Collaborative Water Planning: Retrospective Case Studies

Volume 4.2

Water planning in the Ord River of Western Australia

TRaCK
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Executive Summary

Water planning is a process to allocate and sustainably manage water to meet our future water requirements. Good water plans provide for river health and community needs. Public consultation is integral to an effective water resource planning process. The occurrence of severe water resource management problems throughout many southern regions of Australia has focused recent attention on water planning processes as a means of balancing competing uses of water, addressing over-allocation of water entitlements and achieving transparency in water decision-making. Water management is thus a key natural resource management challenge; with persistent drought in southern Australia, and climate change predictions for such droughts to increase in frequency, there is unprecedented interest in the management of water resources in northern Australia. Northern jurisdictions are responding to the national agenda for water reform with the roll-out of water plans in regions facing increased water use pressures.

The report is part of a broader project TRaCK – the Tropical Rivers and Coastal Knowledge research hub – which aims to develop new approaches to water planning relevant to northern Australia. TRaCK brings together leading tropical river researchers and managers from across Australia to focus on the sustainability of rivers and catchments from Cape York to Broome.

The project seeks to understand the place, practice, barriers and enablers to collaborative water planning. The project aims to improve water planning efforts at two levels:

- **Nationally** by developing a tool-kit of good practices to engage industry, Indigenous and rural communities; by setting guidelines and benchmarks to monitor and evaluate collaboration in water planning; and by establishing procedures that integrate Indigenous values into water planning.

- **Regionally** by assisting water agencies to improve water planning approaches; by helping to minimise conflicts between parties; by providing models and case studies for good collaboration; and by helping stronger, long-term relationships between stakeholders.

The project has two phases: firstly, a review of the literature to develop a conceptual foundation for the project and two retrospective case studies. The purpose of these case studies is to develop an understanding of contemporary water resources planning in north Australian settings. Secondly to conduct two prospective case studies as an action research project.

To date there have been very few water plans prepared in northern Australia. The only one in the north-west is the Ord River Water Management Plan. This report reviews the water planning process in the Ord River in Western Australia (WA) undertaken between 1997 and 2006 by the Western Australian Government[1]. It pays particular attention to the public participation aspects of this water planning process.

The aims of the Ord River case study are to:

- describe public participation in the water planning process;

[1] The Department of Water (previously the Water and Rivers Commission) is referred to as the Department throughout this report.

- use the Collaborative Monitoring and Evaluation Framework (CMEF) (see Figure 1);
- interpret public participation in the statutory water planning process;
- identify barriers and opportunities for collaboration in the water planning process.

This report describes the context and process of the water planning process for the Ord River region as a backdrop to development in the region. It evaluates the water planning process against a series of criteria for the quality of public participation in water planning. This evaluation is used to identify community expectations as well as the barriers and enablers which may support effective collaboration in water planning for Northern Australia. This case study demonstrates the need to consider the role of water planning in the context of the political imperatives of government. In this case study it is acknowledged that the water planning process is just one part of a broader context of water and land-use planning and management activities in the Ord River region. This broader context is a historically contingent and continually evolving complex planning landscape which is characterised by particular political, economic and social imperatives. These include the:

- ongoing development of the Ord River Irrigation System and irrigated agriculture in the Ord River Irrigation Area;
- protracted native title negotiations that involved a consent determination and package of benefits for Aboriginal traditional owners of estates in the Ord River valley (see Section 2.4.2);
- resource use agreements between private interests and government (see Section 3.1.2);
- unique cultural and historical profile of the East Kimberley region and its population.

The Ord River agricultural and hydrological project has a long and complex history of development as an unfulfilled modernisation project (Head 1999; Arthur 1997). It looms large in the geographical imagination of Australians: in particular Lake Argyle, with a volume nine times that of Sydney Harbour, is hailed as a modern engineering wonder (Kittel 2005). Many have commented on the socio-economic and cultural effects of broad scale landscape, land/water use and demographic change through the development of irrigated agriculture in the Ord River region (see Lane 2003; Lane, 2004; Head 1999; Arthur 1997). These effects include alienation of Indigenous lands, modification of river flows in the Ord River scheme, and the development of a regional population centre at Kununurra.

It is more than 30 years since the Western Australian governments first promulgated the vision to irrigate large expanses of land in the Ord River region for agriculture as the Ord River Irrigation Area (ORIA). To date the vision has only partially been realised. The first stage of the Ord River Irrigation Scheme, known as Ord Stage 1, was completed in 1972 with approximately 15,000 hectares of irrigated land under agricultural development (King, Loh et al. 2001). The second part of the Ord River Irrigation Scheme, Ord Stage 2, has a chequered history of delays and has not yet been implemented.

The Ord River water plan was the first to be undertaken in Western Australia. At the time planning for the Ord commenced, the *Rights in Water and Irrigation (RIWI) Act* 1914 did not provide for statutory water planning, although there did exist procedures for water resource

planning. The water plan took 10 years to complete culminating in the release of the *Ord River Water Management Plan* (ORWMP) in December 2006 (DoW 2006).

The Ord River water planning process was protracted for a number of reasons including:

- previous water resources developments such as a major dam and proposals for expansion of the Ord Stage 2 irrigation area;
- other government legal commitments particularly those relating to native title;
- changing demand for hydro-power to power a nearby diamond mine;
- changing policy environment which required information and methodologies concerning environmental flows and so required more baseline research on the Ord River ecology.

The public participation process for the development of the Ord River water management plan itself was brief, minimal and difficult to extricate from the myriad of other planning and engagement activities undertaken by the State water agencies during the period. At the commencement of the planning process the *RIWI Act* had no statutory requirements for community involvement. These were put in place in 2000 along with a state-wide policy for environmental water provisions. These new requirements highlighted the importance of community involvement as an essential component of planning and management of water.

Despite this policy directive the water planning process in the Ord River had several shortcomings. Firstly, the water planning process failed to uphold its stated aims of transparency (WRC 2000b: 5), inclusiveness and promoting discussion and communication (DoW 2006: 149) and this compromised the quality of the decision-making processes. Secondly there is limited community awareness of, and hence support for, the outcomes of the allocation planning process undertaken in the Ord. This may be attributed to several barriers for improved water planning including the:

- existing legal agreements that compromised the transparency of water planning;
- need to incorporate and account for disparate knowledges;
- lack of continuous feedback and engagement of stakeholders;
- need to clarify the role of the public in water planning;
- inadequate Indigenous participation;
- need for a process that is both flexible and resilient to external decision-making.

In addition two external processes affected the water agency's public participation strategy: a parallel community NRM process known as Ord Land and Water (OLW); and the native title negotiations that led to the Ord Final Agreement.

During the planning process the requirements for community involvement were ambiguous for the planners and the community. However the Department actively sought to engage community members in water planning issues and activities through both formal and informal mechanisms. Formal mechanisms included public submissions and an established Community Reference Panel. Informal activities were initiated by the Department as a means to complement the information and involvement from the submissions and panel. By taking a flexible approach, agency staff worked to align processes and to create opportunities for alternative modes of participation within the water management planning process for the Ord River. They did this by supporting other initiatives relevant to water use and management in the Ord River region. Through this support, the agency sought to build the capacity of the Ord River community to engage with water use and management issues and activities, including the development of a water management plan for the Ord River. These informal activities outside of the planning process have been instrumental in creating a platform for future water planning activities.

Agency water planners acknowledge the constraints on and complexities of the Ord's planning processes. They used administrative flexibility and facilitation of community engagement initiatives outside the formal process to create social learning opportunities which are central to collaborative water planning. They also expressed a desire to better incorporate community knowledge, aspirations and values.

Western Australia's current water management framework remains in flux with its legislation under review. One of the main areas to be strengthened in the proposed water legislation is the involvement and participation of stakeholders in the planning process. In light of the lessons from the Ord River experience this report confirms the significance of community engagement methodologies in water planning in the legislative review. Some areas water managers may wish to explore include:

- Improved communication strategies for diverse interest groups to address their particular information and learning needs. Developing effective communication approaches with communities, including Indigenous communities, requires a cross-cultural negotiation of strategies for producing and disseminating knowledge.
- Capacity-building tools to increase community understanding of water planning as well as the ability to contribute meaningfully to the planning process.
- Training and professional development for agency staff and science providers to better facilitate community collaboration in planning and research.
- Specific Indigenous engagement strategies to identify the implications of water plans for cultural heritage, values and practice and the economic development opportunities provided by water planning.
- Participatory impact assessment methodologies with best-practice scenario projections and predictive modelling.
- Data, knowledge and information systems with the capability to handle multiple epistemological frameworks.
- Decision-support systems for rigorous and transparent trade-off analysis in decision-making.

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List of Abbreviations

ASEIA	Aboriginal Social and Economic Impact Assessment
CMEF	Collaborative Monitoring and Evaluation Framework
CoAG	Council of Australian Governments
CRP	Community Reference Panel
DoIR	Department of Industry and Resources
DoW	Department of Water
LCDC	Land Conservation District Committee
EIS	Environmental Impact Statement
EOI	Expression of Interest
EPA	*Environmental Protection Act* 1997
EPBC	*Environment Protection and Biodiversity Conservation Act 1999* (CTH):
ERMP	Environmental Review and Management Programme
EWP	Environmental Water Provision
EWR	Ecological Water Requirement
ILUA	Indigenous Land Use Agreement
KLC	Kimberley Land Council
KWADS	Kununurra-Wyndham Area Development Strategy
MG	Miriuwung Gajerrong
MOU	Memorandum of Understanding
NHT	Natural Heritage Trust
NRM	Natural Resource Management
NT	Northern Territory
NTA	Native Title Act
OES	Ord Enhancement Scheme
OIC	Ord Irrigation Cooperative
OFA	Ord Final Agreement
OLW	Ord Land and Water
ORCRG	Ord River Catchment Reference Group
ORIA	Ord River Irrigation Area
ORIS	Ord River Irrigation Scheme
ORWMP	Ord River Water Management Plan
ORWMG	Ord River Waterways Management Group
NRW	Natural Resources and Water (Queensland Department of)
RIWI	Rights in Water and Irrigation
TRaCK	Tropical Rivers and Coastal Knowledge Research
WA	Western Australia
WAP	Water Allocation Plan
WRC	Water and Rivers Commission
WRMC	Water Resource Management Committee

1. Introduction

Water planning is a process to allocate and sustainably manage water to meet our future water requirements. Good water plans provide for river health and community needs. Public consultation is integral to an effective water resource planning process.

1.1 Project Overview

This report reviews the water planning process in the Ord River in Western Australia (WA) undertaken between 1997 and 2006 by the Western Australian Government[2]. It pays particular attention to the public participation aspects of this water planning process. The report forms part of Phase One of a broader project TRaCK – the Tropical Rivers and Coastal Knowledge research hub – which aims to develop new approaches to water planning. TRaCK brings together leading tropical river researchers and managers from across Australia to focus on the sustainability of rivers and catchments from Cape York to Broome.

The Collaborative Water Planning in Northern Australia is a trans-disciplinary research project conducted through the Tropical Rivers and Coastal Knowledge (TRaCK) research hub to review, trial and promote collaborative approaches to water planning. The project aims to devise innovative methods for incorporating social, cultural and economic values in water planning and water reform in Australia. To do this it draws on a variety of academic disciplines, including law, economics, cultural geography, policy science and sociology.

The TRaCK *Collaborative Water Planning in Northern Australia* project sought to understand the place, practice, barriers and enablers to collaborative water planning. The project seeks to improve water planning efforts at two levels:

- **Nationally** by developing a tool-kit of good practices to engage industry, Indigenous and rural communities; by setting guidelines and benchmarks to monitor and evaluate collaboration in water planning; and by establishing procedures that integrate Indigenous values into water planning.

- **Regionally** by assisting water agencies to improve water planning approaches; by helping to minimise conflicts between parties; by providing models and case studies for good collaboration; and by helping stronger, long-term relationships between stakeholders.

The project has two phases: firstly, a review of the literature to develop a conceptual foundation for the project and two retrospective case studies. Secondly to conduct two prospective case studies as an action research project.

1.1.1 Phase One

Phase One reviewed water planning practices in Australia and internationally to: distil current recommended practice for involving communities and industry in the planning process; and to derive general lessons for improving the scope of collaboration and participation (see Tan et al

[2] The Department of Water (previously the Water and Rivers Commission) is referred to as the Department throughout this report.

2008). To supplement this review, the research team assessed community participation in two retrospective case studies of water planning process in Northern Australia; the Gulf of Carpentaria in Queensland, and the Ord River region in Western Australia (this report). The purpose of these case studies is to develop an understanding of contemporary water resources planning in north Australian settings.

The retrospective case studies aim to identify factors that impede or enhance public participation and collaboration between parties with an interest in water planning. The methods included a:

- stakeholder analysis to determine whether all salient stakeholders were involved appropriately;
- survey of community, industry and agency participant's expectations of water planning processes;
- framework for monitoring and evaluation of collaborative processes.

The lessons from these retrospective evaluations of strengths and weaknesses of the current planning processes, and the tools used will be used to inform the trial of collaborative planning tools and processes in Phase Two of the Collaborative Water Planning Project.

1.1.2 Phase Two

In Phase Two, the two prospective case studies in the Project will involve participants in action research to implement and evaluate lessons from both the review and analysis of literature and the retrospective case studies. These case studies will be conducted in the greater Darwin region of the Northern Territory and a region yet to be determined in north Queensland. Outputs will form a toolkit of good practices and improved planning approaches which will be developed into a training program on collaborative water planning in Northern Australia. These products will also be available for use and further refinement in other collaborative water planning settings elsewhere in Australia and overseas.

1.1.3 This Report

This report is the substantive outcome from one of the retrospective case studies in Phase One. It reviews the water planning process in the Ord River undertaken between 1997 and 2006 by water agency of the Western Australian Government (the Water and Rivers Commission or WRC and its later incarnation the Department of Water or DoW). It summarises the context of the water planning process for the Ord River region, provides a background to development in the region, and describes the water planning process. This process is evaluated in Section 3 of this report against a series of criteria based on the literature review for the Collaborative Water Planning Project (Tan et al. 2008). These criteria have been developed through recent literature on the evaluation of collaborative processes and examine the effectiveness of collaboration as a:

- mechanism for improved decision-making, including governance arrangements, due process and the reconciliation of competing knowledge claims;
- facilitator of social process; including improved relationships, conflict resolution;
- means of obtaining improved outcomes, including efficiency, equity, and wider social perception of the process;
- pathways for catalytic changes in the community.

1.2 Study Scope, Aims and Research Methodology

1.2.1 Study Scope and Aims

This report focuses on the water planning process for the Ord River and the participation of community members in developing options for water use and allocation in the Ord River region. This process was run by the Department (hereinafter 'the Department') according to the provisions of the *Rights in Water and Irrigation Act 1914* (RIWI Act) as it existed prior to the amendments in 2000 and resulted in Ord River Water Management Plan. When the planning process was initiated the RIWI Act did not provide for *statutory* water planning and there was no strict legal requirement to consult the community. With no clear legal and policy documents it is difficult to locate planning criteria adopted by the Department. The plan relates to the management of releases from Lake Argyle, and all extraction downstream on the main stem of the Ord River.

This case study seeks to examine the nature and extent of public participation within the Ord River water planning process. It aims to identify barriers and enablers to collaboration in statutory water planning processes elsewhere. This analysis reflects on an historical process and does not canvass more recent developments in the approach to water planning undertaken by the Western Australian Government.

In this case study it is acknowledged that the water planning process is just one part of a broader context of water and land-use planning and management activities in the Ord River region. This broader context is a historically contingent and continually evolving complex planning landscape which is characterised by particular political, economic and social imperatives. These include the:

- ongoing development of the Ord River Irrigation System and irrigated agriculture in the Ord River Irrigation Area;
- protracted native title negotiations that involved a consent determination and package of benefits for Aboriginal traditional owners of estates in the Ord River valley (see Section 2.4.2);
- resource use agreements between private interests and government (see Section 3.1.2);
- unique cultural and historical profile of the East Kimberley region and its population.

Within this planning landscape there is a myriad of administrative and operational processes that relate to or directly affect the water planning process for the Ord River. In this study we consider only the processes most closely linked to the water planning process. However it is beyond our scope to provide an exhaustive analysis of all water and land use and management-related planning processes and activities, or to describe all community extension activities undertaken by the water agency, in the region over the past decade.

Instead the aims of the case study are, for the Ord River, to:

- describe public participation in the water planning process;
- use the Collaborative Monitoring and Evaluation Framework (CMEF) (see Figure 1);
- interpret public participation in the statutory water planning process;

- identify barriers and opportunities for collaboration in the water planning process.

1.2.2 Research Methodology

To assess the effectiveness of the collaboration during in the preparation of the Ord River Water Management Plan, the research method comprised the following steps.

1) A review of the documentation published by the Department through the course of the water planning process, including: the *Draft Interim Water Allocation Plan, Ord River* (Draft Interim WAP) (WRC 1999); the *Ord River Water Management Plan* (ORWMP) (DoW 2006*)*; the report, *Ecological Water Requirements for the lower Ord River* (DoW 2007); and the report of Indigenous cultural values of the Ord River, *Gunanurang (Kununurra) Big River: Aboriginal Cultural Values of the Ord River and Wetlands* (Barber and Rumley 2003).
2) A review of other documentation in the public domain, including: summary of public submissions in the WA Environmental Protection Authority report on the Draft Interim Water Allocation Plan; media releases; technical reports relating to the Ord River; independent commentaries and assessments; published literature such as the Hampstead review of water planning (2008).
3) Two research field trips to Kununurra in the Ord River region including on-farm visits to irrigators.
4) 36 semi-structured interviews with key people in the Ord River region, including staff of the State Government's lead water agency[3].

Most of the information for this report was derived from the interviews conducted with identified key community members in the Ord River region. Participants were selected on the basis of their involvement in the water planning process as a member of the CRP or their membership of community, industry or environmental interests in the region (see Appendix D). Respondents were identified initially through their involvement in the Community Reference Panel (CRP), and subsequently through recommendations provided by the CRP interviewees and agency staff. Five people declined to be interviewed because they had not been directly involved in the process. Due to time pressures, a small number of identified people were not able to be interviewed.

The interviews were semi-structured using an interview protocol devised to elicit information based on participants' expectations of the water planning process, their experience with the process, barriers and impediments to their active participation in the process, and recommendations for improvements. The interview protocol is attached as Appendix C.

Prior to the interviews, respondents were provided with a research project brochure as a stimulus (see Appendix E). This provided a broad overview of the project, including its aims and objectives, and a context for the research in terms of national water reform processes. They were also provided with a TRaCK Project Information Package, which outlined:

- reasons for the research;

[3] Water agency staff were involved in an extended interview process, where for example, supplementary questions were asked and addressed via email.

- details about the research team including contact details;
- our expectations of their involvement, why they had been selected, and the expected benefits and potential risks of participation in the research;
- ethical information regarding voluntary participation, confidentiality of records and reporting, a privacy statement and an independent contact for concerns about ethical conduct.

The semi-structured nature of the interview protocol allowed the format of the questions to be tailored to the specific knowledge, experience and attitudes of the respondent. Questions were open-ended and respondents were encouraged to elaborate on specific points of interest. Specific questions were devised for stakeholder respondents who were not directly involved in the process through the Community Reference Panel in order to supplement information provided by regional groups, government staff, or community panel members. Interviews were partially transcribed, and coded by the author according to the four dimensions of collaboration adapted from the Engaged Government project as the Collaboration Monitoring and Evaluation Framework (CMEF) (see Figure 1).

A draft of this report was then reviewed by the research team and three external independent reviewers[4]. A number of Department staff provided comments on a first draft. The review comments were used to redraft the final version of the report.

1.2.3 The Collaboration Monitoring and Evaluation Framework

The CMEF is designed to examine the effectiveness of collaboration as a:

- mechanism for improved decision-making, including governance arrangements, due process and the reconciliation of competing knowledge claims;
- facilitator of social process; including improved relationships, conflict resolution
- means of obtaining improved outcomes, including efficiency, equity, and wider social perception of the process; and;
- pathway for catalytic changes in the community.

The criteria for the evaluation, which included both process and outcome elements, have been progressively developed through retrospective evaluations of the collaborative components of public participation in policy development in Australia and abroad. This process has derived a series of generic and transferable indicators which are illustrated by Figure 1.

[4] One international and two domestic reviews were undertaken.

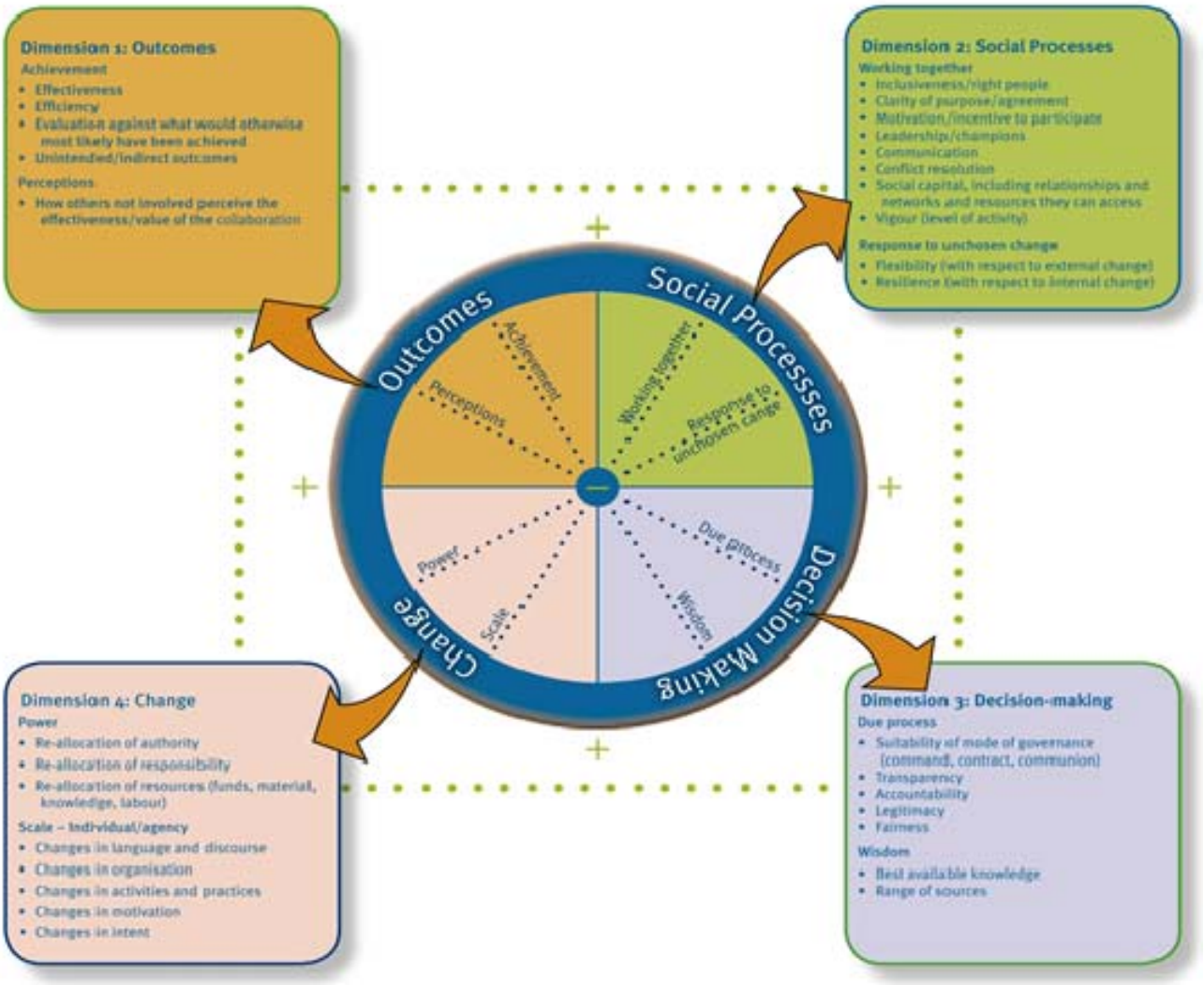

***Figure 1**: Framework for Monitoring and Evaluating Collaboration*

Whilst this set of generic criteria is generally applicable for assessment of collaboration and community engagement, to be able to apply this framework to specific area of water allocation and resource planning it was necessary to modify the model. These changes are detailed in Appendix F. Community participation in water planning in Australia is consultative, rather than collaborative, and hence many of the features of an idealised collaborative process will not be evident in the case study. However, in using this evaluation framework, the components of current planning regimes most conducive to social learning, capacity building, and deliberative decision-making are more readily identified. As such, the CMEF articulates an idealised and demanding standard that is beyond current expectations of water planning in Australia. However, its use is warranted in this (and the Gulf) case study because the analysis is not intended to be a performance assessment, but rather is a rigorous evaluation of existing practice to contribute to practical and achievable pathways for improvement.

