb ratepestanimalstrategy_report_jun08.pdf	
Date Added	Monday, 20 April 2009 11:09:20 AM	
Modified	Monday, 20 April 2009 11:12:59 AM	

This provides evidence of:

- The diversity of vertebrate pest animals within the central west
- The stakeholders in pest animal management
- A prioritisation process for selecting the most appropriate

management actions to achieve the CAP targets

• Recommendations of how to engage the community in pest management

ITEM#37: Willows national management guide: Current management and control options for willows (Salix spp.) in Australia

Туре	Book
Author	C Holland
Author	J Davies
Series	Weeds of national significance
Place	Geelong

Publisher	Victorian Department of Primary Indistries
Date	2007
Repository	CWCMA, Dubbo
Date Added	Friday, 17 April 2009 10:49:48 AM
Modified	Friday, 17 April 2009 11:16:48 AM

This is evidence of:

- The threat that willows pose to the environment
- How planning of willow management should be done at different scales
- What the specific control options are
- What site rehabilitation options are

Appendix 2: Relationship between targets and outcomes across scale

The following table identifies the relationship between the current logic targets, state targets and the Caring for our Country 5 year outcomes. Where the Caring for our Country 5 year outcomes identified that priorities will be identified in the business plan targets, the relevant targets for the CMA have been listed.

Current logic target	Relevant State target (as defined in 2005)	Relevant CfoC ² Target (2009-10 Business Plan)
Net increase extent and connectivity and improvement in the condition of native vegetation	By 2015 there is an increase in native vegetation extent and an improvement in native vegetation condition	Increasethe area of native habitat and vegetation that is managed to reduce critical threats to biodiversity and to enhance the condition, connectivity and resilience of habitats and landscapes
Increased extent and improved condition of native fauna habitat (terrestrial & aquatic)	N/A	Increasethe area of native habitat and vegetation that is managed to reduce critical threats to biodiversity and to enhance the condition, connectivity and resilience of habitats and landscapes
Reduced impact of feral animals and	By 2015 there is a reduction in the impact of	Reduce the impact of invasive species (5 year

² CfoC = Caring for our Country

Current logic target	Relevant State target (as defined in 2005)	Relevant CfoC ² Target (2009-10 Business Plan)
environmental weeds	invasive species	outcome):
		To reduce the impact of weeds of national significance (2009-2010 business plan)
		Deliver actions that sustain the environmental values of priority sites in the Ramsar estate and HCVAEs ³ in the Murray Darling Basin (5 year outcome):
		To address threats posed by invasive plant and animal species to the character of Ramsar listed wetlands and HCVAEs (2009-2010 business plan)
Support the recovery of threatened species populations & ecological communities	By 2015 there is an increase in the recovery of threatened species, populations and ecological communities.	Increasethe area of native habitat and vegetation that is managed to reduce critical threats to biodiversity and to enhance the condition, connectivity and resilience of habitats and landscapes (5 year outcome)
		Priority will be given to projects that improve the conservation of critically endangered and vulnerable ecological communities

³ HCVAEs = High conservation value aquatic ecosystems

Current logic target	Relevant State target (as defined in 2005)	Relevant CfoC ² Target (2009-10 Business Plan)
Increased land area managed within its capability	By 2015 there is an increase in the area of land that is managed within its capability	Assist at least 30per cent of farmers to increase their uptake of sustainable farm and land management practices that deliver improved ecosystem services
Improved soil health and condition in the catchment	By 2015 there is an improvement in soil condition	Assist at least 30per cent of farmers to increase their uptake of sustainable farm and land management practices that deliver improved ecosystem services (5 year outcome):
		Improve the content of soil carbon in priority areas
Improved condition of riverine ecosystems	By 2015 there is an improvement in the condition of riverine ecosystems	Deliver actions that sustain the environmental values of priority sites in the Ramsar estate and HCVAs in the Murray Darling Basin (5 year outcome):
		To address threats posed by invasive plant and animal species to the character of Ramsar listed wetlands (2009-2010 business plan)
Improved condition of GDEs ⁴	By 2015 there is an improvement in the ability of groundwater systems to support groundwater-dependent ecosystems and	Deliver actions that sustain the environmental values of priority sites in the Ramsar estate and HCVAs in the Murray Darling Basin (5

⁴ GDEs = Groundwater dependent ecosystems

Current logic target	Relevant State target (as defined in 2005)	Relevant CfoC ² Target (2009-10 Business Plan)
	designated beneficial uses.	year outcome):
		To address threats posed by invasive plant and animal species to the environmental value non-Ramsar HCVAEs(2009-2010 business plan). Note this includes GDEs.
Improved condition of important wetlands	By 2015 there is an improvement in the condition of important wetlands and the extent of those wetlands is maintained	Deliver actions that sustain the environmental values of priority sites in the Ramsar estate and HCVAs in the Murray Darling Basin (5 year outcome):
		To address threats posed by invasive plant and animal species to the character of Ramsar listed wetlands (2009-2010 business plan)
Engaged community practicing and valuing NRM	There is an increase in the capacity of natural resource managers to contribute to regionally relevant natural resource management	Improve knowledge skills and engagement of at least 30 per cent of land managers and farmers in managing our natural resources and the environment
		Improve the access to knowledge and skills of urban and regional communities in managing natural resource sustainably
		Increase the engagement and participation of urban and regional communities in activities to manage natural resources
Increased understanding & stronger	N/A	Ensure the continued use, support, and

Current logic target	Relevant State target (as defined in 2005)	Relevant CfoC ² Target (2009-10 Business Plan)
relationship between aboriginal and non- aboriginal communities		reinvigoration of traditional ecological knowledge to underpin biodiversity conservation (5 year outcome):
		To develop indigenous partnerships over 2years that engage indigenous communities in delivering CfoC (2009-10 Business Plan Target)
		Projects that use indigenous traditional knowledge from indigenous communities (2009-10 Business Plan Target).