1.2.4 Defining Collaboration

This case study was informed by the rich literature on public participation in planning and environmental management (see Tan et al 2008). The concept of public participation has a wide ambit, and both the objectives and provisions for public participation in the Australian water reform process admit a wide array of potential modes and methods. For example in the development of specific catchment resource plans or water allocation plans there are many aspects of the public participation process open to interpretation by State authorities including: the requirements for consultation with relevant stakeholders on the development and review of water resource plans; on structural adjustment pathways; and means of ensuring the incorporation of Indigenous values. Yet not all approaches to 'consultation' and 'information provision' are participatory and therefore warrant closer examination into the substance of these requirements. A continuum of modes of participation has been distilled from the planning literature and is described fully in the Collaborative Planning Project's Literature Review (Tan et al 2008). The continuum used in this research project to analyse participation modes, objectives and methods is outlined in the table below (Figure 2).

In presenting public participation as a continuum the level of public activity increases as we move along the spectrum, from the public as a passive recipient of information to being an active participant in the decision-making processes. This does not mean that one mode of participation is superior to another, simply that those seeking to involve the public should choose the most context and issue-appropriate mode of participation in a given instance. Historically, the predominant approaches to public participation in water planning can be located in the first two categories (Cole Edelstein 2004), with the more recent novel approaches extending to the establishment of multi-stakeholder platforms (Blomquist and Schlager 2005) and multi-criteria analysis (Mendoza and Martins 2006), representing more collaborative approaches to decision-making.

Mode	Objectives
Information Provision	To provide the public with balanced and objective information to assist understand the problems, alternatives and solutions
Consultatio	To obtain public feedback on analysis, alternatives and decisions
Collaborati	To work with the public and establish spaces for dialogue and deli (e.g. water planning committees, community reference panels), to a decision-making criteria, help develop alternatives and identify a p solution. This is also referred to as deliberation and/or co-designing.
Citizen con	To renegotiate decision-making power within the collaborative rela between government and public to one of partnership (power sharin renegotiation may even mean devolving final decision-making powe public. This can also be called co-deciding.

***Figure 2**: Modes and Objectives of Public Participation*

In the case of the formal water planning process in the Ord River, the modes of public participation employed were informative and consultative. Members of the public were asked by government to comment and advise on scenarios and decisions proposed by the Department in relation to water allocation. This consultative mode of participation is defined in the RIWI Act for water management planning in Western Australia and is consistent with statutory water planning in other states and territories in Australia. In one sense, the

Department is to be commended for undertaking public involvement in the plans where legally there was no strict requirement to do so. Planning theorists of that time, such as McCreddin et al (1997), point out that communities and public servants prefer a shared planning model that goes beyond consultation (See Section 4.1.4 in Volume 1).

1.2.5 Limits to the Research

The water planning process for the Ord River was selected as a case study for this project because it was the first water planning process to be completed and one of only two completed to date in WA. However there are two important limitations of this case study.

Firstly, this research methodology was constrained by the long time lag since water planning commenced (1997) in the Ord River region. Many respondents found it difficult to remember details of events that occurred long ago including the main, formal community participation elements (i.e. the CRP workshops) of the process in 2000.

Secondly this case study research is limited by the lack of Aboriginal perspectives on the water planning process. The Yawoorroong Miriuwung Gajerrong Yirrgeb Noong Dawang Aboriginal Corporation (MG Corporation)[5] (see Section 4.2.7 below) was approached in August 2007 and there was an informal meeting between the author and officers of the Corporation in Kununurra in September 2007. There has been several telephone discussions with MG Corporation officers in which research progress was provided however none of MG Corporation's members could be formally interviewed within the project timeframe. Input will also be sought on a final draft of the case study report. Therefore the analysis of Indigenous participation in the water planning process for the Ord River is based on: interviews from case study respondents; published literature; grey literature in the public domain; and the author's personal observations.

[5] See http://yawoorroongmgcorp.com.au/ for more information on the MG Corporation.

2. The Ord River Region

The Ord River basin is situated in the east Kimberley region of Western Australia and extends into the north-western Northern Territory. The climate in the region is semi-arid to arid monsoonal with a distinct wet and dry season (DoW 2006: 10). The catchment is drained by the 650 km long Ord River. The lower Ord River is the stretch of river approximately 94 kilometres long that flows between the Main Diversion Dam (also known as Lake Argyle) to where it drains into Cambridge Gulf at its mouth. Lakes Argyle and Kununurra and the Ord River Floodplain are part of the Ord River system and are listed under the international Convention on Wetlands of International Importance especially as Waterfowl Habitat, known as the RAMSAR Convention.

The environment of the lower Ord River has been substantially modified since the construction of two dams in the 1960s/70s and changes to the hydrology under post-regulation conditions have produced changes to the riverine ecosystem. Before regulation, dry season flows in the River were intermittent whereas now they are continuous and substantially higher (King 2001). Average dry season flows have increased almost fivefold and the dam structures have significantly reduced the extensive flooding that occurred every wet season. This has resulted in a reduction in the extent and frequency of flood-water inundation of the Ord River floodplain (Hampstead 2008: 512).

The lower Ord River is used to provide water to irrigated agricultural lands (the Ord River Irrigation Area or ORIA) in the Ord River region, for hydro-electric power generation, for water-based tourism, recreational fishing, boating and flying, for watering cattle, as an inspiration to residents of region and visitors and is the homeland and kin of Aboriginal people. The Ord supports local industries such as irrigated agriculture, mining, pastoralism and tourism. The major contributors to the economic output of the Kimberley region in general are mining, retail trade, tourism, construction, pearling, manufacturing, pastoralism and agriculture. The Gross Regional Product for the Kimberley region for 2005/2006 was $ 1.7 billon (KDC 2007: 6).

The East Kimberley region encompasses the local government jurisdiction of the Shire of Wyndham-East Kimberley which has a population of approximately 7,300 (Shire of Wyndham-East Kimberley 2008). The townships of Kununurra and Wyndham are the main population centres of the region with populations of approximately 6,000 and 800 respectively (Ibid.). Kununurra is the main service centre for the regional tourist market as well as the service and administrative centre for the Ord River Irrigation Area.

The population of the Shire of Wyndham-East Kimberley is young, with a median age of 30 (KDC 2007: 5). In 2001, almost half of the resident population of the northern East Kimberley region identified as belonging to the Aboriginal communities (Taylor 2003). The population of the broader region of the Kimberley had one of the fastest growth rates of any region in Western Australia between 1996 and 2006 and is expected to more than double by the year 2031 (KDC 2007: 5).

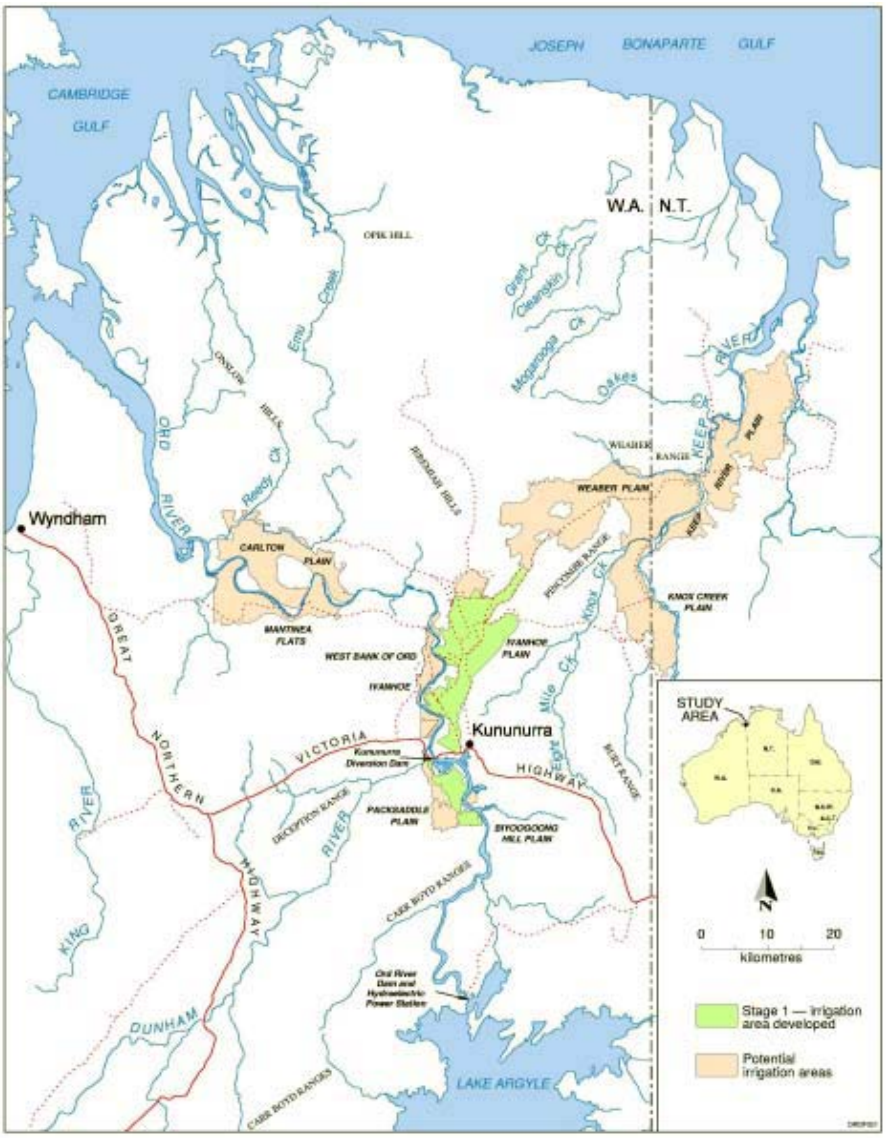

***Figure 3**: Location map to show key features of the Ord River Irrigation Project (DoW 2006: 3)*

The Miriuwung Gajerrong people are the owners and managers of estates in the Ord River region under customary systems of custodial law and governance. Today they continue to live in and care for this country to which they are intractably linked through kin relations established through the consecrations of Ancestral Beings (often known in English as the Dreaming), their journeys and activities in a time long past. The everyday work of living in and caring for land/water by Miriuwung Gajerrong peoples is the work of recreating and celebrating the acts of the Ancestral Beings. Miriuwung Gajerrong people have participated in various recent environmental management programs in collaboration with researchers (See Pursche 2004) and government agencies, such as water quality sampling with the Water and Rivers Commission. Their concerns about the environmental changes to the river and wetlands of the Ord since the construction of the Argyle Dam are noted in Kimberley Land Council (2004) and Barber and Rumley (2003), as are the social and economic impacts.

The lower Ord River is part of an area within which native title has been granted to the Miriuwung Gajerrong people. Miriuwung Gajerrong people executed their right to negotiate under the NTA in relation to this area and have developed an Indigenous Land Use

Agreement which entails a package of compensation and benefits, including resolution of land access issues for Ord Stage 2 development (see Sections 2.2).

From the limited literature available, Aboriginal participation in the irrigation sector appears to be insignificant. Aboriginal workers are under-represented in the agricultural sector of the East Kimberley when compared to non-Aboriginal workers (Taylor 2003), and the majority of these are likely to be employed in the pastoral sub-sector. There appears to be few Aboriginal enterprises that require substantial amounts of water (Kimberley Land Council 2004). In the 2004 Kimberley Land Council survey of Aboriginal enterprises three water intensive enterprises were listed: a mango farm, and two nurseries. The community-run mango farm went bankrupt resulting in a sub-lease to non-Aboriginal management and there are no Aboriginal employees. One of the nurseries, which supplies seed stock to the Argyle Diamond mine for rehabilitation, was said to have a water shortage problem resulting in a delay to progress (Kimberley Land Council 2004).

2.1 Irrigated Agriculture in the East Kimberley

The development potential of the East Kimberley region of WA features heavily in the visions of both colonial administrators and modern bureaucracies. The region contains the homelands of Aboriginal people who have owned, lived in and managed these lands/waters under custodial law for millennia. Settler Australians and their governments have made the region a site of exploration, pastoralism, mining, irrigated agriculture and tourism. In the nineteenth century, the colonial imperative for northern Australia was to populate an 'empty' north (Arthur 1997: 37) close to Asia, and therefore vulnerable to Asian occupation. The colonial vision saw the realisation of multiple benefits: wealth creation (KLC 2004: 112) through agricultural development; installation of a substantive presence of non-Aboriginal people to repeal an 'unspecified threat from Asia' (Ibid); and provision of a solid base for the employment, assimilation and settlement of Aboriginal people (Patterson 1965). Post-war agricultural research and State and Commonwealth government investment was undertaken from the 1940s to establish the success of this land use. Agricultural prospectivity was premised on large quantities of 'cheap water' in conjunction with large areas of soil favourably located (Ibid: 1-2)

In 1939 a Royal Commission was established to investigate the possibility of irrigation on the Ord River (Davidson 1982) and a satisfactory dam site was identified in 1941. The WA Government and the Commonwealth Scientific and Industrial Research Organisation (CSIRO) established the Kimberley Research Station in 1945 to investigate the potential for development of agricultural crops in the region. Initial investigations found that sugar cane, cotton and rice could be produced on irrigated lots in the Ord River region (Ibid.) No economic cost-benefit analysis was done for the project of irrigated agriculture in the Ord River region (Ibid: 5), however, economic studies of various crops in the early 1960s all indicated that farming would be unprofitable unless it was subsidised (Ibid: 7). According to Greiner and Johnson (2000) discrepancies in the economic assessments of the scheme were largely due to the different assumptions about what constituted direct and indirect benefits of the scheme and their valuation.

In 1959, the Ord Development Scheme (alternatively known as the Ord River Irrigation Scheme or ORIS) was inaugurated by the WA Government with financial backing from the

Commonwealth Government. The total capacity of the Scheme was originally designed to provide irrigation to 70,000 hectares of land in the Ord River Valley in two main stages.[6]

The Scheme comprised: the construction of a Main Dam (to create Lake Argyle), a Diversion Dam (to create Lake Kununurra) and associated irrigation infrastructure; the development of serviced farmland on the Ivanhoe and Packsaddle plains in the Ord River region; and the establishment of the township of Kununurra (completed in 1965), the new regional population centre established to support the Ord River Irrigation Scheme. Construction of the Diversion Dam began in 1961 and was finished in 1962. This Dam regulates the water flow to open channels which provide water to 12,000 ha on the Ivanhoe Plain (via the M1 Channel distribution system) and to provide water for the township of Kununurra.

In order to build the Main Dam, the WA State Government acquired pastoral leasehold lands (KLC 2004: 1). According to the Kimberley Land Council, no thought was given to the negative impacts that a project of this scale would have on the Aboriginal traditional owners (ibid). In 1972 the Main Dam wall was completed and the area behind it was filled to form Lake Argyle, 56 km upstream of the Diversion Dam.[7] The Lake is approximately 55 kilometres in length (extending north-south) and approximately 30 kilometres in width at its widest point (ibid).

To date, approximately 12,000 hectares of land is irrigated. The 12,000 hectares is known as 'Ord Stage 1'. The further development of areas for irrigation supplied by the Scheme is known as 'Ord Stage 2'. The Ord Stage 2 project is not yet realised. See Appendix G for a timeline of events relating to development and water planning in the Ord River region.

Figure 3 above shows the main features of the Ord River Irrigation Project[8] and indicates the existing (Stage 1) and potential (Stage 2) irrigation supply areas. (For an outline of the economic activity generated by the Ord River Irrigation Area see the Ord River Water Management Plan (DoW 2006)).

Commercial farming operations commenced in 1964 in the Ord River region and in the ensuing decade many farmers grew cotton on land irrigated by the Ord River Irrigation Scheme[9] (Hassall and Associates Pty Ltd and Coffey MPW Pty Ltd 1993: 4) in the expectation that this high value, high yielding crop would be profitable. This production was subsidised by the WA Government. However by the mid 1970s, the promise of irrigated agriculture was temporarily dashed and by 1974 the cotton industry had closed due to increased marketing and produced costs largely associated with insect pest control (ibid). Cotton crops planted just years earlier had been decimated by a pest caterpillar. The Commonwealth Government

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[6] There was no economic cost-benefit analysis carried out before the decision was taken in 1959 to implement the Scheme in two main stages (Patterson 1965: 3).

[7] The construction of the Main Dam (Lake Argyle) was financed through an agreement between the WA Government and the Australian Commonwealth Government.

[8] Most recently the irrigated farmland development in the Ord has been referred to as the Ord River Irrigation Project (DoW 2006: 1).

[9] The irrigation system in the ORIA is largely gravity fed with water distributed for flood irrigation of crops via a main channel (M1 Supply Channel) to the farming areas. Some water is pumped directly from the Diversion Dam (Lake Kununurra) and Ord River to Packsaddle Plain and other small areas downstream of the Dam.

provided subsidies to cotton farmers who incurred financial losses and encouraged them to plant alternative crops such as hay and fodder grains, rice, and fruit and vegetables (Powell 1998: 46). Despite this support from government, many cotton farmers in the Ord River Irrigation Area suffered huge financial losses, abandoned their land and left the region.

The 1980s heralded new hope in the Ord River region for agricultural development and by the early 1990s horticultural crops had become commercially attractive (King et al 2001). Farmers achieved horticultural successes as a result of diversification. The current array of crops includes perennial and annual horticultural crops such as bananas, rockmelons, watermelons and mangoes. These crops look set to remain profitable land-use options into the future (Greiner and Johnson 2000). Other important crops include forage crops, hybrid seed production and other field crops such as chickpeas, soybeans and, more recently, sugarcane. The prospects for sugar production are uncertain according to Greiner and Johnson (2000). The domestic sugar price has declined significantly over the past years as the Commonwealth government price subsidy has been reduced. In addition, the world sugar price is volatile and has been declining for a series of years, caused mainly by an expansion of world production. Kununurra's sugar mill has recently closed. However in the long term there are predictions of a rise sugar price due to strongly growing demand (ibid).

Other important success factors explaining the turn around in the Ord Irrigation Area's agricultural and horticultural output include improved varieties and pest management strategies. New varieties of cotton are being trialled (ibid). The growth in production has led to renewed interest in exploring the feasibility of the proposed expanded irrigation area—the development project called Ord Stage 2.

2.2 Expansion of the Ord River Irrigation Area

In the early 1990s, the previous development plans for the Ord were reinvigorated. The WA Government's Department of Resources Development sponsored a series of investigative studies and conceptual designs to update earlier development concepts. This included a regional study on the use of Kimberley water resources. As part of this study, an economic valuation report concluded that '…massive Ord expansion is warranted and viable, and now the issue is essentially commitment by the private and public sectors' (Hassall and Associates Pty Ltd and Coffey MPW Pty Ltd 1993: iii).

These studies provided a base for the governments of Western Australia and the Northern Territory to call for expressions of interest from the private sector to finance expansion of irrigation. The focus of this expansion proposal is area known as the M2 Channel Supply Area (or the 'M2 Supply Area'). It consists of land in both WA and NT located on the Weaber, Keep and Knox Creek Plains in the Ord River region (Western Australian Environmental Protection Authority/Northern Territory Department of Lands, Planning and Environment 1999).

In 1996 the WA and NT governments released a review of the expansion potential of the Ord River Irrigation Project (Government of Western Australia and Government of the Northern Territory 1996). The review identifies the uniqueness of the area for horticultural and agricultural development and confirms the potential of Ord Stage 2, stating:

> What sets [the Ord River region] apart is an abundant supply of reasonably-priced land and water and an excellent climate. ….It also weighs heavily in the Region's favour that opportunities are limited for getting started in similar mega-agricultural ventures elsewhere, especially in the

> eastern States where water shortages are pushing water prices up and land prices are high (Government of Western Australia 1996: 3).

In 1998, the WA/NT governments selected three joint venturers as preferred developers of Ord Stage 2 (Wesfarmers Pty Ltd, Marubeni Corporation and WA Water Corporation) known as the Wesfarmers consortium. The consortium was awarded a mandate to investigate the feasibility of developing an export-orientated raw sugar industry on some 32,000 hectares of land (Wesfarmers Ltd 2001). Any development proposal was contingent upon environmental approvals and it was required to prepare an Environmental Review and Management Programme (ERMP) and an Environmental Impact Statement (EIS). These would be jointly assessed according to the WA environmental impact assessment process (Western Australian Environmental Protection Authority/Northern Territory Department of Lands, Planning and Environment 1999).[10]

In 2001 a feasibility study for the Wesfarmers consortium proposal found that the estimated financial returns were likely to be inadequate (Wesfarmers Ltd 2001: 2). Reasons cited included: the volatility of world sugar prices; risks associated with downwards revisions of water allocations for Ord Stage 2 development[11]; and the unresolved nature of Aboriginal land and heritage issues (Ibid: 1-2). In 2001 the Wesfarmers consortium withdrew their proposal to develop Ord Stage 2.

The WA and NT governments however remained committed to the Ord Stage 2 project and, in 2003, announced their intention to seek expressions of interest for Ord Stage 2 development proposals. There were subsequent delays in advertising for new expressions of interest due to several factors including: the clarification of native title matters and land access and availability issues; the completion of the outstanding Aboriginal Socio-Economic Impact Assessment on the impacts of the original Ord Stage 1; and the release of the draft water management plan for the Ord River. In 2003, the WA Government advised the KLC, acting on behalf of Miriuwung Gajerrong native title claimants, that it wanted to pursue a negotiated settlement with respect to native title. This settlement was executed as the Ord Final Agreement in 2005.

In September 2006, with land availability issues relating to Ord Stage 2 substantially resolved, the WA Government called for expression of interest from the private sector to develop between 7,000 ha and 16,000 ha of the M2 Supply Area in Western Australia including water supply and drainage infrastructure. The Government received eight proposals from developers but in June 2007 announced its intention to extend the call for proposals to develop Ord Stage 2[12]. The stated reason was the emergence of '…new circumstances…such as the Commonwealth's [Australian Government] interest in Northern Australia as a key agricultural

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[10] This is premised on the full expansion of the originally proposed ORIA which assumes irrigating a further 50-60,000 hectares of land or the total net capacity of the Area (Western Australian EPA /Northern Territory Department of Lands, Planning and Environment 1999: iii).

[11] The proposed allocation for the Wesfarmers consortium project was reduced by 20% during the course of the Feasibility Study.

[12] In June 2007 the 'new vision for the Ord' is reported to increase farmland in the valley by 30,000 hectares with the Western Australian State Development Minister announcing a decision to involve the Federal Government in its plans to pursue Ord Stage 2 development (Mills 2007).

region[13], and the availability of water and its impact on Ord Stage 2 project economics' (Government of Western Australia 2007). Other relevant issues include the need for the WA Government to complete negotiations with Pacific Hydro on new water release rules for the Ord Power Station[14] and to resolve issues relating to silver/lead/zinc mineralisation in the eastern part of the Weaber Plain in the Ord River region (Loh 2007).

In 2007 the WA Department of Premier and Cabinet identified impediments to progress towards an expanded irrigation area: the cross-jurisdictional nature of the full Ord Stage 2 proposal (which originally included land in the NT) and high infrastructure costs (Brann 2007). Recently it recommended that the WA Government amend their proposal to develop 30,000 hectares straddling the WA and NT borders and develop only 8,000 hectares of the Ord River region in WA for irrigated agriculture (Archer 2007).

Development of Ord Stage 2 remains a luminous possibility for Ord River region communities despite critiques of the viability of the Ord River Irrigation Scheme from an economic (Davidson 1982, Graham-Taylor 1982); social/cultural (Head 1999) and environmental perspective (Wolanski 2001, Symanski 1996, Doupe and Petit 2002). Members of the farming community are committed to the region and its development and express frustration at the apparent lack of progress towards Ord Stage 2. Many of them have made large investments in their businesses and some explained that they continue to expend time, funds and creative resources to envision their place in an expanded irrigation scheme. The demographic pattern of the agricultural community in the Ord River region has changed in recent years with one respondent reporting that the number of farmers has contracted from 200 to 12 major operators. One respondent commented:

> We would like to see Stage 2 go ahead because Kununurra is going backwards. Most people now are working on the mines. People are leaving their farms.

The Ord Stage 2 developments were an influential force in the preparation of the water management plan for the Ord River and this will be discussed further below under Section 2.2.

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[13] The 'Commonwealth interest' in Northern Australian agriculture referred to above is manifest in the establishment in early 2007 of the Northern Australia Land and Water Taskforce by the Australian Federal Government. The 'high level, joint government and industry Taskforce' (Department of the Environment, Water, Heritage and the Arts 2007) aims to:…'examine the potential for further land and water development in Northern Australia, with particular emphasis on the identification of the capacity of the north to play a role in future agricultural development.' (ibid.)

[14] In 1996 a hydro electric power station was completed to provide electricity to the townships of Kununurra, Wyndham and to the Argyle Diamond Mine. In 2000 the Argyle Diamond Mine was approaching the end of its alluvial mining operation (originally expected to be mined out by 2003). This had implications for future energy requirements and water use for hydro-electricity production. The decision of December 2005 to re-invest in deep underground mining until 2018 consolidated future projections of electricity demands in the region (Loh 2007). This decision confirmed the need for the WA Government/DoW to negotiate new water release rules with Pacific Hydro for the Hydro Station including a potential increase in the water allocation to hydro electricity production.

2.3 Legislation and Policy Context

Hampstead et al (2008) characterise Western Australia's water planning as a system that is 'in the development phase' (2008: 508). Water management is currently undergoing reform with State water legislation under review. To date few plans have been finalised. None of these plans are statutory (see Volume 3) and according to a recent national assessment of water planning:

> it would be fair to say that none has strictly followed either the process or content set down in the Act, or the content proposed by way of the (admittedly) very new planning policies and proposals (Hampstead et al 2008: 508).

The statute governing the development of water management plans in WA is the *Rights in Water and Irrigation Act (1914)* (RIWI Act). The RIWI Act provides for three levels of water planning: regional, sub-regional and local-level water plans (Division 3D).

Until 2005, the RIWI Act was administered by the Water and Rivers Commission (WRC). Currently the WA Department of Water now has this responsibility and is the lead agency in the development of a water management plan for the Ord River. A water management plan is developed by the Department at the discretion of the Minister or the Department and the Minister is responsible for plan approval (s. 26 GU). The Department generally implements its water allocation decisions through a water-licensing regime in areas proclaimed under the RIWI Act (Trayler 2006:10).

In 2001 amendments to the RIWI Act were intended to establish a legislative framework for provision of water to the environment, tradeable water rights (Tan 2008) and public participation in water management planning.

The Act includes objects for consultation: 'to foster consultation with members of local communities in the local administration of (the Part of the Act relating to Plans), and enable them to participate in that administration' (s.4).

Hampstead et al (2008) describe the sections that relate to consultation in developing or amending a plan:

- consultation with any existing water resource management committee in the preparation, modification, or revocation and substitution of a plan (s. 26GZ);
- public notification that a plan has been prepared, and a mandatory two-month period for making submission (ss. 26GZA and 26GZB);
- an ability for the department to modify a draft plan based on submissions;
- a summary of submissions and report indicating the merits of the submissions to be prepared by the Department for the Minister for consideration in the plan approval process;
- formal Gazettal of commencement of a plan, with a note indicating whether the Minister made modifications to the drat plan prior to approval (s. 26GZF);
- notice that the Commission is considering the amendment or substitution of a plan, and a mandatory two month period for making submissions on the need or otherwise to consider amendments or replacement (s. 26GZG).

The Act also provides for the establishment of a Water Resources Committee to provide assistance or advice to the department. Water resources committees are the main vehicle, provided for in the RIWI Act, for public input into water planning in WA (RIWI Act, Division 3C). A committee may be established at the discretion of the Minister for Water Resources for any locality or area of the State[15]. The Minister holds the power to determine the membership, constitution, term of appointment and procedures of the committee (s. 26GL). The role of a water resources committee is to assist and advise government relating to the functions of the Department for any locality or area of the State of WA (RIWI Act, Division 3C; 26GM). The RIWI Act provides guidelines for the membership of water resources committees. It states that: 'as far as is practical', the membership is to be comprised of:

- persons who are residents, or employed in or operate a business in the locality or area for which the committee is established;

- persons who are representatives of local government, public authorities, or who have knowledge and experience relating to water needs and practices of local communities including Aboriginal communities or persons who are from the WRC (now DoW) (RIWI Act, s. 26 GL.)[16]

According to Hampstead et al (2008), one of the main areas to be strengthened in the proposed water legislation is the involvement and participation of stakeholders in the planning process (2008: 506).

The RIWI Act legislates for the provision of water for the environment in water allocation and licensing. The *Environmental Water Provisions Policy for Western Australia* (WRC 2000b) complements the RIWI Act and prescribes the protection of ecological values in the allocation process through determination of EWPs and EWRs (see Section 3.1.2).

Separate legal arrangements govern water use from the Ord River system for hydro-electricity production and mining. The *Ord River Hydro Energy Project Agreement Act 1994,* between the WA Government and Pacific Hydro, guarantees water for the operation of the hydro power station on the Ord River and specifically overrides the RIWI Act. This Act ratifies the 1994 Water Supply Agreement (WSA) between Pacific Hydro and the WA Water Corporation which contains principles for the development of water release rules for electricity generation (DoW 2006: ix). This WSA is also not affected by administrative powers under the RIWI Act. The terms of the WSA are not publicly available. Water for the power station is not supplied through the RIWI Act but is obtained through the *Water Authority Act 1984* (now the *Water Agencies (Powers) Act 1984*).

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[15] The WA Government's Policy Statement on Water Sharing notes:

> Local advisory committees can assist the Commission [Water and Rivers Commission] where broader community advice is required to assist in making [water} sharing decisions and preparing [water] allocation management plans. (WRC 2000e: 10)

[16] The RIWI Act also stipulates that members of a water resources committee should collectively have knowledge of and experience in the management or development of water or other natural resources, the use of water, conservation of ecosystems and local government. Users of water must be in the majority on any water resources committee if the functions of the committee relate to use of water (RIWI Act, Division 3C).

The *Diamond (Argyle Diamond Mines Joint Venture) Agreement Act 1981* ratifies and authorises the implementation of an agreement (Argyle Diamond Agreement) between the State of Western Australia and the mining joint venturers for the mining, marketing and processing of diamonds and related matters. Water for the operation of the Argyle Diamond Mine is granted through a licence under the RIWI Act to the joint venturers.

As mentioned above, the Department of Water is the agency responsible under the RIWI Act for the development of a water management plan for the Ord River. The WA Water Corporation, as the bulk water controller and operator of the Ord River Irrigation Scheme, controls the two dams on the Ord River, the Main Channel (irrigation supply channel to M1 Supply Area) and some of its fixtures. The Corporation is responsible for maintaining these assets and for liaising with stakeholders regarding any works and the flow regime in the lower Ord River. In July 2002 the WA Water Corporation handed over responsibility of administering all other Ord River scheme services and infrastructure to the Ord Irrigation Cooperative (OIC), as part of a state-wide move to privatise irrigation cooperatives in WA. The Ord Irrigation Cooperative holds a single allocation licence under the RIWI Act for the M1 Supply Area. Individual irrigators in the irrigation area generally hold shares in the cooperative in proportion to their entitlements to water and in accordance with the cooperative's articles of association (Tan 2008).

2.3.1 Water Policy Context

Water allocation planning took place in the Ord River region during a period of national and state reform of water administration and management. The process of developing the water management plan for the Ord River began in 1997 in the context of a broad restructure of water management and service provision in Australia through the Council of Australian Governments (CoAG) *Water Reform Framework* (CoAG 1994) (see Volume One). In 2004 Australian CoAG renewed its commitment to water reform by developing the National Water Initiative (NWI). Western Australia became a signatory to the NWI in 2006 almost two years after the other states and territories.

The State of WA is currently in the process of overhauling its water management framework and the governing legislation. The WA Government established the Water Reform Implementation Committee in 2005 to provide advice on progressing water reform. It has recommended that statutory water plans be developed for discrete water systems in WA and close consultations with water users and stakeholders should be an integral part of the water planning processes (Water Reform Implementation Committee 2006: 4).These recommendations are supported by the WA government in their response to the Committee's *Blueprint for water reform in Western Australia* released in February 2007 (Government of Western Australia 2007).

As part of the national water reform agenda, CoAG required states and territories to establish a clear policy to ensure that the water needs of the environment are addressed in water allocation decision making (WRC 1999: 3). The water needs of the environment are defined in Western Australian water planning as Ecological Water Requirements (EWRs) and Environmental Water Provisions (EWPs). In WA, EWRs are 'the water regime needed to sustain the ecological values of water dependent ecosystems at low levels of risk'. (WRC 2000b: 12). And EWPs are '…water regimes that are provided as a result of the water allocation decision-making process taking into account ecological, social and economic

values. They may meet in part or in full the ecological water requirements' (WRC 2000b: 12)[17].

In 2000 the WA Government released the *Environmental Water Provisions Policy for Western Australia* (WRC 2000b). This policy provided a basis to determine EWR/EWPs for the Ord River in the Revised Interim Water Allocation Plan for the River. The Policy elaborates the means of implementing water management planning in WA and identifies community involvement as a 'fundamental aspect of water resources allocation planning and management processes' (Ibid: 5). It reiterates the statutory requirements for community involvement in the development of water management plans and provides additional guidance on the means of involving the public in water planning. It states that:

> … in most cases stakeholders will also be given additional opportunities to have input into the preparation of water management plans using such approaches as workshops, open forums and displays, surveys and meetings with stakeholders. For important plans, consultative committees may be established to assist with plan preparation. (WRC 2000b: 10).

According to the *Environmental Water Provisions Policy for Western Australia* (WRC 2000b), the water agency is required to refer a water management plan to the WA Environmental Protection Authority, where Environmental Water Provisions specified in a plan may have significant implications for the environment (WRC 2000b: 10). Further, the plan may be subject to environmental impact assessment by the same agency (ibid). The Policy notes that wherever possible, the consultation processes of the Department and the EPA will be integrated to avoid duplication of effort by stakeholders (ibid: 10). For example, in the case of the water planning process for the Ord River, the WRC forwarded the public submissions it received on the Draft Interim Water Allocation Plan to the EPA for its consideration.

The Policy also states that the water planning agency will develop a timetable for the preparation of water plans, that this will be available for inspection by stakeholders and will be regularly reviewed to take account of changing priorities (WRC 2000b: 10). It also expounds the principle of transparency in providing water for the environment through water planning in WA (Ibid: 5.)

2.3.2 Native Title

The Miriuwung Gajerrong people are native title holders for some areas in the Ord River region. However, the Ord River Irrigation Scheme extinguished native title over large tracts of their customary estates. This includes the area of land inundated by Lake Argyle that covers an area of more than 3000 square kilometres, land to the south-east of the Lake, over 15,000 hectares of irrigated farmland established as part of Stage 1 on the Ivanhoe and Packsaddle Plains, the area now established as the township of Kununurra, and Lake Kununurra. (KLC 2004: 2).

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[17] In the case where water allocation plans are formally assessed by the WA EPA under the provisions of the *Environmental Protection Act 1986*, the Minister for the Environment has statutory decision-making powers to set conditions requiring that specified environmental values must be protected and that the EWPs identified in approved plans are adopted to meet these requirements' (WRC 2000b: 5).

The Ord River Irrigation Scheme was developed without consideration of the interests, rights and needs of Indigenous people[18]. Aboriginal people were not consulted regarding the proposal by the WA Government to construct two dams (KLC 2004: 2). Nor were they provided any compensation for the loss of their traditional estates, damage to their heritage through inundation (Hill 2004), or for the associated impacts of dislocation and dispossession. These impacts included trauma and social disorganisation and disruption (ibid). For example, Aboriginal people living in the area now covered by Lake Argyle were advised they had two days to vacate their homes as the new lake filled much faster than was expected (L. Kirkby pers. comm.).

In 1994 the Miriuwung Gajerrong people lodged two claims for native title to areas in the Ord River region. The first claim eventually reached the High Court of Australia on a point of law. The substantive matter was sent to the full Federal Court for further determination and native title was found to exist in some areas.

In September 2003 the WA Government announced their intention to compulsorily acquire 65,000 hectares of land for the development of Ord Stage 2. As part of its proposal to expand the irrigation area, the WA Government commissioned the Kimberley Land Council, a representative body under the Native Title Act 1994, to undertake a social and economic impact assessment of the Ord River Irrigation Project Stage 1 (KLC 2004) on the Aboriginal people of the Ord River region. The assessment reviews previous government-sponsored studies on the impacts of Ord Stage 1 on Aboriginal people (KLC 2004: 3) and recommends measures to address and mitigate the ongoing impacts of this development.

The Miriuwung Gajerrong people, as native title holders and claimants for the land area nominated for inclusion in Ord Stage 2, had the right to negotiate certain conditions under the NTA. In relation to the land required for Ord Stage 2, the Western Australian Government accepted that native title remains intact (though not tested in the courts and therefore not legally defined) (KLC 2004: 5) and sought a negotiated approach to settlement of native title and other matters rather than a litigated one. To guide these negotiations the WA Government and the Kimberley Land Council, on behalf of the Miriuwung Gajerrong people, drafted a Memorandum of Understanding (MOU) with the aim of reaching a final agreement on these matters (Office of Native Title n.d.). This MOU was contingent on the WA Government addressing the impacts of Ord Stage 1 as a precondition for successful negotiations for Ord Stage 2 (KLC 2004: 5).

Signed in 2004, the MOU is titled the Miriuwung Gajerrong Global Negotiation Framework Agreement (known as the Miriuwung Gajerrong Global Negotiations). The Framework comprised several elements including: consent determination of Miriuwung Gajerrong # 1 claim; a package of benefits to compensate for extinguishment of native title in Miriuwung Gajerrong #1 claim; native title and heritage clearances for development of Ord Stage 2; and funding to support the global negotiations (Bogan 2007).

[18] Legislation for Aboriginal site protection, for example the *Aboriginal Heritage Act 1972*, was not in force when Ord Stage 1 was implemented.

The global negotiations also resulted in the Ord Final Agreement. It was struck in 2005 and is a registered Indigenous Land Use Agreement (ILUA) under the Native Title Act. The Ord Final Agreement is a package of agreed actions and commitments which includes funding from the WA Government to:

- establish and operate the new Miriuwung Gajerrong (MG) Corporation;
- transfer land to the Miriuwung Gajerrong Corporation including community living areas;
- establish the Ord Enhancement Scheme to address the recommendations of the Aboriginal Social and Economic Impact Assessment of Ord Stage 1;
- fund joint management arrangements for new conservation areas and for Water Reserve 31165 with the Department (Office of Native Title n.d.).

The WA Government applauded the agreement stating:

> …it clears the way for development in Kununurra and the Government will now be able to ease the chronic shortage of land for residential and agricultural purposes (Department of the Premier and Cabinet n.d.)

In 2006 the native title rights of the Miriuwung Gajerrong to lands in the Ord River region were recognised in a consent determination before the Full Federal Court[19].

[19] The process of negotiating the resolution of native title matters in the Ord River catchment and surrounding areas was complex as it compounded three main matters concerning: native title issues relating to the future act provisions of the NTA; addressing compensation liabilities for the extinguishment of native title on areas in the Ord Valley forming the OIRA Stage I and associated developments; and the contents of a consent determination for the Mirriuwung Gajerrong #4 native title claim. (See Bogan 2007:111 for details).

3. The Water Allocation Planning Process

Under the National Water Initiative (NWI), water planning is regarded as one of the most important of the administrative, regulative and economic tools for achieving sustainable use of water. Under the NWI, water sharing or water allocation planning is defined as catchment based planning of surface water and groundwater resources to specify how they are to be managed and shared to achieve economic, environmental, and social outcomes.

This study examines the process that led to the release of the final water management plan for the Ord River, the *Ord River Water Management Plan*, in 2006. The water planning process was administered by the WA water planning agency, the Water and Rivers Commission (WRC) (later to become the Department of Water (DoW)) under the provisions of the RIWI Act. Amendments to the RIWI Act in 2000 broadly specifies the process elements in the production of a 'water management plan' for a given locality or area in WA. These are: a description of plans and their contents (RIWI Act, Division 3D, Subdivision 1); and, the public consultation and approval of plans (RIWI Act, Division 3D, Subdivision 2).

The plan development process was protracted and convoluted and many stakeholders have since lost sight of all elements and details of the process. The timing and conduct and public participation aspects of the water planning process were affected by the changing political, economic and policy imperatives of government and other interests (see Section 3.1.4 for details). For the purposes of this analysis, five main phases in the development of the water management plan for the Ord River are identified and described in the following section of the report.

Phase Number	Dates	Water planning process
Phase 1	1997-1999	Developing the *Draft Interim Water Allocation Plan, Ord River*
Phase 2	1999-2003	Revising the *Draft Interim Water Allocation Plan, Ord River*
Phase 3	2003- 2006	Developing the *Ord River Water Management Plan*
Phase 4	2007 and ongoing	Updating the Ecological Water Requirements (EWRs) for the lower Ord River
Phase 5	Ongoing	Implementation and review

Figure 4: *Phases in the Ord Water Planning Process*[20]

3.1 Phases of the Water Resource Plan

3.1.1 Phase 1: Developing the Draft Interim Water Allocation Plan Ord River

The Water and Rivers Commission commenced drafting a water allocation plan for the Ord River in 1997. The first iteration was the production in 1999 of the *Draft Interim Water Allocation Plan*, *Ord River* (Draft Interim WAP) (WRC 1999a). The key issues in the

[20] See also Appendix for a timeline of events relating to development and water planning in the Ord River region.

development of the Draft Interim WAP were: the need to define and secure existing and future water use in the Ord River basin for development of irrigated agriculture; and the determination of ecological flows requirements for the lower Ord River to protect environmental values of the system.

In developing the Draft Interim WAP, the Board of the Water and Rivers Commission sought to facilitate the development of Ord Stage 2 and to provide for existing and future water use, while minimising the risk to the environment of the Ord River (WRC 2000a: 1).[21] An objective of the water planning process was to ascertain the amount of water required to sustain the values of the lower Ord River environment and to provide for this in the water planning process (ibid).

From 1997 to 1999, however, the Water and Rivers Commission had insufficient information to determine the environmental water requirements for the Ord River. The Commission acknowledges that there had been major consequences to the flow regimes and riverine ecology in the lower Ord River as a result of the construction of the dams, operation of the irrigation scheme and, to a lesser extent, the construction of a hydro power station in 1996. These included a reduced variability of flows (WRC 2000a: 21) with changes in annual stream flow and in the seasonal pattern of flow (ibid: 18) and attendant ecological changes to the riverine environment of the lower Ord River.

The Water and Rivers Commission intended to undertake further research to better understand the post-dam hydrological and ecological characteristics of the lower Ord River (WRC 1999: 48) and to develop environmental flows requirements to protect its ecological values. However in the absence of this knowledge, and in drafting the water allocation plan for the River, the Commission adopted a precautionary approach to EWPs and designated a fixed percentile of water to the environment[22] for each month based on the analysis of historical discharge records for the Ord River prior to the construction of the Main and Diversion Dams (WRC1999: 20). The Draft Interim WAP therefore set a 'minimum environmental provision' (WRC 1999: 21) or 'interim Environmental Water Provision' to be revised through a 'public process' as part of the next phase of water planning (see Phase 2 below and Appendix B of this report for details).

The Draft Interim WAP aimed to provide clarity of use rights for three groups including the:

- Water Corporation, as operators of the storage systems;

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[21] Arguably the main purpose of the Draft Interim WAP is to serve as a foundation for the development and further expansion of irrigated agriculture. Both the Draft Interim WAP and the ORWMP identify this as a motivating factor in the process. For example, the Draft Interim WAP notes it:

> …has been prepared in anticipation of application for additional diversion of water through licenses for the Ord Stage 2 irrigation scheme (WRC 1999: 3).

And, the final ORWMP document observes:

> Water planning was required to address the water resource management aspects raised by establishing new irrigation supply areas (WRC 2007: 2).

[22] The WA DEP in its comments on the Draft Interim WAP considers it appropriate to set EWPs in the absence of EWRs for the lower Ord River. The DEP and the EPA both note that to do so is inconsistent with the COAG Framework Agreement on Water Resource Policy and the WRC's own *Draft Environmental Water Provisions Policy* (EPA 1999: 6-7).

- Ord Irrigation Cooperative Ltd, as operators of the water distribution systems in the existing irrigation areas;
- proponents for the proposed Stage 2 development (WRC 1999: 1).

The Plan provided an interim Environmental Water Provision for the lower Ord River and determined allocations for existing (Stage 1) and future water use (including Stage 2 proposed developments) and hydro power generation. The Draft Interim WAP provides 300 GL/yr to irrigate the Stage 1 area to be guaranteed in a license held by the OIC, and up to 740 GL/yr to irrigate the proposed new area, the M2 Supply Area (WRC 1999: 3) as part of Ord Stage 2 developments.

The Draft Interim WAP was released in May 1999 for a period of two months public comment. The water agency communicated the Draft Interim WAP to a range of stakeholders to seek public comments. According to an agency planner interviewed for this study:

> Copies of the Draft Interim WAP were also sent by the WRC to key stakeholder groups, including Government agencies and briefing sessions were held in Perth and Kununurra by the DoW for relevant agencies. The WA Government departments contacted included the Water Corporation, Agriculture WA, the (then) Western Australian Department of Conservation of Land Management, the WA Department of Fisheries, and the (then) Western Australian Department of Minerals and Energy. Organisations supporting indigenous interests, environmental groups and industry peak bodies were also invited to make comment direct to the EPA, as part of the public review of the Draft Interim WAP by the EPA.

In December 1999, the WA Environmental Protection Authority provided advice on the Plan to the WA Environment Minister (EPA 1999).[23] In its advice it included a summary of the issues raised in public submissions on the Plan (see EPA 1999: Appendix 3). The EPA was not satisfied with the rationale for developing the interim Environmental Water Provisions for the Ord River proposed in the Draft Interim WAP and advised the Commission to assess a new sustainable diversion limit for the Ord, consistent with new water and environmental legislation and to further develop an interim Environmental Water Requirement[24] for the lower Ord River based on the 'new' social and environmental values of the Ord developed in the period since the Ord River was dammed (King et al 2001). (See Appendix B for details).

3.1.2 Phase 2: Revising the Draft Interim WAP

In 2000, the water agency commenced revision of the Draft Interim WAP based on the consolidated advice it received from the EPA, other government agencies and the public submission process in late 1999. The key issues in revising the Draft Interim WAP were the:

- ability to determine flows provisions to protect environmental values based on a regulated Ord River;
- need for further research to determine these values and the flows requirements to maintain them;

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[23] This was not a formal assessment of the Plan by the EPA under the Environmental Protection Act 1986.

[24] The Scientific Panel advised that the Interim Environmental Water Requirement should be equal to the Interim Environmental Water Provision until such time as the results of further investigations become available.

- establishment of mechanisms to assist the Minister for Water Resources and the Department, to decide on aspects of a revised water management plan for the Ord River including a Scientific Panel and a Community Reference Panel (CRP); and, the withdrawal of the Wesfarmers/Marubeni consortium proposal for Ord Stage 2.

In revising the Draft Interim WAP, the new imperative of the water planning process was to enhance environmental flows in the lower Ord River during the dry season.[25] These additional flows were required to maintain the environmental values developed in the River since the construction of the two dams and associated infrastructure in the Irrigation Scheme. Providing these additional flows meant significantly altering the other water allocations proposed by the Draft Interim WAP. Furthermore, the requirement to release additional water for environmental flows from Lake Argyle in the wet season, as well as the legal commitment to provide water for hydro electric power generation, meant that that water available for irrigation was significantly limited at some times of the year. The water available for irrigation would be further limited to meet the demand for water for hydro power, if this increased as a result of a shift in the Argyle mining operation to underground operations. The Water and Rivers Commission also stated their intention to consider the possibility of determining 'special purpose flows' (WRC 2000a: 2)[26].

From 2000, the Department undertook activities to revise the Draft Interim WAP including:

- commissioning research projects to build the scientific information base for the water planning process27;
- establishing a scientific panel with expert knowledge of tropical river ecosystems 'to provide advice on the water-dependent ecosystems and their water requirements' (WRC 2000a);
- conducting additional consultation with the community (WRC 2000a).

In 2000, a panel of river ecologists (the Scientific Panel) was established to provide advice to the Commission on how best to revise the environmental flow provisions for the lower Ord River (DoW 2006: 37-38). The Panel comprised six experts involved in a number of the ecological studies undertaken in the Ord River catchments since 1999 (Braimbridge and Malseed 2007: 11). The Panel assessed the impacts of changed hydrological conditions on key ecological attributes and flow factors (WRC 2000a). They identified a key consideration in setting a revised Interim Environmental Water Requirement was maintaining an adequate dry season flow. The Panel also recommended further hydrological and ecological work to help define the EWRs.

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[25] See 'Background to developing a Revised Interim Allocation Strategy—Ord River Western Australia' (WRC 2000a) for details of the process adopted by the WRC to determine the Interim EWPs and EWRs to produce a Revised Interim Allocation Strategy for the Ord River.

[26] After providing for the environment, the next priority for water allocation under the planning approach is to provide for existing users (WRC 2003a: 8). In revising the Draft Interim WAP the WRC noted issues regard existing uses of water in the Ord River region, including the need to foster efficient and careful use of water in the irrigation area to prevent groundwater re-charge and transport of chemicals and nutrients into the lower Ord River (Ibid.)

[27] The goal of these projects was to better understand the hydrology and ecology, as well and the social and economic values of the River.

Revised Environmental Water Provisions for the lower Ord River were determined by the Department (with advice from the Scientific Panel) and presented in 2000 to a Community Reference Panel (CRP) set up for the water planning process. (See Section 2.2.2 for details of the CRP process.)

The CRP met on two occasions in 2000. At its first meeting in June, the CRP advised the water agency on a suite of values and recommendations for water and water use in the Ord River region. The Commission proposed at this workshop that the revised Draft Interim WAP would be released in October 2000 (DoW 2006: 44). This did not happen and a second CRP meeting was convened in October 2000. At this meeting the water agency representatives outlined the main elements of a revised allocation strategy for the Ord River. The meeting ended with an invitation to make written submissions to the Department on the strategy so these could be considered in finalising the revised plan (Ibid: 163).The water agency also undertook some additional specific briefings with irrigators and M2 Supply Area proponents in late 2000 and early 2001 and, in response, they received written submissions from community members in this period (ibid: 165).

A revised Interim WAP was substantially drafted by late 2001. It incorporated outcomes of the CRP workshops held in 2000 and initial work on ecological characteristics of the River. The revised Interim WAP for the Ord River was due for release in 2003 with a public comment period of four weeks (WRC 2000c). However, this version was not released that year because the Wesfarmers consortium proposal for the M2 Supply Area development was withdrawn in December 2001. There was no longer an immediate need for the Interim WAP to inform the development of the M2 Supply Area. This provided additional time for the Department to carry out further investigations into the environmental flow regime being proposed and to update irrigation and power demands.

3.1.3. Phase 3: Developing the Ord River Water Management Plan (ORWMP)

Following the withdrawal of the Wesfarmers/Marubeni consortium proposal, the Department continued to refine allocations for the Ord River between 2003 and 2006, re-drafting the revised Interim WAP. In 2006 it released this document as the final *Ord River Water Management Plan* (ORWMP) (DoW 2006). The key issues in developing the ORWMP were:

- the changing magnitude and timing of new irrigation and power demands in the Ord River region during the period 2003 to 2006;
- the need to alter allocations for consumptive use due to the reassessment of the Environmental Water Provisions for the lower Ord River (to comply with advice from the EPA (see Section 3.1.1 above);
- on-going delays to Ord Stage 2 developments which would impact on future water use demands.

The stated purpose of the Ord River Water Management Plan is to:

- Protect the riverine environment of the lower Ord River, as adapted since the Ord River Dam [Lake Argyle] was constructed;
- Provide for existing commitments to irrigation and hydro-power generation;
- Guide planning for the WA portion of the M2 Supply Area [Ord Stage 2 developments] and irrigation developments on the lower Ord River;

- Identify the potential for further hydro-electricity to be generated at the Ord River Dam [Lake Argyle] and the Kununurra Diversion Dam [Lake Kununurra];
- Indicate the potential for additional irrigation allocations to be made in the future (DoW 2006: 6).

The ORWMP provides for 865 GL/yr to be diverted for irrigation from the Ord River with 400 GL/yr for a future Ord Stage 2. This is significantly less than the total allocation to irrigation purposes of 1235 GL/yr, proposed in the 1999 Draft Interim Water Allocation Plan. This difference is largely due to a reassessment by the water agency of the Environmental Water Provisions for the Ord River, based on the advice received from the public and the Environmental Protection Agency.

The ORWMP is to be updated with an expected revision within three years of its release (DoW 2006: 7). The Plan has now been formally released but was not formally assessed by the WA EPA before its release[28]. Under s 26GZC of the RIWI Act, a statutory water plan would be required to be formally referred by the Department to such bodies involved in the planning or management or a natural resource. Thus the EPA would be involved in a formal assessment if the ORWMP were a statutory plan.

In 2005 Rio Tinto decided to continue its Argyle Mine operations underground which meant increased future demand for water for electricity generation from the Ord Power Station. When the Wesfarmers consortium withdrew its proposal for agricultural development in the Ord River region in 2001, the WA and NT Governments restated their commitment to establishing new areas of the Ord River Irrigation Project (DoW 2006: 6). The Department continued to refine its allocations for water use in the Ord River on the basis of these changing demands whilst supporting ongoing scientific research in the catchment to improve knowledge of the riverine environment of the lower Ord River.

3.1.4. Phase 4: Updating the Ecological Water Requirements for the lower Ord River

Phase 4 of the water planning process represents the period in which the Department of Water updated the Environmental Water Requirements for the lower Ord River, using a new methodology which represents a higher degree of resolution in determining flow requirements than previously employed (Braimbridge and Malseed 2007: v).

In May 2007 the water agency released new ecological flow provisions for the lower Ord River. The publication, *Ecological Water Requirements for the Lower Ord River* (Braimbridge and Malseed 2007), presents the findings of work undertaken over the past few years to develop a 'more comprehensive, higher resolution Environmental Water Requirement' (ibid: 4) and associated environmental allocations for the River. The outcome of this work results in a slightly higher (by 200 GL/yr) annual flow discharge. At the time of writing, the Department was conducting further work to determine revised allocations for hydro-power generation and irrigation in the Ord River Irrigation Area based on the revised Environmental Water Requirements and new knowledge on Ord River hydrology (ibid: 87). The Department indicated that this could include a future allocation to Ord Stage 2, greater than that specified in the ORWMP (Ibid: 1). Any proponent for Ord Stage 2 development must also apply for a

[28] According to agency staff, the EPA was briefed before the document was released.

water licence under the RIWI Act. A licence application for the proposed M2 Supply Area in the Ord River Irrigation Area must be advertised[29] and subject to formal public comment.

3.1.5 Phase 5: Developing an Addendum to the ORWMP and the Report

The key issues in the development of Phase 5 of the water planning process are the:

- ongoing refinement and consolidation of information and advice on water allocations in the lower Ord River based on new scientific knowledge and changing irrigation and power demands;
- formal assessment of these allocations by the WA Environmental Protection Agency, including public consultation.

The Department expected that a new developer for the first stage of the M2 Supply Area development would have been appointed during 2008 and that, by then, it would have received a new application for a water license for the development proposal. The "Where to from here?" section at the end of the ORWMP (see DoW 2006: 191) states how the agency anticipates assessing this license application:

> The updated hydrology and new EWR for the lower Ord River will be used, in conjunction with the sustainable diversion limits of the current plan [ORWMP], to assess the [water] licence application for the first phase of the M2 Supply Area development. (DoW 2006: 191).

However, in June 2007 the Western Australian Government decided to rethink the approach to expanding the Ord River Irrigation Area. This effectively extended the time by when a new licence application for the proposed M2 Supply Area development in the ORIA was likely to be received by a further 18 months or so. This has necessitated a change in the approach to the water planning process, formulated by the Department in late 2006.

In late 2006, the Department had planned to incorporate any comments received on the ORWMP with public input received from advertising of the M2 [Supply Area] licence, together with updates to the Ord River hydrology and new ecological water requirements (detailed in the *Ecological Water Requirements for the lower Ord River* report (Braimbridge and Malseed 2007), for the lower Ord River, into a new report on the proposed M2 [Supply Area] licence and new power station water release rules. The Department had hoped to forward this report to the EPA in late 2007 (ibid.) to provide input to the final setting for environmental management conditions on the M2 [Supply Area] development. It would be subject to review under the formal public consultation processes of the EP and EPBC Acts. A Department officer further explained:

> …formal environmental assessment of the future management of the Ord River resource was purposefully delayed until the next major (M2) licence application was received. No major reductions in flows of the lower Ord River would occur before a new M2 licence was granted. Moreover, this approach enabled the ORWMP to be released in 2006 to guide planning for the M2 [Supply Area] development, but provided additional time to complete work on the new ecological water requirements for the lower Ord River, update the hydrology and finalise new water release rules for the power station. The approach avoided two rounds of formal public consultation within 18 months (on the ORWMP and the new M2 licence application) and ensured

[29] This is a requirement under the provisions of the RIWI Act.

that, when formal assessment was undertaken, it would be informed by the most recent information.

Currently, the Department of Water plans to prepare an addendum to the 2006 ORWMP for completion in mid 2008. This addendum document will incorporate:

- the updated hydrology for the Ord River (based on research undertaken by the DoW);
- new environmental water provisions based on the Ecological Water Requirements for the lower Ord River (Braimbridge and Malseed 2007) report;
- new [Ord River] power station water release rules to be developed by the DoW;
- the (confirmed) irrigation allocations of the ORWMP.

The Department intends to package the ORWMP (DoW 2006), the *Ecological Water Requirements for the lower Ord River* report *(*Braimbridge and Malseed 2007), and the new addendum. These three documents will be formal assessed under the WA *Environmental Protection Act 1986* and *Environmental Protection and Biodiversity Conservation 1999 (Cwth) Act* (EPBC Act). The Department also expects to conduct an associated round of public consultation covering the three documents during late 2008 or early 2009.

3.2 Public Participation in the Water Planning Process

In this section we describe community participation in the water management planning process. Several different types of activities aimed at involving community interests occurred as part of the water planning process. These are described as:

1. Development of the Draft Interim WAP and submissions process;
2. Community Reference Panel (CRP) and meetings;
3. Discussions and negotiations; and
4. Informal participation.

3.2.1 Development of the Draft Interim WAP and Submissions Process

During the development of the Draft Interim WAP, the WRC consulted with a number of local and state government bodies (WRC 1999). The Commission also undertook some '…targeted consultation with specific stakeholder groups in Kununurra and around the State [Western Australia]' (Worley 2004) including attempts to consult with Indigenous people before the release of the Draft (Barber and Rumley 2003: 7).

The Draft Interim WAP was released to the public for a period of 8 weeks ending on August 20 1999 (WRC 1999: i).

The WA EPA reviewed the Draft Interim WAP under the Section 16 (e) of the WA *Environmental Protection Act 1986*. This is not an assessment under Part IV of the Act but consolidated advice based on a consideration of the Plan itself, the issues raised within public submissions on the Plan and the proponent's [the WRC's] response to these submissions (WRC 1999: i). The EPA provided this advice on the request of the WRC. It should be noted that the WRC was not obligated under the RIWI Act as it stood in 1999 to refer the Draft Interim Plan to other bodies whose functions may be affected by the Plan. Section 26 GZC, RIWI Act now requires such a referral to other bodies.

The WRC received sixteen written submissions from individuals, interest groups and State and Commonwealth Government agencies (see EPA 1999: Appendix 2). It forwarded these to the EPA by 10 September 1999 who prepared a summary of issues raised in the public submissions which is recorded in its full report, released in December 1999, entitled *Advice to the Minister for the Environment from the Environmental Protection Authority under Section 16 (e) of the Environmental Protection Act 1986* (EPA 1999). The majority of comments from the public on the Draft Interim Plan fell under the issue of 'Methodology adopted to achieve EWPs' (EPA 1999: Appendix 3).

The EPA review report also records a detailed response by the WRC to the 'Summary of Issues Raised in [Public] Submissions on The Draft Interim Water Allocation Plan—Ord River Western Australia' (EPA 1999: Appendix 4). The WRC commits in its response to completely re-assessing the EWPs in the final water management plan for the Ord River (Ibid: 2) and that the modified ecology of the River and the social values established since construction of the dams will affect the water level criteria to be maintained (Ibid: 6). It also commits to some actions for involving the public in the next phase of the water planning process including: seeking the input of various local representative bodies in developing management objectives for the lower Ord including: Ord Land and Water (OLW); the Shire of Wyndham-East Kimberley and its Lower Ord Community Advisory Committee; and, the East Kimberley Recreational Fishing Advisory Committee. (Ibid: 14); and the development of a clear and transparent strategy for consultation with Aboriginal communities and a detailed Aboriginal social and cultural values study. It doesn't provide any further details of a strategy for public participation in the process of revising the Draft Interim WAP.

From 2000 to 2003, the WRC set about revising the Draft Interim WAP on the advice from the EPA. The process of revising the Draft Interim WAP culminated in the release of the ORWMP some six years later. A draft of the ORWMP was not released for public comment.

3.2.2 Community Reference Panel and Meetings

A Community Reference Panel (CRP) was established in 2000 as part of the process of revising the Draft Interim WAP for the Ord River (DoW 2006: 44). The CRP did not have any formal legal status. Its primary role was to provide advice on the proposed allocations of the Ord River Water Management Plan.

The CRP for the water planning process for the Ord River predated amendments to the RIWI in November 2000. These amendments commenced in 2001. Division 3 C of the RIWI Act now provides for the establishment (at the discretion of the Minister) of a Water Resources Committee. A Water Resources Committee under the Act has broader functions than the CRP. The water agency determined that the overheads of running a permanent Water Resources Committee with broader functions for the East Kimberley region (and including the Ord River] was not warranted at the time. Nor was it considered appropriate given the major allocation issues involved in developing the ORWMP. The Department established the CRP as the main public forum for formal participation in the water planning process.

The role of the CRP was to assist and advise the agency on 'socio-cultural aspects of the allocation decisions' and in particular, the revision of the Environmental Water Provision for the Ord River (WRC 2000c). The CRP met on two occasions in 2000.

The first meeting of the CRP is described by the Department as a 'community workshop', held in June 2000 in Kununurra, and the second meeting was a 'follow-up public forum' in Kununurra in October 2000.

The role of the CRP was specifically 'advisory rather than decision-making' (DoW 2006: 147) and the group 'was not required to give a consensus view' (ibid: 148). In the Panel's Terms of Reference it was asked to:

- confirm the range of issues to be considered in determining the interim Environmental Water Provisions (based on output from previous consultation and planning processes);
- recommend key social values to be maintained in the Interim Water Management Plan period;
- consider the impacts of the recommended interim Environmental Water Requirements on the social values identified;
- develop potential flow scenarios (in terms of heights, frequency and duration of minimum and maximum flows at designated points in river reaches) to accommodate social values;
- contribute to the development of a communication and participation process for the allocation planning process subsequent to the Interim Water Management Plan (DoW 2006:148).

First CRP Meeting

At the first meeting of the CRP in June 2000, twenty-one participants were invited to discuss the re-drafting of the Draft Interim WAP and a new approach to determining EWPs for the Ord River (Loh 2007). The scope of this workshop was outlined to Panel members as follows:

- community consultation provides input to EWP decisions to be made by the Water and Rivers Commission and recommended to relevant Ministers;
- the Commission water management planning was to take place in the context of the Ord Stage 2 Supply Area proposal;
- the community reference group focus was to be on water flows in the lower Ord River (though many other water related issues have been raised through prior consultative processes).

The ORWMP (2006) describes the focus of the workshop:

> Participants were asked to consider the ecological water requirements of the Ord River and provide advice to the Commission on social and cultural values to help determine interim EWP (DoW 2006:151)

Three evening meetings were held prior to the CRP workshop in June 2000 to provide a briefing for interested participants: telephone discussions were held with all potential participants. CRP members were invited to attend one of these three meetings in preparation for the workshop (DoW 2006: 149).

At the workshop, water agency officers presented CRP members with definitions of Environmental Water Requirements and Provisions and a summarised version of the Scientific Panel advice on developing an interim EWR (DoW 2006; 151). Members were also provided with a background paper prepared by the WRC which described the social/other values and

management objectives already raised through various community consultations between 1996 and 1999 for other land and water planning projects in the Ord River region. These processes were:

- the Kununurra-Wyndham Area Development Strategy (KWADS);
- Lower Ord Management Plan;
- Lower Ord Ramsar Site Draft Management Report;
- Ord Land and Water Management Plan Status Reports;
- public submissions on the Draft Interim Water Allocation Plan [Ord River];
- public consultation for the Kimberley Regional Allocation Plan (ibid).

The background paper also gave an overview of the process for making environmental water allocations (DoW 2006: 147). It was distributed with the invitations to the June workshop to provide context for discussions at the workshop.

The aim of the CRP workshop in June 2000 was 'to add further information to the Scientific Panel report on the EWR, and facilitate both qualitative and quantitative discussion based around simple models of river cross-sections to generate community values for an EWP [for the Ord River].'(DoW 2006: 149). The workshop was facilitated by an independent consultant contracted by the Water and Rivers Commission (ibid: 149). Four WRC personnel attended to provide technical advice (Ibid: 151) and provided information to the Panel, predominantly in the form of power point presentations.

At the first meeting, the Water and Rivers Commission presented the CRP with a series of three flow scenarios (Loh 2007). Participants worked in small focus groups to discuss the scenarios and compile a list of 'values', 'criteria' and 'recommendations' for each.[30] The focus groups then reported to the larger group and the facilitator recorded the information generated on a white board.

A report of the CRP workshop in June 2000 was drafted by the WRC and distributed to participants in early July 2000. No major editorial changes to the draft report were received from participants, and the final record of the CRP process is given as an Appendix to the ORWMP entitled 'Outcomes of Community Consultations' (DoW 2006: 151). The five main outcomes of the June 2000 workshop identified were:

1. Generated a range of issues to be considered when determining interim EWP.
2. Identified the impacts of possible future flows at designated points in river reaches.
3. Recommended key social values to be maintained in the Interim Plan period.

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[30] Panel members were asked to familiarise themselves with cross-section hydrological information available for five sites along the Lower Ord River (Ivanhoe Crossing, Kimberley Research Station, Tarrara bar, Skull Rock Boat Ramp and Carlton Crossing). This information consisted of maps providing relative water levels for the three scenarios which were:

- 1972-95 (dams, pre-hydro)
- 1995-current (dams, post- hydro)
- Possible future (full allocation for Stage 2 Supply Area) (DoW 2006: 153).

4. Identified further work and information that is needed as input to the decision-making process.
5. Agreed on the next steps in the process (DoW 2006: 151).

The record also provides a summarised text which is the 'range of issues', 'ecological, social, recreational and economic values and recommendations', and recommendations on 'further work' and 'next steps' discussed at the June 2000 workshop.

Second CRP meeting

A second meeting of the CRP was held on 25 October 2000 in Kununurra. The ORWMP describes the purpose of this meeting:

> Participants from the June Community Reference Panel and others attended a briefing and discussion of the Commission's progress with revising the Interim Water Management Plan. The workshop provided an update to community members on how the Commission had incorporated the advice of the Scientific Panel and outcomes from the previous Reference Panel [CRP] workshop [in June 2000] into a revised water allocation strategy for the Ord River. The intention was for feedback from the meeting to be used in finalising the revised Interim Water Management Plan. (DoW 2006: 163).

At this meeting a briefing paper was provided to CRP members. THis paper summarised the background to developing a revised interim water allocation strategy for the Ord River (see WRC 2000a). It detailed the approach to determining the interim EWRs and EWPs and water allocation options for existing use and Ord Stage 2 projects. The workshop involved presentations on briefing paper content, time for extended discussion and an invitation to make written submissions on the document. This paper was also made available to other key stakeholders (including the Ord Irrigation Cooperative and Water Corporation) but was not published more widely. The WRC invited the CRP and key stakeholders to provide written comment on the options discussed in the briefing paper by 8 November 2000 'before making final decisions on the allocation strategy' (WRC 2000a: 9).

The invitation to comment was made open to the public at the CRP meeting, but was not formally advertised. Given the small size of the community and its inter-connections, the Department was satisfied that any person wishing to make a submission was aware of the invitation to comment. Two submissions were received.

At the October 2000 CRP meeting, staff of the water agency outlined the main elements of the revised water allocation strategy for the Ord River, the proposed interim EWR, its rationale and its implications for consumptive uses. Attendees were encouraged to discuss the information provided to them. The ORWMP records the major points of discussion and acknowledges the receipt of two written submissions by the end of November 2000 (one from a river pumper) and the other from the Kimberley Land Council. Further written submissions were received between December 2000 and March 2001 from Stage 1 irrigators and M2 Supply Area proponents 'in response to additional specific briefings' (DoW 2006: 163 -65) with these interest groups.

The outcomes of the two CRP workshops/meetings and initial work on ecological characteristics of the River were used by the Department to revise the water management plan for the Ord River in 2000/01. However, the Wesfarmers consortium joint venture for the

M2 Supply Area development withdrew its proposal for Ord Stage 2 in December 2001 and the WRC chose not to release the revised water management plan. From the perspective of the WRC, this provided additional time to carry out further investigations into the interim EWP regime now being proposed and to update irrigation and power demands (Loh 2007).

3.2.3 Discussions and Negotiations

There were at least three types of consultation processes that occurred over the period from 2000 onwards between the Department and community interests in water planning. These were on: water planning issues; licensing applications; and contract negotiations. As an officer of the water agency notes, these three types of negotiations 'engage(d) stakeholders in different ways and include(d) different degrees of third party involvement' (pers comm).

In the period between 2000 and the release of the final ORWMP in late 2006, the Department undertook various discussions and negotiations with people with interests in water planning in the Ord River region. The initial focus of the Department was on the CRP workshops, with follow up negotiations being held with particular stakeholder groups. These continued periodically until the plan was finalised in 2006. Extensive consultations also took place between the WRC, the Water Corporation and the Ord Irrigation Cooperative over allocations, licence conditions and the new environmental flows for the lower Ord River (Loh 2007).

An officer of the Department noted that following the collapse of the Wesfarmers consortium Stage 2 proposal in 2003, '… the focus of consultation [in the development of the ORWMP] really moved to the existing irrigation area [ORIA] and the consultation with the Ord Irrigation Cooperative over its forthcoming [water] licence' (Worley 2004). The WRC had been negotiating with irrigators over the water licence since 1997 and finally issued the OIC with a licence in September 2004.[31]

Between 2002 and 2004, negotiations between Pacific Hydro and the water agency over revisions to the Draft Interim WAP and the 1994 Water Supply Agreement for the Ord Power Station also continued. These negotiations involved the development of new water release rules for the Power station that recognised higher power demands and were compatible with the granting of new licences for proposed Ord Stage 2 developments. In 2006, Rio Tinto decided to continue underground operations at its Argyle Diamond mine until 2018 and demands on the Ord Power Station became clearer. Negotiations recommenced between the Department and Pacific Hydro to provide water to the Power Station for increased future electricity production).

The WRC employed consultants in 2000 to consult Indigenous people about their values and aspirations for the Ord River and wetlands and produce a report of Aboriginal cultural values of the lower Ord River. The report, *Gunanurang: (Kununurra) Big River Aboriginal Cultural Values of the Ord River and Wetlands* was produced in June 2003 (see Section 4.2.7 of this report for more details.)

[31] As part of the 1994 water reforms agreed by COAG, governments and/or their agencies were to transfer the function of distributing water in irrigation districts to co-operatives of irrigators. To take on this function in the Ord Irrigation District, irrigators had to form a co-operative and obtain a licence to supply customers served by the Ord Stage 1 irrigation systems (i.e. M1 Supply Channel).

3.2.4 Informal Participation

There was ongoing communication between community interests and the water planning agency during the water planning process. This was not part of the formal legislative requirements of the WA water planning framework but was part of a considered approach by the water agency to informally engage some members of the Ord River region communities in discussions about water use planning and management. This informal participation involved community members learning about and contributing indirectly to the water planning process through various avenues, including through informal meetings and interactions with Department staff, or through their involvement in other linked activities and water management processes.

The Department actively sought to engage community members in water planning issues and activities through mechanisms other than the formal submissions and CRP processes established. They worked to align processes and create opportunities for alternative modes of participation within the consultative process of the water management planning process for the Ord River. They did this through supporting other initiatives and processes relevant to water use and management in the Ord River region. By supporting these initiatives and processes the agency sought to build the capacity of the Ord River community to engage with water use and management issues and activities, including the development of a water management plan for the Ord River. The Department has provided details of these initiatives and processes which are given in Figure 5 below. I elaborate in various sections of this report on some of these, however it is not within the scope of this study to provide an exhaustive analysis of these initiatives and processes and how they articulate with the Ord water planning process. Some attention, however, is given to what is arguably the most significant community-driven process of this era, Ord Land and Water (OLW), and its *Ord Land and Water Management Plan* (OLW 2000) in Section 4.2.2 below.

Other government-initiated processes that linked community members to the Department included the:

- Ord River Catchment Reference Group (ORCRG), a government-initiated body established to coordinate action on water issues in the region. The ORCRG was identified by one respondent as an ‘informal water management committee’ (2004) used by the WRC in its discussions with community interests about water planning from 2003/04 onwards (see Gardiner and Price, 2006)
- regional Natural Resource Management process
- East Kimberley Land Conservation District Committee
- East Kimberley Recreational Fishing Advisory Committee.

Stakeholder group	Support provided by the Department
Ord Land and Water	Support provided through resources, professional support and partnerships
Ord Irrigation Cooperative (OIC)	Support provided through development of partnerships, collaborative planning, resources for an environmental officer at OIC and ongoing professional support for that officer
Ord River Waterways Management Group	A cross-Government initiative led by Department to develop a collaborative framework for management of the Ord River that recognised different agencies roles and regulatory responsibilities in an effort to integrate processes and provide more clarity within the Ord River community about roles and expectations of various government bodies.
Shire of Wyndham-East Kimberley	The Department entered into some partnership projects with the Shire; facilitated embedding a Rivercare officer within the Shire to enhance their environmental capacity, and that officer is now a fully funded environmental officer within the Shire.
Ord River Irrigation Area Irrigators	Department has partnered with CSIRO through the Ord Bonaparte Program[32] and ongoing projects to research groundwater and irrigation issues in the Ord River basin.
Miriuwung Gajerrong people	Project on pesticide use in the ORIA; cultural mapping of sites on the Ord River; agreement to establish a joint management reserve; employment of indigenous people (see 4.2.7 of this report for further details)

Figure 5: Table of Initiatives and Processes Supported by the Water and Rivers Commission (WRC)/Department of Water Parallel with the Ord River Water Management Plan[33]

4. Evaluating Public Participation in the Water Planning Process

4.1 Decision-Making and Public Participation

In this section Dimension 3 of the CMEF is used to analyse the decision-making aspects of the water planning process for the Ord River. This considers how the public were involved in contributing to decisions about water planning and the factors affecting the opportunities for public participation in the planning process including:

- the uncertainties surrounding competing and changing demands for water in the Ord River region;

[32] The Ord Bonaparte Program was a partnership between the Australian and Western Australian governments, and local agencies and organisations in the Ord River region: 'The program which began in 2000 was originally intended to be an integrated natural resource management research and development program over a five year period. However the program was cancelled after only a few years following a mid term review' (Rangelands NRM Coordinating Group 2008).

[33] The information in this table is provided by the DoW.

- the clarity of the water planning process;
- the use of best available knowledge;
- negotiating values for the Ord River.

4.1.1 Overview

Water planning legislation in WA formalises an advisory role for the public in water management planning. This is consistent with other jurisdictions in Australia and with the current standards set by the National Water Initiative which identifies 'consultation' with stakeholders as pivotal to water planning (CoAG 2004: 36). In the case of water planning in the Ord River region, the Department started the process in 1997 in the absence of a statutory planning framework. With the formal legal requirement enacted in 2000, the Department was required to consult the public on matters of water management planning in the region through a public submissions process and the establishment of a Water Resources Committee (in this case referred to as a Community Reference Panel).

In the Ord process, negotiations between the water planning agency and various private sector interests were affected by incumbent contractual and legal commitments between the WA government and particular stakeholders. The Department invested substantial time and energy negotiating with existing water users over their entitlements (for example, the Ord Irrigation Cooperative) and with other commercial interests with legal rights to water (for example, Ord Stage 2 proponents, and representatives of Pacific Hydro and Argyle Diamond Mine) as part of the development of a water management plan for the Ord River.

The majority of community stakeholders interviewed for this case study were not satisfied with the public participation process for water management planning in the Ord River catchment. Their main concerns about the process were the:

- minimal level of community engagement and opportunity to input to the process
- protracted nature of the water planning process which caused them to lose sight of the process and their role in it
- lack of feedback over many years from government regarding their input to the public participation process
- widespread dissatisfaction with the interim Environmental Water Provisions given in the ORWMP and the rationale for this and other allocations in the Plan
- perception that the process was (to some extent) redundant through ongoing indecision on behalf of government about future land and water use in the Ord River region
- perception that government decision-making about water in the Ord River region is constrained by existing agreements which enshrine allocations for hydro electricity production and other uses.

The following sections will address legal and policy requirements, governance arrangements, uncertainty in the broader planning environment, clarity of public participation purpose and inclusiveness.

4.1.2 Legal and Policy Requirements

There were no statutory obligations regarding public participation in water planning process for the Ord River. The Department ran a formal public notification and submissions process[34] for the Draft Interim Water Allocation Plan. They also, at the discretion of the Minister for Water Resources, convened a water resources committee (the CRP) for the water planning process.

The introduction of the statutory planning framework in 2000/01 meant there was ambiguity around the legal requirements for public consultation in the initial phases of the planning process. The main record of the planning process, the ORWMP, does not outline these obligations or whether they changed over time (DoW, 2006).

However the Water and Rivers Commission did not satisfy the WA Environment Protection Agency with regards to the incumbent policy framework for determining environmental flows provisions for the Ord River. The EPA advised in 1999 that the WRC had not demonstrated that the approach taken in the Draft Interim WAP was consistent with the CoAG Framework Agreement on Water Resource Policy (CoAG 1994) or the WRC's own *Draft Environmental Water Provisions Policy* (EPA 1999: 7). Specifically, the EPA stated that the WRC had not demonstrated in the Draft Interim WAP that:

> …the environmental values of the lower Ord River will be protected by the interim EWPs in the Plan and that the approach adopted to defining these EWPs is sufficiently conservative (EPA 1999: 8)

Although the process fulfilled the RIWI Act, which at that time did not mention community involvement, in some respects the process failed to uphold its stated aims of transparency (WRC 2000b: 5), inclusiveness[35] and promoting discussion and communication (DoW 2006: 149), and thus, from the point of view of respondents, compromised the quality of the decision-making process.

I identify three main aspects to the inadequate public participation in this case:

- lack of clarity of process (see 4.1.5 below);
- limited opportunities for participation (see 4.1.6 below);
- the exclusive or confidential nature of communications and discussions (see 4.1.7 below).

4.1.3 Governance Arrangements

The governance arrangements for public participation in Ord River water planning are characterised by two main features: the discretionary power of the Minister of Water Resources (under the RIWI Act) to convene and consider advice from the CRP; and, the

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[34] A list of the individuals and organisations who forwarded submissions in relation to the Draft Interim WAP is given in the Advice to the Minister for the Environment from the EPA to the WRC in December 1999 (see EPA 1999: Appendix 1), along with a summary of the issues raised in these submissions (Ibid: Appendix 2).

[35] With a particular emphasis on describing Aboriginal values and interests in water in the Ord River region (see DoW 2006: 165-67).

incumbent power relations enshrined in contractual arrangements between the WA Government and commercial interests.

The Ord River water management planning process was one of the first water planning processes undertaken by the Department in WA. The legislation and policy frameworks for water planning in WA provided minimal guidance about the form and process of public participation in water planning (see Sections 1.4.1 and 1.4.3). The water planning agency therefore had to use its expertise and resources to design a public participation process that was responsive to local circumstances, the needs of the relevant communities, and also that struck a delicate balance between often competing priorities for water use. The Department had limited human and financial resources to undertake the water planning process for the Ord River. Perhaps most importantly, the agency was charged with developing a planning framework in a context that was beset by external pressures and priorities. As one respondent noted:

> The Ord is probably an 'unusual case' because the uncertainties of future demands for water were particularly large. Demand projections are not normally so dependant on external decision making (by Rio Tinto) [this refers to the decision to mine underground at the Argyle Diamond Mine].

The public was to play an advisory role in decision-making about water use and allocation as part of the water planning process for the Ord River. The Minister for Water Resources retained the ultimate decision making authority in the process. The Department was responsible for presenting the views of community interests to the Minister for Water Resources to consider in finalising the water management plan for the Ord River. The *Environmental Water Provisions Policy for Western Australia* (WRC 2000b) asserts this principal authority of government in decision-making about water management in Western Australia:

> As is appropriate in such matters of balancing of community values, the final decision will be made by the Government of the day. (WRC 2000b: 5)

The Community Reference Panel was the main vehicle for the public to formally contribute to discussions about water use in the Ord. In establishing the CRP, the Department (and its Minister for Water Resources) went further than legally required under the RIWI Act, and exercised discretion to establish this community advisory body for the process. The CRP was under the direction and control of the Department in executing its duties. According to the Department, the range of stakeholder interests on the CRP was carefully selected to span all interest groups within the Kununurra community.

The status of the public participation process for developing a water management plan for the Ord River was not clear to many respondents. Many respondents questioned the value of their participation in the water planning process and felt that their comments and views were not taken into account in the outcomes of the process. Although the participation of community people in any Department-led activities was voluntary, the terms of the engagement were not negotiable and there was no formal agreement between the Department and participants about the terms of their participation.

According to some respondents, the public participation process for the Ord River water planning did not provide clear direction about the lines of accountability in decision-making within the process. It did not highlight the role of the Minister for Water Resources as the decision-making authority. There was a general understanding among CRP participants, however, that government was indeed the decision-maker, and some people mentioned directly lobbying the Minister for Water Resources as a more effective way of having their input to the water planning process considered.

A perception that lines of accountability were blurred in the CRP process may have contributed to a feeling of confusion amongst respondents about the efficacy and purpose of their participation. For example, CRP members were invited to participate in the CRP on the basis of their individual views. Yet the format of the June 2000 workshop required individuals to form 'working groups' (DoW 2006: 153) and present a collective appraisal of the impacts of different flow scenarios on five different sites in the Ord River to the larger Panel forum and for the records of the Department. This activity aimed to generate collective values for the purposes of water planning without a clear framework for individuals to consider trade-offs or the full suite of impacts of proposed future scenarios. The CRP itself acknowledged this issue in its recommendation to the Department on the need for a comprehensive cost/benefit analysis to provide base data for decisions on competing uses (ibid: 162).

4.1.4 Uncertainty: Competing and Changing Demands for Water

As is evident from the historical description above, the water planning process for the Ord River took place in the context of a myriad of other issues and circumstances concerning land and water use in the Ord River region. The complications and contingencies presented by these factors afforded a great deal of uncertainty to the water planning process. This uncertainty produced a re-allocation of authority, responsibility and resources away from the participants in the process including the government water agency with responsibility for producing the ORWMP. A respondent explains:

> We'd probably all agree that the Ord allocation plan [ORWMP] probably doesn't have a very clear cut, comprehensive and, transparent process that started from here and went to here. You had to take into account all the underlying stuff that was/is going on.

There were large uncertainties in future demand for water amongst (potentially competing) uses in the Ord River region between 2000 and 2006. This uncertainty was due to:

- the likely future power demand of the Ord hydro-power station due to Argyle mining operations
- future irrigation demands associated with Ord Stage 2 development
- negotiations between traditional owners and the WA Government over native title and other issues.

Future irrigation demands in the Ord River Irrigation Area remain contingent on the timing and scale of any future Ord Stage 2 developments and the improvements in water efficiencies that can be achieved in Ord Stage 1 areas. Many respondents from communities and industries of the Ord River region were intensely aware of the links between a government development agenda in the Valley and the water planning process, as one respondent observed:

> I probably looked at [the water planning process and the process of developing Ord Stage 2] as the same process, in a way, because I think deep down they were. The development was going to go ahead and this was the way it was portrayed by most people and by government. 'We just need to sort out the water to make the development happen' was the feeling.

Changes in law and policy made in 2000/01 make it difficult to interpret the policy and legal obligations regarding the provision of water for the environment in the Ord case. An environmental water provisions policy (EWP Policy) was endorsed by the Commission in late 2000 (Gardner, 2002). In 2000 amendments to the RIWI Act allows statutory water plans to provide guidance to the Department in provision for water for the environment (Sections 26GX(2) and 26GY(2) RIWI Act). The legislation does not give any further details on how the Department will determine environmental allocations of water, thus the EWP Policy remains the key reference document.

Prior to 2000 there was a gap in WA policy and law in regard to providing water for the environment. Against that backdrop, the WRC decided in 1999 to accept the advice of the EPA and the public and develop environmental flows for the Ord River that maintained the 'post-dam' river environment (see Section 3.1 this report). This had the effect of causing a major delay in the development of the water management plan for the Ord River as the Department had to re-design the planning process including devising a new approach to determining environmental flows provisions. The new WA policy imperative relating to EWR/EWPs (see WRC 2000b; Section 3.1 this report) included the consideration of social and economic values in relation to environmental flows and obliged the WRC to include the community in their new approach in determining such flows. The WRC planned to do this through the CRP process.

There were also major uncertainties related to the hydrology and ecology of the Ord River system at the commencement of the water planning process in 1997. Delays in finalising the water management plan for the Ord River allowed the Department to gain substantial knowledge about the functioning and characteristics of the system through scientific studies undertaken in the period from 2000- 2005/6 (of revising the 1999 Draft Interim WAP).

In that context of policy and legal change and uncertainty in the period of 1999-2000, the Department struggled to design and run a process for water allocation in the Ord River that was coherent, well defined, clear and timely. The public participation aspects of the development of the water management plan for the Ord River are similarly affected by the large uncertainties, delays and contingencies that were brought to bear on a water planning process that had little resilience in the face of external political, commercial and legal pressures and constraints. One respondent commented:

> People may be critical of it [the water management planning process for the Ord River] but it's got this inherent constraints: systems demanding water; power stations in place; a [n existing] flow regime in the lower Ord-post dam; hydro power…

4.1.5 Process Clarity

Community members who participated in the water planning process for the Ord River were generally confused about, or did not agree with, how the decisions about water management and allocations were made. The role of participants in the decision-making process was not clear to many respondents and they mostly considered the formal participation episodes perfunctory and ill-defined. Few respondents made any direct reflections on the nature or conduct of the CRP meetings or on the role of the Panel in decision making. My observation is that the purpose and role of the Panel has been lost or obscured by the protracted nature of

the water planning process (see Section 1.2 this report). For example, several people interviewed had attended the CRP workshop in June 2000[36] and had forgotten they were at the workshop or could not recall any details of their involvement in it. Nor did any respondents recall that they had been referred to collectively as the 'Community Reference Panel', or claim they had not heard the CRP referred to in this way previously. For example, one person noted:

> This Reference Panel [CRP] idea is a bit of shock because I just remember it as a public meeting really. Where people could come along and make comments on the Draft Allocation Plan [Draft Interim WAP].

None of those people I spoke to about the second CRP workshop in October 2000 could recall having attended this second meeting. Several people noted 'I was probably there', but said they couldn't be sure. One person commented:

> You put so much effort into these processes and it's almost like it goes into a black hole. So it's interesting you say there was feedback to the community [at the CRP October 2000 workshop], I missed it.

One of the major downfalls of the decision-making process was the lack of timely feedback to community about the progress and outcomes of the water planning process. Many of the community members I spoke to who attended the CRP workshop/s in 2000 were not aware that the final ORWMP had been released in late 2006. This included irrigators who are members of the Ord Irrigation Committee and those who deal directly with the Department over their water entitlements. For example, one respondent commented:

> The WRC asked us what our issues might be. But we never really got the feedback on how it would actually feed into the planning process for water allocation which was a real concern.

Respondents raised the issue of how community input was incorporated or reflected in the final water management plan for the Ord River. For example, one respondent commented that they did not feel that the water management plan accounted for the contributions of community members:

> …when you read your water management plan [the ORWMP] you look to see where peoples' inputs were incorporated—be they recreational fishing or indigenous or irrigators all those different areas. That would have been a key outcome and I think the water management plan failed to do that.

Other respondents noted that they are not aware of the process followed by the Department to revise the allocations following the collapse of the Wesfarmers consortium Ord Stage 2 proposal. For example, a respondent commented:

> I don't know if they [the allocations in the ORWMP] have changed since then?

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[36] The list of attendees at the CRP workshop in June 2000 is given in the ORWMP (DoW 2006: 150). The ORWMP does not however list attendees at the second CRP workshop in October 2000.

The confounding nature of various types of consultations that occurred over the period of the water planning process for the Ord River also contributed to a lack of clarity in the public participation process. One respondent noted that it was not always easy to clearly separate the consultations undertaken by the Department with stakeholders in relation to water licensing, contract negotiations and water planning issues over an extended period between 2000 and 2006.

4.1.6 Opportunities for Participation

Beyond the Community Reference Panel, there was very limited opportunity for other Ord Valley community members to contribute to the water planning process. The CRP process was the only formal opportunity for the public to be involved other than through direct lobbying or their participation in targeted consultations between the Department and key industry bodies, such as the OIC and Pacific Hydro, and with the WA Department of Industry and Resources over allocations for Stage 2 Supply Area (DoW 2006: xii). Membership of the CRP was by invitation only which precluded others interested in the development of the ORWMP becoming involved. The Department made their best effort to include people from the range of community interest groups in the Ord River region on the Panel, however it was not an open forum, leaving the public submissions process as the only avenue for other community members to contribute.

The method of having large workshops as the main vehicle for participation in the CRP process was also questioned by some respondents. For example:

> Calling a meeting [refers to CRP workshops] and having a large number of people attend a meeting, knowing this is an irrigation area, people were quite cagey in providing their opinion in that sort of environment. So I think that if you really wanted to get better input then, and people engaged in the process, there needs to be consultative structures put in place that allow for that to happen.

Despite one of the Terms of Reference of the CRP being 'to contribute to the development of a communication and participation process for the allocation planning process' (DoW 2006: 148), the only formalised public participation in the water planning process after the end of 2000 was by written submission. The development of the comprehensive Environmental Water Requirements for the lower Ord River (provided in the *Ecological Requirements for the lower Ord River Report* (Braimbridge and Malseed 2007) did not involve any public consultation.

Some respondents noted that the CRP workshops were the first time they had thought much about water planning and that many of the concepts and scenarios introduced to them at the time were unfamiliar. Two workshops seems barely enough time to consolidate any new learning as one respondent alluded to:

> The workshop [CRP workshop, June 2000] was really good—I think there should have been more processes like that where you bring people together and you are forced to listen to other people's opinions and when you have to come up with something that is acceptable to a group. It's never going to be perfect. It [the CRP workshop, June 2000] was quite successful; there should have been more of them.

The Department acknowledges that 'a limited consultative process' (DoW 2006: 147) was used in the Ord River water planning process: '…because of the number of consultative processes which had already occurred in the Ord River region and the time pressures on the review of the interim Plan' (Ibid.). Planning agency staff consciously worked to align the water planning process with other planning processes in the region (See Section 3.2.4 of this report).

4.1.7 Confidentiality

Many respondents are aware of the commercial interests of some parties in relation to water in the Ord River region that are protected under other legal agreements including the agreement to supply water to the Ord River hydro- power station and existing water licences for Ord Stage 1. Some expressed scepticism at the government's ability or willingness to accommodate all interests in water planning due to their prior obligations under these agreements. Due to the confidentiality aspects of these agreements, the transparency of the water planning process is compromised. A respondent notes the importance for participants in water planning to have full access to information about water use in the Ord River region:

> All the available information [on water use in the Ord River region] has to be made available [to participants] — no matter whom it affects and what the consequences of that are. And that way you can plan properly.

In its ongoing consultations about water planning in the Ord River region post-2000, the Department prioritised commercial interests (see Worley 2004) including the prospective water licence holders for Ord Stage 2 (the Wesfarmers consortium); Ord Stage 1 licence holders, the OIC; and, Pacific Hydro. These negotiations with commercial interests were largely confidential in nature and therefore could not be considered part of a public consultation process for water management planning. A respondent noted:

> Conversations with OIC [and Department] at the time [of the development of the ORWMP and licensing discussions] are probably confidential because they were about how the irrigation system would work—it wasn't a public process.

Despite the confidential nature of negotiations about irrigation licences and water supply for hydro-electricity production, aspects of these negotiations did reverberate in the wider community of the Ord River region, as the representatives of industry bodies such as the OIC communicated with their constituents about everyday water planning business. However, participants in the water planning process were given no formal support by the Department to communicate and explain to others (external to the process) about the water planning process.

Respondents who had some experience of, or involvement with, the contractual and licensing discussions between the Department and industry parties did not offer any objections to the decision making process for determining allocations. The main irrigators' industry body, the OIC, had their water licence for Ord Stage 1 upheld as an outcome of the water planning process in 2004. New conditions attached to the renewed licence included the development of a Water Use Improvement Plan for the Ord Stage 1 area by the OIC. The Department worked with the OIC to develop this Plan.

4.1.8 Use of Best Available Knowledge

To provide well-considered advice to government on any issue, community interests need to have a clear understanding of the issue, how it affects them and knowledge of options to

address or resolve the issue[37]. Best practice in water planning in Australia also prescribes the use of best available scientific data and socio-economic analysis to be used in making decisions about water management (Tan 2008).

In its records of the water planning process, the Department is clear and frank about the paucity of information on the Ord River system at the commencement of the process (see for example DoW 2006: 4-5). The Scientific Panel established for the process confirmed the limitations imposed by the minimal ecological data (Braimbridge and Malseed 2007). The Department therefore defends an iterative approach to the planning process whereby allocations are updated on the basis of new knowledge gained through ongoing research. This adaptive management approach is well accepted in the arenas of contemporary NRM and water planning in Australia.

The Scientific Panel was established to provide independent advice to the Department on an ecological and hydrological research programme for the Ord River. Substantive research was undertaken in the period between 2000 and 2006 to inform the development of revised allocations for the Ord River.

The Indigenous cultural values study (Barber and Rumley 2003) commissioned by the WRC was also intended to inform the revised water management plan for the Ord River. However the results and recommendations of this study were not formally considered in re-drafting the Draft Interim WAP (see Section 4.2.7 this report). This represents a significant failing of the water planning process given that the Department had stated its intention to consider the cultural values of Miriuwung Gajerrong people in the development of the final water management plan (WRC in EPA 1999: 3).

The Department also used information gained through other Ord water management activities in their consultative process for water planning (see Section 3.2.4 this report for further details). A respondent elaborates:

> Other planning processes, like the OLW process, were used as a bit of a platform for the ongoing [water] planning work. The NRM strategy stuff too. We [the Department} picked up a lot of the consultation that had been done for that. The water management planning process [for the Ord River] used those values that were tabled through that process which was a very community-orientated process.

Participants in the water planning process had to understand, reconcile and communicate many new concepts and explanations from the scientific and technical realms of water management and planning. A number of people interviewed commented on the conceptual bases for determining allocations, including how the hydrological models were implicated in decision making. They expressed concern that the models hadn't been sufficiently well explained to people and they were not confident in their predictive capacity.

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[37] The *State Water Strategy for Western Australia* elaborates the role of Water Resource Management Committees in water allocation, stating: '…[they] will enable better integration of technical management skills with local knowledge and understanding of water resources.' (Government of Western Australia 2003: 51). The Strategy also announces the promise of these committees to 'help promote a culture of local management of water resources' and confer a role in the development and implementation of 'plans promoting sustainable management of Western Australia's water resources' (Ibid.)

The issue of communicating scientific knowledge as part of the water planning process for the Ord River remains controversial with some respondents noting the lack of community understanding and support for this input. For example one person commented:

> [With respect to the ORWMP…] I think uncertainty around allocation is possibly worse. People do not understand the science behind it or are unconvinced of it.

And another reflected:

> …they [the Department] had the Scientific Panel and they had reports and things. But it's when you've got science standing on it's own… people get caught up in their own sphere of science and there's no real linkage to the people on the ground.

A CRP participant also commented on the need to make the scientific understandings about the Ord River system available to community members through the participation process:

> The CRP workshop felt like it was just a 'tick the box' exercise. People needing information…like the ecological and hydrological information they need to help them make decisions. The people in the community have a lot of knowledge too of the river which is valuable input.

Developing a good working knowledge of many new and complex scientific concepts related to hydrology and ecology takes time and support, yet another suggests:

> And be prepared to build the community's capacity and understanding of what water planning is.

The participation process for the development of the water management plan for the Ord River was a basic one that did not provide for a range of communication styles or the diversity of knowledge held by community members/groups. In particular, the contributions of Indigenous community members were confined to a separate process which documented their values, aspirations and recommendations for water management and their participation in water planning in the Ord River region in a cultural values study. As stated above, the results of this study were not considered in the final water management plan despite it being completed some three years before the release of the ORWMP.

4.1.9 Negotiating Values for the Ord River

The conflicting values of the Ord River is a theme that keeps remerging and is a key source of tensions. Symanski (1996; 575) identifies xenophobia, nation building, the perceived threat of an Asian invasion and tourism as the 'real origins' of the Ord River Irrigation Scheme. Whatever its origins, the Scheme has now assumed diverse meanings for many community people who are in constant, ongoing negotiation about the functions, purpose and character of the Ord River and its surrounds. Water planning emerges in this context; where the River and its water are contested as a multiple entity: an Aboriginal homeland, a Ramsar site, a tourist attraction, a commercial resource, a fishing paradise and many other things. Among these differing 'rivers', and within the water planning process itself, therefore, arises the 'which one of the multiple rivers should we be managing for?' Changes to the river's morphology since the construction of the dams brings this question to the fore in setting suitable flow regimes.

'Which river are we managing for?' is the implied question posed by the EPA in their advice to the WRC on the Draft Interim WAP in 1999. The WRC response was that we should be

managing for a post-dam[38] river. This river is a 'regulated' (WRC 1999: 1) one with a 'substantially modified' riverine environment (Ibid: 9) and a 'fundamentally different' (Ibid: i) flow regime from that known prior to the construction of the two dams.[39] The view that the social and environmental values of the Ord River are now dependent on a 'post-dam' flow regime was also expressed by some members of the public in their submissions to the Draft Interim WAP.

The EPA's argument for maintaining the post-dam environmental values is based on several factors: that changes to the Ord River ecology since the construction of the Irrigation Scheme are irrevocable (at least to some degree); that the Ramsar values of Lake Argyle, Lake Kununurra and the lower Ord are the product of changes since the construction of the Scheme; and, that new recreational and social values for the Ord River align with the post-dam environmental values (see also King et al 2001). However, some respondents in this study queried the approach of defining a 'steady state' river for from which values are then derived; may not these values be in flux along with the river system itself? One person noted:

> And that people didn't think about what might have been there before. Or that it might be a river in transition. And what you see now is just a snapshot of a river in transition.

In the case of the Ord River we also encounter the testimony of scientists who identify it as a 'river in transition' (Thorburn 2001) and suggest it may reach a new equilibrium in 100 years time (Doupe, Froend et al. 2006). Doupe and Petit in their reflections on regulation and water allocation for the Ord River, note the questions that underpin the 'management challenge' for the River: 'What is being sustained and for how long? And for whose benefit and at what cost?' (2002: 318).

There is a prevailing view in the Ord River region community that the Ord River and its water is a product of an engineering scheme aimed at supporting irrigated agriculture and that therefore agriculture should be the priority use of the water produced in the Ord Scheme. For example, a respondent commented:

> …the Ord River was dammed for a purpose to produce food and fibre through irrigated agriculture. That should not be lost sight of.

And another respondent said:

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[38] The 'pre-dam' river [lower Ord River] was characterised by intermittent dry season flows with wet season flooding.
The 'post-dam' river [lower Ord River] is characterised by increased dry season flows, continuous flows throughout the year and a reduction in the frequency of downstream flooding during the wet season (see DoW 2006: 4). As a response to changed flow regimes in the lower Ord since the construction of the two dams, the riverine environment of the lower Ord has become characterised by thick riparian vegetation in some places.

[39] The EPA advises: 'It would be more appropriate to base the interim EWPs on protecting environmental values which are sustainable under post-dam flows and so preserve the riverine ecosystem that has adapted to these changes' (EPA 1999: 9)

> We are restricted [in terms of water use] at the moment and it's crazy to think we're restricted when we've got so much water [in the Scheme] and it's so reliable…

Some respondents questioned the rationale for establishing an allocation to the environment for a river system that, in their view, has been drastically changed by the technologies of the dams and flow releases. What 'environmental' values are we protecting? They wondered. For example, one respondent commented:

> The environment got a huge chunk of allocation [refers to EWR/EWPs for the Ord River] to keep an unnatural environment [the Ord River, 'post-dam'] going…I expected more water for irrigation.

And another reflects a similar view:

> That [environmental] flow/allocation has only become available to the environment because the land isn't already developed for irrigated agriculture [refers to Ord Stage 2]. It's also only become available to the environment because the dam [Lake Argyle] is there.

A tension is therefore apparent in the water planning process: between the 'old' river and its environs and its 'new' incarnation which is the Ord River 'post-dam'. A cascade of historical and political decisions and engineering works has produced this 'new' version[40]. The argument that the River has been substantially modified and has a utilitarian value associated with irrigated agriculture that defines water use priorities seems to prevail. What implications does this have for public participation in water planning? It means that there is foreclosure on some options for management of the Ord River and on some versions (and associated values) of the River. For example, Indigenous communities who continue to hold values for the 'pre-dam' environment of the River as sacred place, homeland and kin do not have a strong voice in decisions about water allocation. Their interests would presumably be sustained by an irregular and, at times, very low flow. The ORWMP acknowledges these values, and the associated water requirements, but at the same time denies their utility:

> The Dreaming of the Miriuwung Gajerrong people include stories associated with the pre-dam flow regime of the lower Ord River and….Miriuwung Gajerrong elders suggested a drying out period of lower flow during the dry season. Unfortunately, it is not possible or desirable to re-establish the pre-dam flow regime. (DoW 2006: 49).

4.2 Social Processes

4.2.1 Overview

In this section I use Dimension 2 of the CMEF to describe and analyse the social processes that emerged from the water planning process for the Ord River. Social processes are the activities and relationships between people and events including issues of conflict, communication, motivation, trust, behaviours, leadership and representation. I examine how these activities and relationships contributed to the knowledge, resources, capabilities and political influence of Ord River region communities.

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[40] Doupe and Petit (2002: 317) observe in relation to water planning in the Ord River region: '…any choice now is compromised by the decisions of the past'.

4.2.2 Alignment of Planning Processes

The Ord Land and Water (OLW) project began in 1998 as a result of community concern about the environmental impacts of land use and proposed development in the Ord River basin, including ground and surface water quality[41]. An impetus for the project was the impact of farming practices on environmental values in the basin and, in particular, a series of fish kills in the Ord River from suspected Endosulfan (agricultural herbicide) contamination of waterways.

The OLW group was initially funded through a grant from the Australian Government's Natural Heritage Trust (NHT) administered by the WA Agriculture Department. A Coordinator and Project Manager/Officer, George and Marie Gardiner respectively, were employed to facilitate the OLW process. The process was inaugurated at an Environmental Symposium in March 1998, where George Gardiner explained:

> Beginning today will be a lengthy period of problem definition and refinement, of solution development and implementation. The process will involve all members of the community of Kununurra through meetings, consultation and workshops spread over the next two to three years. The outcome will be sets of best practice, monitoring and audit processes that will ensure that all land and water users strive towards between management of those resources (Gardiner in OLW 1998: 6).

The OLW process involved four main stages:

- information transfer and awareness building, culminating in the election of a project steering committee;
- identification of management issues through consultation with all interests, culminating in the formation of four Local Action Groups[42]
- production of the *Ord Land and Water Management Plan* (OLW 2000);
- implementation of the ORWMP including the establishment of the Ord Land and Water Board in 2002 (OLW 2000).

Although the OLW process had no formal administrative or legislative basis (and has only one paid officer of OLW), it successfully achieved behavioural change and built social capital through voluntary compliance, the production of new knowledge and practices and increased

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[41] Some community members were concerned about Ord Stage 2 development. For example, a respondent commented:

> Development was one of the main impetuses for the OLW process…Ord Stage 2 has always been seen as critical for the region and ongoing business and social development or whatever. Wesfarmers and Marubeni [the Wesfarmers consortium] were putting together a proposal for sugar [to grow sugar cane] for Ord Stage 2 and there was a lot of concern in the community about how that would come out.

[42] A respondent noted:

> The OLW community groups were really successful. They were seen as this positive thing: let's get together and work on this thing, positively, together. And do it for the community. People gravitated quite naturally from the group, Care of the Ord Valley Environment (COVE), to the OLW community action groups….OLW was a comfortable forum and therefore a comfortable progression from COVE to OLW for me.

social cohesion and cooperation. It has a broad scope defined by the needs and interests of its constituents who participate in and contribute to the process using their own time and resources. A respondent noted:

> OLW involved a lot of local issues about how to manage agricultural practices etc… all of which had wonderful community involvement. In my opinion it achieved its objectives.

Another respondent commented in relation to the development of voluntary Guidelines for Endosulfan use by OLW members and associates:

> So without any other regulatory devices they [OLW and the ORIA farming community] managed to maintain good compliance. People can then access this body of knowledge [through OLW]—-they know where to go.

And yet another person noted:

> It [the OLW process] was a very galvanising process and they [OLW members] did it pretty much themselves.

Yet another respondent noted how OLW was integral to fostering community capacity in environmental management and stewardship:

> One important step [in building the capacity of the community] was the initiation of OLW and their plan, devt over 4 years, was a key step for the town. It was probably the first plan that a town ever produced.

The success of the OLW project as a community initiative was identified by many respondents who gave details of the project's consultative processes. These included the following issues.

- A sense of accountability in the *Ord Land and Water Management Plan* (OLW 2000) to the contributions of individuals/the group. For example, one respondent noted:

  > The key thing with the Ord Land and Water Management Plan (OLW 2000) is that when it came out in draft form you could actually see your input in it.

- Appropriate timeframes and processes including multiple opportunities to be involved. A respondent noted:

  > So there was an individual contact who was available… there were opportunities through public meetings; there were opportunities through written submissions and there were the directly targeted contacts. Not just within government agencies but within private businesses and other interest groups. I don't know how they created it, but the feeling that your comments wouldn't be lost in the process.

  And according to another respondent:

> The timeframe wasn't too short [refers to the development of the Ord Land and Water Management Plan (OLW 2000)]. You weren't given two weeks to comment.

- Ownership of the project and the *Ord Land and Water Management Plan* (OLW 2000) by the members of OLW. One person elaborated:

  > We didn't perceive an overarching political influence in the development of the process. It seemed to be us as a community and we felt that we then actually had the power to put this into place.

- A focus on communication between members of OLW and between OLW and the broader Ord River region communities. The group commissioned a survey of communication in the Ord River catchment as a basis for developing strategies to improve communication in NRM issues (OLW and MB Consulting 2004).

In contrast to the participation experience during the OLW, none of the respondents in this study identified with or related to a 'public participation' process for the development of the *Ord River Water Management Plan* (DoW 2006). Nor did people in their discussions during interview readily identify with the water planning process run by the Department. One respondent noted:

> A lot of people who you would expect to be affected by it [the water management planning process for the Ord River], aren't aware of it, no.

The OLW process is prominent in people's minds. The association with the OLW process required that I clearly distinguish between the process that led to the development of the ORWMP and the process which led to the development of the *Ord Land and Water Management Plan* (OLW 2000). For example, in several instances respondents confounded these two processes in our discussions and I observed that people were more likely to associate the OLW process with the concept of 'public participation and water planning in the Ord' than they were the Department-led process that produced the water management plan for the Ord River. To them, the term 'water planning' represented the community-driven OLW process and not the government-initiated water planning process.

Notwithstanding the strong familiarity with the OLW, the public participation episodes in the development of the ORWMP built on the successful community-driven initiative, Ord Land and Water (OLW). The links between the two processes are noted but not elaborated in the official record of the community participation in ORWMP document. The Plan refers to the Ord Land and Water Management Plan (OLW 2000), a major outcome of the OLW process, in the following way:

> The Ord Land and Water Management Plan (Ord Land and Water Management Plan (OLW 2000)) was released in 2000 and presented community aspirations in relation to land and water management in the Ord River Irrigation Area. The River Issues section demonstrated that the community valued the lower Ord River and recognised that an informed assessment of ecological

> water requirements for the lower Ord River needed to be balanced with the needs of recreational uses and commercial uses including power and irrigation (DoW 2006: 4).[43]

The Department also acknowledges in the ORWMP that values collated from 'previous consultations' were used to provide examples and guide discussion in the CRP process (DoW 2006: 152). Previous consultations included the OLW process and the *Ord Land and Water Management Plan* (OLW 2000), although this detail is not given in the final water management plan for the Ord River[44]. Not properly crediting the prior consultative work of the Department or others, including OLW, provides an incomplete account of the public participation process that led to the articulation of these 'values' in the official record of the water planning process.

In contrast to the official record of the ORWMP, however, the majority of respondents in this study, including Department officers, readily identified the development of the *Ord Land and Water Management Plan* (OLW 2000) as an impetus for and significant input to the public participation aspects of the development of the water management plan for the Ord River. For example, a respondent notes:

> I suppose what probably got me involved initially [in the development of the ORWMP) was my involvement in OLW…

The sharing of information and learning between the process of developing the ORWMP and that of the *Ord Land and Water Management Plan* (OLW 2000) appears to be largely a one-way process, as a current member of OLW indicates when asked if the ORWMP is raised in discussions at the regular OLW meetings:

> It [the issue of the development of the ORWMP] has never been raised[45].

Other people interviewed in the course of this study highlighted several aspects of the OLW process that contributed to the water planning process.

4.2.3 Inclusiveness

Overall the Ord River water planning process was not inclusive of the entire range of community interests. This was due to the limited nature of the CRP process whose members were by invitation only and the lack of ongoing engagement with Ord River communities, particularly Aboriginal peoples, over the length of the water planning process. The consultative

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[43] The DoW elaborates in the ORWMP: 'Over the past six years local efforts in Kununurra have been successful in improving co-ordination and knowledge about water issues, and building capacity to improve water resource management of the Ord River system. These efforts have helped progress implementation of the Kununurra community's Ord Land and Water Management Plan (Ord Land and Water Management Plan (OLW 2000)) and complemented management objectives of this plan [the ORWMP]. The ongoing commitment of local stakeholders to implement Ord Land and Water Management Plan (OLW 2000) strategies is contributing significantly to improving water management in Stage 1 areas.' (DoW 2006: xii).

[44] It is however confirmed by planning agency staff (see Section 3.2.4 this report).

[45] When other people were asked whether the water planning process was raised as part of the development of the Ord Land and Water Management Plan (OLW 2000) no one remembered it as being discussed.

efforts of the Department were 'targeted' (Worley 2004) at key stakeholders and, in particular, those with commercial interests in water use.

The CRP process included a good cross-section of community interests; however, it lacked appropriate representation from the Aboriginal communities of the Ord River region. In deciding how to constitute the CRP, the WRC drew on the existing membership of the community body, OLW. One respondent notes:

> The CRP workshops were around the time of the maturation of the Ord Land and Water Management Plan (OLW 2000) so there was good representation of people [on the CRP] who were engaged and who had been active participants in the OLW process and who had been involved in a lot of community values studies [refers to the four OLW action groups]

A substantial number of participants were invited to join the CRP '…on the basis of them being key representatives of various relevant interests, and having prior involvement in community processes or groups. They were thus felt to represent both specific interest and the broader community interests.' (DoW 2006: 149). The CRP invitation list included people with interests in irrigation, recreational fishing, commercial tourism, local government, farming and Aboriginal cultural values (WRC 2000c). The Department consulted with key stakeholders to provide advice on the composition of the CRP (DoW 2006: 149).

The ORWMP describes the rationale behind the composition of the CRP (as constituted at the June and October 2000 workshops):

> A fairly large number of stakeholders (35) were invited to be on the panel to ensure wide community input and to establish a consultative style to further future negotiations regarding the allocation plan, as well as other water resource management initiatives. The invitation list was eventually more extensive than proposed in the original terms of reference because of the strong interest shown by the community (DoW: 149)

A list of the Panel participants at the June 2000 meeting is given in Appendix 4 of the ORWMP (see DoW 2006: 150).

From discussions held with members of the CRP I concluded that the composition of the Panel was appropriate, with the exception of Indigenous representation, which was absent. Many people noted this as a failing of the water planning process more generally. A sole representative of the Kimberley Land Council (KLC) attended the CRP workshop in June 2000. The Department took care to select the membership of the CRP to cover the full range of local stakeholder interests. Department staff considers it unlikely that any new issues would have been raised if opportunities for further or broader public input had been provided.

However the representativeness of the panel was questionable. To my knowledge the CRP participants had no agreed mandate to speak on behalf of the 'interest groups' the Department had identified them as members of and the issue of representation was not addressed in the Terms of Reference for the Panel. Members were thus representing their own individual interests in the workshop discussions.

Despite this, some respondents articulated the difficulties of speaking as an individual, and not as a representative of a set of interests. For example, participants in the two CRP workshops

had often worked together through the OLW project and were to some extent aware of one another's issues and views from their participation in that and allied consultative processes (i.e. KWADS). Respondents commented, however, that Panel participants were generally circumspect about their views on balancing water use, and in some cases were reluctant to express them openly as part of the short-lived CRP process. One respondent explained:

> Having lived in the town [Kununurra] for a long time…and knowing the town…if you speak up against the general community opinion, people tend to ostracise you but in very interesting ways; very different ways. The town is small enough that you know everybody that there's this kind of politeness between everybody on the outside, but there's a lot of crap that goes on underneath that. I'm sure that goes on in many communities. But people just don't speak up [in a forum like the CRP], as an end result.'

This is an issue that may be addressed to some degree by the methods employed in an open consultative process. More time for participants to develop inter-personal relationships in this new context and different configurations of small working groups may have assisted in promoting greater confidence, communication and trust amongst CRP members.

The appropriateness or otherwise of representation of interests in the other participation episodes in the development of the ORWMP is difficult to gauge given the confidential nature of some discussions. However most of the ongoing interactions between Department and community after 2000 were focussed on particular stakeholders, including irrigators and development proponents. As one respondent noted:

> There was never really an environment created where community, other than the farmers and irrigators etc, had a good opportunity to have input into that process, you know.

4.2.4 Motivations to Participate

Respondents noted the factors that motivated their participation in the water planning process:

- a desire to protect their personal, business, cultural or other interests in water and in Ord Stage 2 development;
- their background knowledge, personal interests and experience of the issues relating to water planning;
- the time and resources they had available to participate.

I observed a great deal of frustration among Ord River region communities about lack of progress towards Ord Stage 2. One respondent indicated that this frustration has affected how seriously the community take the outcomes of the water management planning process for the Ord River:

> I mean I don't sense a widespread anger [amongst the farming community] with the smallness of the allocation to agriculture. But I suppose there is an element of just being resigned about it. They sort of feel that it's a process they can't really control. That these guys have been promised action on Ord Stage 2 for the past 30 years and nothing seems to be happening so to them, I suppose you could say,' it's…400 gigs, 800 gigs, what's it matter? We're not going to get to use any of it anyway.

The delays in progressing the WA Government's vision of an expanded ORIA have created a feeling of disillusionment amongst many respondents who question the relevance of the ORWMP in the light of ongoing delays to Ord Stage 2 development. A respondent reflected:

> It's [the Plan] no longer relevant. The [water allocation] rules are going to have to change depending on what crops are likely to be grown and what areas are likely to be developed for Stage 2.

There is a concomitant lack of faith in the intentions of government on behalf of respondents that has also emerged as result of the delays. One respondent commented:

> I think the government might just want it to go away (Ord Stage 2). 85% of the State's income comes from the northern Pilbara[46].

The Shire of Wyndham-East Kimberley continues to lobby for the development of irrigated agriculture in the Region and Aboriginal Traditional Owners of estates in the Ord River region have entitlements under the Ord Final Agreement that are contingent on the staged development of the M2 Supply Area in Western Australia. 'When might we actually see any progress?' many respondents asked during interview. One noted, for example:

> …things are pretty slow and boring here [in the Ord River Valley] at the moment waiting for Ord Stage 2 to happen. People come into town [Kununurra] setting up businesses in anticipation of Ord Stage 2 happening and then they have to leave. It's very frustrating.

As noted above, the Ord River community is small and described as tightly knit, where people are motivated to contribute to debates about progress. People I spoke to were invariably positive about the Ord River region as a place and home as well as about the people living there. Several respondents talked warmly about the commitment and energy of people in the region; to its prosperity and potential, including their desire to be involved in decisions about its future. For example, one person noted:

> There's a lot of energy in this town [Kununurra]. There are a lot of people with a point of view. I think it's a very healthy thing. You could get a lot of points of view—some wouldn't rest well with the others but you'd certainly know what your options were. I mean, people in Kununurra are not backwards in expressing themselves. People are very switched on. The energy in the community is terrific. There is nobody who doesn't care.

A keen appreciation is evident among the Ord River community of the remoteness and 'different' nature of life in the East Kimberley, and a concomitant disdain for the imposition of solutions or policies from 'down south' to local circumstances. One respondent commented:

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[46] This scepticism with respect to government action is clearly not confined to the community of the Ord River region but it has affected the way some respondents view their participation in the development of the ORWMP. For example, one respondent reflected:

> For me, though, the Plan [ORWMP] is not set in stone in any way because it could be wiped away by a change in heart by someone in a government department or by a minister…

> There are a lot of people in town [Kununurra] who are aware of the problems and issues elsewhere and they're pretty keen to not see the same mistakes made here right through from farming and mining. There are a lot of people who are keen to see things done properly in this area.

Another respondent associated motivation to participate in water planning with a desire to eschew externally-imposed management approaches:

> Underpinning all this [participation in the water planning process] I suppose is a fear of regulation. That if you don't get in there and have a crack at it as a community then it's going to arrive. And when it does arrive, it'll be from on-top: a Canberra-driven circus that won't work. It's much better if the community [Ord River community] makes its own efforts to understand better and make change.

Those people involved in the water planning process at the outset had generally high levels of motivation as a result of both personal and stewardship concerns. For example one person noted:

> [My interest and motivation was from the point of view of] …being an irrigator who is responsible for the resource.

Others explained that their interest in the outcomes of the process was due to their economic and business interests. For example, one person commented:

> …so obviously anything to do with it [Ord River] and reduction in flow is going to impede my business and I'm keen to have a handle on it and what it might mean for the future…so I can manage around it.

While the two CRP meetings were well attended by community people, several respondents did not attended the meetings either because they were busy at the time and/or that the meetings had been held at inappropriate times and places. For example, tour operators and several famers noted that it is difficult for them to attend meetings in Kununurra due to their seasonally-driven work schedules and business locations[47].

Overall the motivation of the public to participate and take interest in the water planning process for the Ord River appears to have waned over the past few years. As mentioned earlier in this report, many respondents were not aware of the release of the ORWMP in 2006, nor had they received any recent communications on the water planning process or its outcomes. Some commented that they had sought copies of the ORWMP and other information about water licensing from the Department with no success. Others admitted that they had lost interest in the immediate outcomes of a process that seemed to have no clear

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[47] For example, a respondent noted:

> If these things [planning processes] happen in the middle of the Dry Season I've got no chance of going. We just don't have time it's as simple as that. And you find a lot of these things are done at that time of year (in the Dry Season) when everyone's flat out.

conclusion. I suggest this is in some part due to the lack of opportunity created by the Department for the community to participate in ongoing discussions about water use since 2000, and partly because respondents felt that the water planning process had lost its relevance in the light of limited progress towards the Ord Stage 2 development. One person explained:

> I suspect that the community's [Ord River community] enthusiasm for it all has waned somewhat with the passage of time. That's probably not only with this [the release of the final ORWMP] being delayed, but with Ord Stage 2 being so delayed. Unless you are directly involved in an agriculture development that involves water you would have no reason to be involved because the process [statutory water planning process] is so long winded and slow. People just lost enthusiasm [in the process].

The level of activity in the public consultation process for developing the ORWMP decreased significantly after the CRP workshops in 2000. No further formal consultation with or participation from the general public, or community members was facilitated by the Department after this time, with the exception of a study on the Indigenous cultural values of the Ord River undertaken by consultants on behalf of the Commission. According to an agency water planner, consultation with the community could not continue while major allocation decisions issues were still being resolved with key stakeholders:

> In particular, negotiations over the Stage 1 licences were continuing with the OIC and uncertainties remained over projected electricity demand on the Ord River Dam Hydro-electric Power Station until late 2005. Extensive negotiations with the OIC, Pacific Hydro, the Water Corporation and the Department of Industry and Resources about these outstanding matters were carried out over the intervening years. It was not appropriate for these negotiations to be public and consequently formal community consultations were effectively put on hold.
>
> An opportunity to make formal comment on the Ord Irrigation Co-operative's [OIC's] licence was, however, provided to the public in June 2001 when the their application was advertised in the Kimberley Echo (regional newspaper) and the Western Australian newspaper in June 2001. No comments were received.
>
> As research work on the aquatic ecology of the lower Ord River proceeded from 2000, particular projects were periodically reported locally, although no formal consultation processes were undertaken.

As discussed above (see Section 3.2.4), during the period following the CRP consultations the Department facilitated community involvement in a number of water management projects spanning a wide range of stakeholders. Participation in management projects was considered by the Department to be a critical part of the engagement strategy that underpinned water planning The Department undertook and/or resourced several small scale initiatives to improve communication about water management issues in the catchment. For instance, they established the Ord River Waterways Management Group (ORWMG) which a Department officer described as 'informal water management committee' (Worley 2004). This Group was a government and community initiative aimed at driving government investment in research and development in the Ord River catchment (Gardiner and Price 2006). It comprised representatives from government agencies that have management responsibilities for the Ord River and its environs. The Group meets on a regular basis primarily to exchange information

and seek to coordinate the activities of the various agencies. A respondent elaborates on this communication mechanism:

> I don't think it [the Ord River Waterways Management Group] was a one-stop-shop but it did allow people to gain a better understanding of all the regulatory expectations were; but also with all the agencies sitting around the table we could aim to get some consistency. [It was] an attempt to get some more collaborative decision making across the board.

The WRC also hosted a position for a Rivercare officer under the Natural Heritage Trust. This person was responsible for supporting the Ord River communities to undertake projects aimed at improving water quality and management and increasing public awareness of waterways issues. It also supported one of its officers to work on a number of projects with the Indigenous communities of the Ord River region to assist in building trust and relationships between agency staff and Indigenous people (See Section 4.2.7 this report for details.).

The Department argues that its decision to confine their formal consultative process for the development of the ORWMP was based on the capacity of the community to participate in another planning process. Planning agency staff noted that Ord River region communities have been involved in many regional government-led planning initiatives over the past decade and believed the risk of 'stakeholder burnout' to be real. For example:

> And we'll [Department] over consult them and burn them out…and ask them what they want even though they have already told their visions to other people in different contexts. In a small region with limited people it's not appropriate to start afresh in planning anymore.

And another respondent explained:

> …if we wanted to be really blinkered we could decide to go and consult with everyone… The region simply doesn't have the capacity to do another planning process like this. It really makes it much more messy and complex because it's not as transparent; it's not clear how the process is unfolding — it's kind of clever and responsible to pick up the threads of other processes.

4.2.5 Leadership and Champions of the Process

The public participation process was administered by several long-serving dedicated staff of the Department's Kununurra office. Informants acknowledged and praised the enthusiasm and commitment of local officers responsible for facilitating the water planning process and noted the difficult job they had balancing their commitments to the community with government and agency imperatives. For example one person commented:

> Knowing the people in the Department and how hard-working and dedicated and balanced their views are and then knowing the process [water planning process] itself from a government machine-perspective were really different things.

Informal aspects opportunities involved Department officers in ongoing, routine discussions with stakeholders about water planning and water licensing. The officers are well known to the Ord Valley communities and several respondents mentioned the strong personal relationships they had formed with these individuals over many years. A respondent noted:

> I always have a lot to do with those guys from Water and Rivers on a personal basis. And we bounce things off and have continuous discussions.

Some respondents did, however, note the issue of lack of continuity of local agency staff as one that could compromise the leadership of the process. One person reflected:

> You need a really good lead from government and we haven't had one. There's also an ever-changing personnel. You just seem to get a rapport, someone who understands the issues and then they're gone.

Many of the same community people who were involved in OLW participated in the Department water planning process. Several respondents commented that some of the individual participants in the CRP process 'wore many hats' and that it was difficult to know in some cases whose interests individuals were representing at the CRP meetings. They also commented that the same few individuals tended to participate in the range of government-led planning processes in the Ord River region. The personnel of the Department were aware of the potential for 'stakeholder burnout' as a result of these demands and sought to design a participation process that wasn't too onerous in terms of time and knowledge invested on behalf of community interests (see Section 4.2.5 above).

4.2.6 Communications Processes

In the development of a water management plan for the Ord, with the exception of the CRP process, the communications aspect of the public participation process were often ad hoc or informal. They tended to focus on the particular needs of commercial, rather than broader public, interests. The Department produced some communications materials for broad distribution including a fact sheet on the Revised Interim Water Management Plan (WRC 2000c).

Members of the CRP were supplied with information about the water planning process but this was not made widely available to other community people in the Region. The WRC produced a report of the June 17 2000 workshop (as agreed by workshop participants) which was distributed to participants in late 2000. This was not made more widely available until it was published in the final water management plan in 2006. A respondent noted:

> The agency haven't been out there pushing it [the water planning process] or promoting it for a long time.

In one of the few formal public communications documents regarding the development of the Ord water management plan (WRC 2000c), the WRC notes that:

> Improved communication and feedback mechanisms with the community will be integral to the development of the next phase of the allocation plan [refers to producing the ORWMP].

These 'improved mechanisms' did not manifest in the years between 2000 and 2006. The basis of communication between Department and community was mainly through informal participation processes and although some respondents noted they were (and are) in regular contact with the Department, most remain frustrated with their ability to influence water planning in the Ord River region. For example, one person commented:

> Oh we've been talking to the WRC ever since we got here [to start irrigated agriculture enterprise in the Ord River region]! It's an ongoing saga really. They're [Perth-based agency staff] not really interested in up here because there is so much water. It's not an issue to them.

The principle formal communications the Department had during the period from 2000 to 2006 with stakeholders in the water management planning process was with commercial and industry bodies about contractual and water licensing negotiations.

A diagram of "Where to from here?" was prepared by the Department (2006) and shared across Government and key stakeholders. The diagram shows the roles of the State and Commonwealth Government agencies in the decision making steps around the plan, its release, related licence applications and amendments, associated approvals for Ord Stage 2 developments and the future revision of the plan. While demonstrating the interactions of the complex processes involved, the diagram indicates when and how further public input on the regulatory decision making stages was planned (as described above).

The lack of feedback was an important communication issue between the water planning agency with the parties interested in the development of the ORWMP. Several respondents expressed frustration at the Department's poor record of communicating the results of people's contributions to the process to the participants. One person commented:

> …that's our main gripe the lack of consultation [in relation to water planning for the Ord River]. They [government representatives] come looking for information and then they run away and make a policy decision and don't tell anybody.

And another person noted:

> When they [Department] were doing this plan for water and rivers [the water management plan for the Ord River]…we did a lot of work for them on estimating crop [water] requirements…But we don't get any feedback from them.

For reasons noted above in section 3.1, public review on the draft ORWMP was not sought and therefore the Department did not run any public information sessions. The Department did however provide briefings to the EPA, Pacific Hydro, OIC and Water Corporation before the Plan was released.

Nor did the Department run formal public information sessions upon the release of the final ORWMP[48]. Several respondents who had been involved in the water planning process were not aware of the release of the ORWMP or the allocations in the final Plan. One respondent reflected:

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[48] According to an agency staff member, the DoW Regional Manager came to Kununurra to release the Plan and to talk to key people. Briefings on the Plan were also included by DoW staff in other meetings where related matters (e.g. water licensing issues) were also discussed between the Department and stakeholders in the Ord River region (Ian Loh pers. comm.).

> I don't even know what the allocation [refers to environmental flows provisions in the final ORWMP] ended up being. I look at the river now and it's still wet!

People who weren't involved in the public participation activities for the water planning process generally relied on other community or industry members to inform them about the progress and outcomes of the process. There was no regular, ongoing or formal communication mechanism established by the Department with stakeholders about the progress of water planning, and many respondents who were involved in the earlier public participation activities (i.e. the CRP) remain unsure about what happened after 2000. As one respondent explains:

> If the WRC had some other community engagement aimed at the public [other than the CRP meetings] it certainly didn't hit me! And I'm a person who is actually interested….

Comments made by several respondents indicate that there were people involved in the water planning process who played a significant role in informing other members of the community about the process. One respondent noted:

> I was aware that a [water planning] process was going on but it was only through the feedback I get from farmers.

The Department of Water plans to address the currency of the OWRMP with an addendum, as explained by Ian Loh:

> The current intent of completing an addendum to the 2006 ORWMP, and making the addendum and the ORWMP subject to a formal round of environmental impact assessment under the EP and EPBC Acts, hopes to overcome the perceived shortcomings with consultation over the ORWMP.

4.2.7 Indigenous Participation

Indigenous participation in the development of a water management plan for the Ord River was limited because Miriuwung Gajerrong native title holders and the WA Government were involved in native title negotiations that extended over many years. These negotiations included the development of a MOU for resolving native title, compensation and land development proposals, referred to as the MG Global Negotiations framework (see Section 2.4.3). The Department was part of this whole-of-government process which led to the OFA in 2005. The MG Global Negotiations greatly constrained the ability for the Department to engage Aboriginal people in water allocation planning.

During the development of the Draft Interim WAP there was no formal process for consulting with Aboriginal communities in the Ord River region. However, the Draft Interim WAP indicates that it intends to ensure adequate consultation is undertaken:

> There will be further consultation with all stakeholders before its [the Plan's] finalisation. In particular, the Commission will involve the local aboriginal people and representatives when finalising the plan (WRC 1999: iii).

Public submissions on the Draft Interim WAP provided advice to the WRC on how to engage Indigenous people in its water planning process, including developing a clear and transparent consultation strategy in a participatory manner with the Aboriginal communities involved (EPA

1999: 10). Similarly, the EPA, in its advice to the WRC on its Draft Interim WAP, recognised the need to 'appropriately' incorporate native title rights and interests of Aboriginal traditional owners in the water management plan. These rights and interests, it elaborates, may include:

> The rights to possess, occupy, use and enjoy, access, control access, use/enjoy resources, trade resources, control use/enjoyment of resources, maintain/protect places of importance under traditional law/custom/practices etc. (EPA 1999: 10).

The EPA advice also notes that, with respect to Aboriginal/heritage issues, the water management plan should:

> …develop a clear and transparent strategy for consultation with the aboriginal communities upon which they Plan may impact, and provide a framework to ensure the inclusion of the Ord River's role in the lives and cosmology of the Aboriginal people in the allocation process (EPA 1999: 9)

The EPA also recommends that the WRC develop a Cultural Heritage Management Plan for the Ord River (EPA 1999:9).

The Department, in its response to the EPA advice on the Draft Interim WAP, committed to: 'ensur[ing] that Aboriginal people's cultural values associated with the Ord River are considered, together with the rest of the community, in the development of the final allocation plan [for the Ord River] in 2003' (EPA 1999: 3) It advises that a 'detailed Aboriginal Cultural Values Study of the Ord River is to be developed with the local Aboriginal people over the next 6-12 months' (EPA 1999: 10). With respect to a Cultural Heritage Management Plan, it states that this is beyond the scope of the water management planning process (Ibid: 9).

According to a water agency staff member, it was not possible for the Department to hold formal consultations with the Miriuwung Gajerrong people over Ord River water resource management issues while the WA Government was opposing their native title claims in the courts (up to ~2001). Following the affirmation of native title rights at the conclusion of negotiations in late 2003, further interactions with the Miriuwung Gajerrong people were centralised through the Western Australian Government's Office of Native Title. These negotiations ultimately resulted in the Ord Final Agreement (OFA) in 2005. The staff member explains further:

> The WRC fed into the larger OFA process. While the OFA was centred on land issues it was a critical part of the Ord planning landscape and it was thus connected to the water planning process. A key water resource management and planning outcome from the OFA was a joint management arrangement for a 120, 000ha water reserve at the bottom of Lake Argyle [between WRC and the Miriuwung Gajerrong people]. The Department and the MG Corporation are now the co-vestees of this land and are collaboratively planning for its long term management.
>
> Incorporating Aboriginal views on possible flow regimes for the Lower Ord River [in the water management plan for the Ord River] was impossible due to these larger (whole of Government) negotiations over the OFA at the time. The range of views on flow regimes held within the Aboriginal community, nevertheless, was identified through KLC representations at the 2000 [CRP] workshops and gained through collaborative projects with other local indigenous people.

This view is supported by a report of social impacts from Ord Stage One prepared by the Kimberley Land Council. The report states (as at 2004), traditional owners '…were heavily engaged in a number of other complex, stressful and time consuming litigation and consultations and negotiations, including Miriuwung Gajerrong 1 Native Title Claim and the re-negotiation of the Argyle Diamond Mine Agreement [ILUA]' (Ibid: 6). It also notes: 'On average traditional owners in the ORIA were attending lengthy meetings on a fortnightly basis, an exhausting schedule considering most attendees are elderly' (ibid: 9).

There were several further factors that contributed to the lack of broad Aboriginal participation in the formal water planning process for the Ord River. In the initial stages of process, there was no clearly identifiable representative structure or body (such as the MG Corporation) that Department could engage with on local issues relating to government business, including planning processes.

In addition, at the same time as the water planning process was proceeding, the Wesfarmers consortium was undertaking an ERMP/EIS for their Ord Stage 2 development proposal. As part of the ERMP/EIS process the WA Government charged the consortium from 1998 with the responsibility of consulting with Aboriginal communities in the Ord River region with respect to their proposal (see Kinhill Pty Ltd 2000). This added yet another set of demands on Aboriginal communities of the Ord River Valley.

In 2000 the WRC commissioned a study of the Aboriginal social and cultural values of the Ord River. The report, *Gunanurang: (Kununurra) Big River Aboriginal Cultural Values of the Ord River and Wetlands* (Barber and Rumley 2003*)* was finalised in 2003. The consultants who undertook the Study conducted 'comprehensive discussions, consultations and fieldwork' with Aboriginal people from all the language groups who have an interest in the Ord River region and environs (Barber and Rumley 2003: 13). The Study summarises the values held by Aboriginal people for the Ord River and its surrounds and makes recommendations for actions to be taken by the Department to promote the equitable participation of Aboriginal people in water resource planning in the region. A written submission by the Kimberley Land Council in November 2000 noted that the plan should be delayed until the proposed cultural values study had been completed (DoW 2006: 164).

However it appears that the Department did not use the *Gunanurang: (Kununurra) Big River report* to officially inform the water management plan for the Ord River. The final ORWMP document states that the results of this cultural values study were not available to inform this 'Interim Water Management Plan' (DoW 2006: 166). This text is actually in error: the text of the ORWMP has not been updated from an earlier version of the Plan that was about to be released in late 2001, just before Wesfarmers consortium withdrew from the M2 Supply Area Project.

The *Gunanurang: (Kununurra) Big River report* was completed in 2003; in sufficient time to be considered in the re-drafting of the final water management plan released in 2006. However, there is some conjecture over how long it took the report to be authorised for general use. One respondent noted there were delays in releasing the report publically after its finalisation in 2003:

> At the time it [the cultural values report] wasn't shared at all. It took a long time for approval—for its public release. Years.

A Departmental officer confirms that the cultural values study took a long time to complete and for the report to be made public:

> However, this also occurred in the case of other reports covering ecological studies of the lower Ord[49]. The cultural values study was a report to the WRC, dated June 2003. However, it was only made readily available through the Commission's web page much later (in 2006). Delays had occurred prior to June 2003 in reviewing and revising earlier drafts.

It is difficult to account for the lack of attention to the cultural values study in the final ORWMP. The Department suggests that the report did not provide the information they needed to progress work on elaborating social water requirements of Aboriginal stakeholders:

> …priority was not given to releasing the report in 2003 as it provided little direct guidance to the Commission [WRC] on social water requirements for the Ord River and had potential to complicate then current negotiations between Government and the Miriuwung Gajerrong over native title rights. The picture changed with the native title determination of late 2003, the Kimberley Land Council ASEIA[50] report on Ord Stage 1 (2004) and the subsequent whole of Government negotiations that lead to the Ord Final Agreement [OFA] in October 2005.

The cultural values study provided an insight into Aboriginal values of the Ord River generally, documenting the spiritual importance of the river to the Miriuwung Gajerrong people and also providing the Department with advice on Aboriginal views about desirable flow regimes of the lower Ord River. One of the water planners elaborates:

> These [aboriginal views about desirable flow regimes of the lower Ord River] were sought to assist Department in establishing social water requirements for the lower Ord River. The report [Gunanurang: (Kununurra) Big River] did not provide such input. The consultants [authors of the report] had difficulty in providing advice on these matters as they argued that Aboriginal belief systems saw the river as integral to the whole landscape (country), with the land being central to their overall spiritual belief system. Providing specific advice on managed flow regimes of a regulated river was inconsistent with their underlying beliefs and concepts of country.
>
> The report demonstrated the Miriuwung Gajerrong peoples' strong links to the land generally and the river as part of that land, and supported their native title claims. It also reflected the Miriuwung Gajerrong [peoples'] desire to be involved in decision making about their environment. However, at the time (~ 2000 to 2003), the consultants advised that the Miriuwung Gajerrong [peoples] only wished to negotiate on the larger native title issues with Government as a whole and not engage in other narrower issues such as flow regimes in the lower Ord River.

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[49] Other reports to the Commission related to the ecological water requirements of the Lower Ord River, while completed between 2000 and 2003, were also only placed on the web in 2006, when reference to them became necessary as part of finalising the ORWMP.

[50] This is the report with the full title: *Ord Stage 1 Fix the past. Move to the Future: Aboriginal Social and Economic Impact Assessment of the Ord River Irrigation Project Stage 1* (KLC 2004).

The *Gunanurang: (Kununurra) Big River Report* and the ORWMP describe the custodial connections Miriuwung Gajerrong peoples have with the Ord River, as well as their 'strong desire for improved recognition of Aboriginal rights of access and expectations of a role in management.' (DoW 2006: 47). However despite this broad recognition of Aboriginal rights and interests in the River, the planning process was unable to address these issues and engage Indigenous people effectively in decisions about water planning in the Ord River region. The Department did not produce a publicly available Aboriginal engagement/consultation strategy for the water planning process, as had been recommended in public submissions on the Draft Interim WAP in 1999 (see EPA 1999: 9). There was also minimal direct involvement of Indigenous people in the water planning process itself. For example, several respondents noted the lack of Indigenous representation on the CRP with only one representative of the KLC in attendance at the June 2000 CRP workshop.

Some respondents acknowledged the lack of participation by Aboriginal people in the water planning process as a significant limitation. The Department did however make attempts to involve Aboriginal interests in the process. The *Gunanurang: (Kununurra) Big River Report* acknowledges, for example, that the WRC attempted to consult Aboriginal people through the Miriuwung Gajerrong Families, Heritage and Land Council (MGF) about the Draft Interim WAP before it was released but agreement for the report to progress did not occur until 2000. A planning agency staff member confirmed that Aboriginal community representatives were invited to attend a briefing meeting about the water planning process, but notes that this may not have been an appropriate form of engagement at the time[51]:

> They [Indigenous community representatives and their organisations] were written to and asked to participate in a meeting but it's not the right time or the right environment for Indigenous people. At the same time there were also native title negotiations…They were quite wrapped up in the OFA stuff too; people's time in committees and decision-making time was very much taken up by that process.

The ORWMP notes that:

> Considerable effort has been made to engage Indigenous people in water and natural resource management and further engagement is expected to consolidate their involvement (DoW 2006: xii).

The 'further engagement' referred to in the ORWMP took place mainly through the efforts of the local Department staff to negotiate and support small scale, cooperative planning and management initiatives with Aboriginal community members and their organisations. These initiatives succeeded on the basis of the commitment, flexibility and ingenuity of individuals in the Commission/Department who worked within the constraints of their agency to allocate time

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[51] Hampstead et al (2008) report that 'the department recognised that its officers had to go through a learning process regarding Indigenous engagement and that this could be improved further. The interactions between land and water, the concept of 'country', and Indigenous access and involvement in the context of Native Title are extremely complex. Flows are only a small part of these complex interactions. The department felt it initially made the mistake of assuming some sort of heterogeneity of views within the Indigenous community, when obviously this was not the case' (2008: 520).

and resources to particular projects and activities aimed at developing relationships between staff and Indigenous community members and their organisations.

Water planning staff described working with Aboriginal groups in a 'low-key, practical way' on specific projects relating to water use and management that Aboriginal community members identified as important. The staff noted that this approach allowed themselves and the groups involved to work around, to some extent, the complexities associated with the native tile negotiations that were taking place at the same time as the water planning process. It also provided for an appropriate level of engagement with Aboriginal communities at that time. One respondent explained:

> We started working with Aboriginal people on a very practical level… Like the Ord River Aboriginal cultural values mapping project [see below] – to start to engage them at a level that they wanted to be engaged at…The work we did alongside all that [native title and Global Negotiations] was just a bit more low key.

These small scale initiatives, undertaken in negotiation with the Aboriginal traditional owners, included a cultural values mapping and interpretative project for the lower Ord River, a project on the feasibility study for developing a Fishway on the Ord River and a project on pesticide use in the ORIA. The Department staff were aware of a historical legacy of poor relations between Aboriginal communities in the Ord River Valley and the political and economic activities of governments, details of which are comprehensively addressed in the report, *Ord Stage 1 Fix the past. Move to the Future*: *Aboriginal Social and Economic Impact Assessment of the Ord River Irrigation Project Stage 1* (KLC 2004) (known as the ASEIA report). They noted also that it can be difficult to get broad recognition and support for this work within the planning agency. Despite this, local Department staff worked with Aboriginal community members on the project activities based on their understanding that it was necessary to build trust and mutually beneficial relationships as a basis for a stronger, future engagement of Aboriginal people in planning processes.

Another example of this type of collaboration was the Mirima Dawang Wooorlab-Gerring Language and Cultural Centre project to map important Indigenous places of interest and names along the Ord River waterway. This project was funded mainly by the State. A Departmental officer explains:

> The Ord River cultural mapping was a long term process that built capacity and relationships (and is ongoing) and marked a significant shift in relationships with the indigenous community. The impact of this collaboration built the foundation for entering into a joint management arrangement through the OFA and underpins the ongoing strong relationship the Department has with local people (Ian Loh).

A respondent explained:

> Doing the map [of Aboriginal cultural values of the River]… it [the map] wasn't really the main outcome we were looking for. It was a means to an end. What we wanted was for XX [person's name] to get to know people in the community and for him/her to start building that relationship with the Mirima mob [members of the Mirima Dawang Woorlab-Gerring Language and Culture Centre]. Because you can't just come in and sit down [with Aboriginal people and their organisations] and say 'here I am mate. Let's talk about country!' So what we said was 'let's do

this project and as you do it, people will get to know you and to trust you'. And now XX has a fantastic relationship with that lot [52].

4.2.8 Conflict Resolution

The stated aim of the water planning process that commenced in 1997 was to 'establish how the Ord River water would be shared between the competing needs of the environment, current and future irrigation and hydro-electricity generation' (DoW 2006: vi). As one respondent observed:

> Water allocation planning is almost always controversial; it's not a smooth or easy process; there will always be some dissatisfied interest groups. It's quite a complicated and delicate balancing act.

Inevitably community groups in the Ord River region have a range of views on how to balance competing water uses. The public participation process for water planning in the Ord did not attempt to resolve the divergent views among community interests.

The RIWI Act identifies one of the functions of a water resources committee for water planning processes in WA as being '… to assist the Commission in the resolution of disputes about the use of water resources involving persons having rights under this Act or persons affected by the exercise of those rights' (RIWI Act, s.26GM(1)(e)). Formation of the CRP predates this provision, and strictly there was no expectation that the CRP would undertake this function (see ToR for the CRP in DoW 2006; 147-8). However if resolution of disputes *had* been one of the duties of the CRP, it may have led to different way of running the planning process. It should be noted that the June 2000 workshop of the CRP was facilitated by an independent consultant.

Tensions arose in the course of the 'community consultation' process (DoW 2006: 147) relied upon to develop the ORWMP. A respondent reflects on this tension:

> What come out of that meeting [CRP workshop, June 2000] was that you can't keep everyone happy. There's not enough water to go around. You have to make trade-offs but you need the knowledge to do that, so you can make those decisions.

Although the CRP participants were not required to reach a consensus view on the water use scenarios presented to them by the WRC, some respondents suggested that the CRP discussions were sometimes heated. One person commented:

> I remember people being quite aggressive [in the CRP workshop] about all those steps along the way. There was a feeling that there was only one view. That: 'this is how it is'. There were only a few of them [CRP members] that were like that…It's Kununurra—you don't really have to pay for

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[52] Another respondent noted:

> The map of the Aboriginal cultural values of the lower Ord River was a good thing because it was a tool that showed the whole community including the farmers the various and different uses of the river. It didn't discriminate between the various uses but for the very first time, what the map did was show people that there are some cultural values in the River.

> much in terms of where you put your infrastructure. There's not a lot of red tape. Suddenly they were being asked about this massive development [Ord Stage 2 and water planning implications] that was going to impact on their way of life. I think that's probably why they were so upset.

The official record of the 'community consultation' in the ORWMP does not refer to conflict and tensions among CRP members. It presents the outcomes of the CRP process as coherent and non controversial (see DoW 2006:151-163).

Community interests are divided on the then current status of water allocation determinations and expressed concerns about their origins. They also identified a perceived inequitable distribution of water between consumptive and non-consumptive uses in the ORWMP. For example, some respondents noted that the issue of environmental flows was confounded with what might be indentified as an informal allocation in the ORWMP to allow year-round access to the lower Ord River for recreational boating and tourism. Indeed, in practice, the navigability of the lower Ord is linked to hydro-electricity production as one respondent notes:

> It's fine like now when everyone has their air conditioners on. There's a greater amount of water coming downstream [into the lower Ord River]. But once it gets too much below sort of 65 cubic metres per second around Tarrara Bar, then we [boat operators in the lower Ord River] start to run into problems, hitting things.

Several other respondents also noted the 'unstated' allocation to facilitate the passage of boats in the lower Ord, intimating that this amounted to 'free water':

> Pacific Hydro has got a state agreement [refers to WSA ratified by the Ord River Hydro Energy Project Agreement Act 1994] that was signed a few years ago. The tourism operations in town have free water. The Water Corporation release water so the boats can go up and down. What's the resource for?

The conflicting views on the interpretation of allocations and environmental flows in the ORWMP have not been resolved through the public participation process for the development of the Plan.

4.3 Outcomes of the Participation Process

4.3.1 Introduction

In this section Dimension 1 of the CMEF is used to examine and analyse the outcomes of the water planning process for the Ord River. This includes whether or not the process met its stated objectives and goals, whether or not it was timely and efficient and if it met community expectations of the process, as well as other unexpected outcomes of the process.

Outcomes of collaborative initiatives can be conceptualised in different ways (Craps 2003: 46). Here I define the expected outcomes as the desired conditions that the multiparty initiative sought or hoped to achieve (after Craps 2003). I define the unexpected outcomes as those outcomes that resulted from the water planning process, but which were not identified at the outset of the process as objectives or intentions of the parties involved. Outcomes generally are the results of the collaborative activities that occur as part of the water planning endeavour, in contrast to the activities that I examine in the following other dimensions of this analysis which are focussed on the processes (after Craps 2003).

4.3.2 Achievement of Objectives

As I have shown in the previous two parts of this report, the public participation process for water planning in the Ord River was a protracted and disjointed process that included a range of different approaches to working with community interests. It was a limited consultation process, as acknowledged by the WRC/DoW (DoW 2006: 149). The principle elements of the process were designed to comply with the relevant legislative and policy requirements, but there is no public document that outlines the goals of the public participation process.

Assessed against the pre-2000 context which did not provide for a legislative and policy framework for water planning, the ORWMP planning process is a trial or pilot which led to a development of community engagement processes. Around this time, that is the late 1990s, there were similar trials of water planning processes in NSW and Queensland (Hampstead et al 2008; Tan 2008). All of these trials were non-statutory leading to the introduction of statutory processes, therefore it may be useful to use these as benchmarks.

The Department met its obligations under the RIWI Act for community consultation and complied with the guidelines of the *Environmental Water Provisions Policy for Western Australia* by involving the community in water planning including the establishment and review of EWPs (WRC 2000b: 5).

However, assessing the outcomes of the process in terms of these criteria provides a limited view of the achievements of the water planning process. Below I also consider the outcomes of the process in terms of its efficiency.

4.3.3 Efficiency

The water planning process for the Ord River spanned a decade from 1997 to 2007. The RIWI Act does not stipulate a timeframe for the development of water resource management plan in WA. However respondents from the water planning agency and community interests noted that the process was too long and, should have been substantially shorter, ideally with the release of the revised Interim water management plan as a final Plan in 2003. There were several reasons for the protracted nature of the process all discussed in full above. They include: the need to adjust environmental flows proposed in the Draft Interim WAP (1999) based on EPA and public advice; the delays to the development of Ord Stage 2, and increased demand for water to produce hydro-electricity for the Argyle Diamond Mine operations.

The Department (2006: 44) notes in the ORWMP that the public participation element would have been designed differently had it known that the water planning process was going to be influenced as strongly as it was by the need to substantially revise the interim EWPs in the Draft Interim WAP and the withdrawal of the Wesfarmers consortium proposal for Ord Stage 2. It reflects:

> Had the additional time before release of the revised draft plan (Draft Interim WAP for the Ord River] been known at the time [of the June 2000 CRP workshop] (a consequence of additional technical work [to underpin work to establish revised EWR/EWPs] and review of options that became necessary), a different approach to the consultation process would have been undertaken. Instead, consultation and negotiation has focused on issues relating to specific

> stakeholders and on development of a communication and involvement process during the interim phase of the plan, leading up to the replacement of the interim plan. (DoW 2006: 44)

As it eventuated, the water planning process for the Ord River was not efficient in terms of achieving good public participation outcomes for a given investment of time and resources—from the perspective of both the Department and community members. Although the bulk of the public participation activities occurred over a short time frame in 2000 (comprising the CRP meetings and other community meetings), the process did not adequately engage community stakeholders over the life of the water planning process[53]. Many respondents commented that the lengthy nature of the process compromised its relevance, with corresponding effects on their 'faith in government'. One person said:

> We've been waiting for this [the release of the ORWMP] for years and years to the point where I think people have almost totally forgotten about it… the first one [Draft Interim WAP] had a lot of things wrong with it. It can't take 7 years to fix it.

Respondents did not strongly identify with the CRP as the primary vehicle for community participation in the water planning process. If they could recall any details of the CRP workshops and associated meetings in 2000 at all, they were generally puzzled that there had been no further workshops/meetings of this kind. One respondent noted the need to have time to build trust and relationships through a community consultation process:

> You might feel comfortable after a couple of months to put forward views where you might have thought at first 'oh what are people going to think of this?' But then it would be out there and you could talk about it. You can't do that with people you don't know very well. So it's critical to have time [to contribute in the consultation process for the water planning process].

A planning agency officer confirmed this point:

> Trying to take people [community members] along with you [in the water planning process] takes a long time…

The public participation process for the development of the ORWMP was vulnerable to external factors affecting the water management planning process including the omnipresent and uncertain prospect of Ord Stage 2 development. For example, the WA EPA, in its advice to the WRC on the Draft Interim WAP '…recognises that it is proposals for additional water diversion from the Ord River that is driving the timing and approach in the water management planning for the Ord' (WRC 1999: 8).

There was no formal communication with community interests to help redefine a new timeframe for public participation in the development of the water management plan following the documented delays. This is despite the policy imperative in the *Environmental Water*

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[53] Hampstead et al (2008: 524) document departmental reports that 'had it known the reworking and redrafting of the plan would be delayed by several years, a different approach to consultation may have been undertaken. Officers at the time felt they were rushing through the process. Having said that, the workshop approach resulted in a detailed and comprehensive articulation of values in a very short timeframe'.

Provisions Policy for Western Australia which states that the WRC will develop a timetable for the preparation of water management plans to be considered by stakeholders and regularly reviewed to take account of changing priorities (WRC 2000: 10).

It is difficult to ascertain the resources invested in the public participation phase for the Ord water planning process, or how these resources might have otherwise been better used, given the extremely lengthy nature of the water management planning process. However it is clear that the Department had few regionally-based officers to cover its broad mandate which, on top of water planning, included water licensing, vegetation management, and operation of the dams.

Some community members in the Ord River region have invested a lot of time, resources and energy in projects allied to the development of the water management plan for the Ord River, for example through OLW and in helping determine crop requirements for water use in the ORIA. Several respondents commented that they had attended the CRP meetings on their own time and that were not renumerated for their contributions of time or travel to participate in these activities, nor for the number of other government consultative processes they have and continue to participate in. These inputs to the public participation process are not recognised in the official records of the process.

4.3.4 Community Expectations for Water Planning

Based on the interview responses, the public participation process for water planning in the Ord River region did not meet community expectations for an open, comprehensive and well defined process. The outcomes of the process, including future licensing, allocations and in particular the EWPs, are not strongly supported in Ord River region communities who consider that the Plan should be geared to meet future water demands. Whilst several respondents noted that the OLW process produced social cohesion, learning, collective ownership and pride among participants, they did not make similar observation about the government-initiated water planning process for the Ord River.

There was a strong view expressed by several respondents that community members sought certainty in guaranteeing water availability. This is a view consistent with the Government's stated objective of the process:

> The Plan [Revised Interim water management plan (2003) for the Ord River] is required to allow more certainty for current and future water users… (WRC 2000d)

Respondents also commented that people in the Ord River communities are anxious to see opportunities for regional expansion of irrigated agriculture, and that water planning should enable such expansion. One respondent commented:

> Although there are different views and values, there is definitely recognition [among community members in the Ord River region] about the value of water for the ongoing livelihood of the community in the Ord valley….

And another reflected:

> I suppose I expected from the process [the water planning process for the Ord River]: a realistic plan for what water is available so farmers can say 'ok that's how much we've got available'.

> Because we [Ord River irrigators] were developing and thinking about Ord Stage 2 and we wanted some certainty that things were not going to change in 5 years time.

Several respondents commented that they expected the issue of water licensing to be resolved as a result of the water planning process. One respondent thought that allocations for irrigators pumping directly from the Ord River had not been confirmed or communicated as an outcome of the water planning process, and expressed concern about the lack of progress towards issuing water entitlements. Another respondent was not sure if the riverside pumpers had been included in the ORWMP, despite having had some involvement in the early development of the Plan and having made a submission as part of the consultative process for the Draft Interim WAP. One respondent noted:

> …we've been trying to get an allocation on this property for years. Ten years now. We may not even be included in the Plan [ORWMP]….although I suspect we are included. I hope we are… we've got no idea what allocation we've got.

Others identified maintaining the health of the Ord River system as a principle concern. For example, one respondent noted their motivation for becoming involved in the water planning process:

> Personally, the change in the environment of the river: environmental change or damage that would happen [as a result of changed water use]. What does it mean to take off more water for Ord Stage 2? At what time of the year? And what impacts will there be on the river system?

Community members in the Ord Valley expect to be treated as legitimate stakeholders with knowledge and practices to contribute to the goal of improving water management in the Region. One person commented:

> We're stakeholders, looking after a resource [Ord River region water resources], trying to make a living and making sure we do it properly.

And another noted:

> …we had to consider as a community how we were going to use the river [Ord River]. We don't exist without using the river for financial gain in someway.

Notwithstanding the advisory role for the public conferred by legislation in water planning in WA, the Ord River community members expressed frustration at not being more closely involved in decisions about water use and management in their region. For example, although Kununurra-based officers of the Department were well known as the local faces of water planning, there was a feeling expressed among respondents that the big decisions were generally made elsewhere within the bureaucracy. One respondent commented:

> A lot of those decisions are made down in Perth.

From my discussions with respondents I observed that people expect to have the opportunity to be involved in decision-making about water resource management in the Ord River region,

and feel that, particularly in the latter years of the water planning process, that they had not been given this opportunity[54].

A small number of respondents were positive about the outcomes of the water planning process, noting that they were better informed about water management as a result of their participation:

> I think as a result of the plan [ORWMP] that people [involved in the development of the ORWMP] have a lot better understanding of the river and a much better appreciation of the ways things work…it actually placed a value on water, be it a monetary value or be it a perceived public asset benefit, if you like. It actually went some distance to do that.

Another respondent commented on the outcomes of the water planning process from the point of view of an industry body. This body, the OIC, was engaged in extensive discussions with the Department about their water allocation and license over many years. He/she noted:

> I think the way the OIC's allocation itself was developed was very collaborative. Because they got quite a generous allocation…So I think they were very satisfied with their level of involvement and what they got out of it.

In general, however, respondents commented that the water planning process had not met their expectations. One respondent elaborated:

> I don't think it provided for fair and equitable comment by the broader community in the process. I can understand at the end of the day that water is to be allocated fair and equitably and there's been an environmental water provision etc. But it would have been good to have the community participate more in that process.

Others reflected on the difficulty of trying to please everyone involved in water planning. For example, one person commented:

> …I think there were always going to be people disgruntled with the process [water planning process for the Ord River]. Who felt it either went too far, or didn't go far enough… In Kununurra there are lots of different strong views [about water use and management].

There remains a substantial degree of unresolved tension and dissatisfaction among respondents regarding the outcomes of their participation in the water management planning process for the Ord River. This public dissatisfaction coalesces mainly around disagreement about the environmental flows provisions; believing that these allocations conflict with the needs of future irrigated agriculture.

The rationale and substance of the interim EWP in the ORWMP was questioned by many respondents.[55] A common reflection was that the revised interim EWPs in the final Plan, (and

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[54] A respondent commented:

> When they [the government/WRD/DoW] want to make a ruling or a decision they should have a public meeting at least to talk to those that are concerned or involved.

now updated in the report, *Ecological Water Requirements for the Lower Ord River*[56]), are too large.[57] For example, one respondent commented:

> 400 gigalitres [of water] out of a dam that size [refers to Lake Argyle/Diversion Dam] just seems ludicrous but there are all sorts of conservative estimates put in there [in the ORWMP] and various other things and there is a wastage [of water] in the existing system that we're aware of.

Another said:

> Anyone who works and lives around the place [OIRA] who doesn't wear a green hat or work for the DoW will tell you that they can't believe the environmental allocation.

Yet another person reflected:

> We think the environmental flow [interim EWP in the ORWMP] was too high. They [the Department] didn't seem to prepare to budge on it. Especially when you consider what was there before [refers to the Ord River prior to damming]. I don't know who does determine what the environmental flows should be?

Some respondents linked the interim environmental allocation with what they perceive as an inadequate allocation for irrigated agriculture for Ord Stage 2. For example, one respondent commented:

> The general view is that the allocation for Ord Stage 2 [in the ORWMP] is inadequate…I think it needs to be looked at more…There's so much water there [in the Ord River system].

Several respondents consider that the final water management plan for the Ord River does not properly account for all the water in the Ord River system or promote good practice in water use. Their comments relate to the expectation that the Plan should identify all the water produced in the system and promote its efficient use. For example, one person noted:

> I just think they [the Department] haven't really look seriously enough at what's available within the existing allocation arrangement and what they could do to improve it…because you can certainly improve the availability of water up in Lake Argyle very, very cheaply…58

Another respondent noted that there is wastage of water within the current allocations for irrigated agriculture from the Ord River:

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[55] Schofield, Burt and Connell (2003) identify a widespread suspicion on the part of competing water users regarding the justifications used by water planning agencies for ecological water provisions.

[56] Most people interviewed were not aware of or did not comment on this latest report released in May 2007.

[57] See Doupe, Froend, et al. (2006).

[58] The OIC has developed a recent proposal to increase the height of the spillway at the Main Dam (Lake Argyle) to store more water.

> Because they've got a resource that is under utilised they don't have to worry about it. So it means that cane growers or those heavy users turn their irrigation on and if it's supposed to come off at 1am then it doesn't come off. They don't get out of bed because they don't pay for the extra water they use.

4.4 Change

In this section Dimension 4 of the CMEF is used to describe and analyse the changes that occurred as a result of public participation in the Ord River water planning process. I focus on changes in the power relations between participants and the changes to individuals and groups in terms of their knowledge, organisation and practices.

4.4.1 Changed Relationships

There is no clear evidence of any re-allocation of authority among community participants in terms of decision-making or implementation as a result of their participation in the water planning process. Respondents didn't express a sense of ownership or responsibility for the development or implementation of the ORWMP. One respondent noted, however, that participants in the development of the ORWMP should not accept the Plan and its outcomes as static: they have a right to continually negotiate their role in the planning process:

> Really …the fact that the Plan [ORWMP] is there…we [community members] shouldn't just have to accept it. We should be able to challenge it. And improve it and make it work better.

Specific groups in the Ord River region assumed responsibility for representing their interests in broader water planning and management. The OIC, for example, was in negotiations over several years with the Department about their water licensing conditions. One person commented on the need to assert their views:

> So I guess the major stakeholders [for example, irrigators in the Ord River region] determined…that we would be proactive [in negotiations with the Department]…and make sure that we looked after our own best interests.

There are instances where the Department has put their 'planning energies' to promote community participation in water planning and management as an alternative to the formally identified 'Ord River water planning process'. (See Sections 4.2.6 and 4.2.7 this report). This flexibility and insight allowed the agency to better respond locally by facilitating public participation in water management. Similarly, members of the Ord River region communities made changes to the way they organised themselves to respond to water issues in the region. For example, the OIC and Ord Asset Cooperative invested time and resources in planning their own needs as part of their participation in the water planning process. One respondent identified a change in the relationship between the OIC and government as a result of these efforts:

> It's good to understand and go through the process of working out what you need and then to ask for it. I guess that was the most successful part of it [being involved in discussions with the Department about water planning]—in getting an understanding of what we [refers to the OIC and its members] wanted and government agreeing to it.

There have been changes in the Ord River region communities since the water planning process began in 1997. Participation needs of community groups arguably have also changed. One respondent noted this point:

> The water planning process of yesterday [for the Ord River] won't fit today. And it's not that long ago! People are becoming more organised, from green groups to Indigenous groups. They demand more information and genuine consultation.

As a result of their participation in the water planning process individuals changed the way they spoke and communicated about water planning issues. In particular these changes are related to their increased knowledge of EWRs and EWPs and other allocations as part of water planning. For example, one respondent reflected:

> They [the Department officers] did talk about environmental flows at the workshop [CRP workshop, June 2000]—they went right through it. . It didn't make much sense to me at the time. I knew nothing about water planning…I didn't know what an EWR was before the workshop.

The recent national review of water planning (Hampstead et al 2008: 527) observed that the Ord planning process significantly improved the capacity of regional officers:

> There is an improved understanding of local stakeholders and issues, and the role of water allocation planning in the context of the broader natural resource management issues of the area. Regional officers now the confidence to lead Stage 1 management improvements.

Some participants in the water planning process who had previously sought to protect their own interests became more prepared to respond to the motivations of others as a result of the knowledge they gained through the water planning process. For example, one respondent noted that being involved in the CRP was an opportunity in itself to learn about the government processes for water resource management and about the views and priorities of other community members:

> I think it [the water planning process for the Ord River] has changed things. It's brought a lot of [community] views out in the open.

4.4.2 Changed Practices

As a result of the long duration of the planning process (e.g. slow progress towards licensing and setting of EWR/EWPs, changing power demands due to mining operations, as well as protracted Ord Stage 2 developments[59]), community members do not generally feel that the process has changed their practices to any substantial degree. A respondent elaborated on this point:

> It's [the public participation aspects of the water planning process] a long time ago. And I don't even know what the end result of water allocation is going to be for here. We're just doing what we did a decade ago and not much has changed as far as I can see.

[59] See Appendix G which is a timeline of events related to development and water planning in the Ord River region.

The allocations for Ord Stage 1 are protected in the ORWMP and any projections for Ord Stage 2 are regarded (mostly) by community as contingent and non-binding. Some respondents noted that the basis of the Plan is questionable[60] and that licenses have not been formally issued to many irrigators even after a decade-long process of definition.

A number of respondents commented that they thought that Department staff working on the development of the ORWMP did want more public participation activities to occur as part of its development. They noted that local Department staff were committed to facilitating a high standard of ongoing communication with community interests about the water planning process. At the commencement of the water planning process in 1997, there was only one WRC staff member based at Kununurra working on the process and regional agency resources were very limited as one respondent notes:

> Getting people remote from the region to understand the resources needed to deliver this range of functions [refers to planning and regulator role of the Department] has been difficult (but not an excuse)—it's a challenge. There was a huge administrative burden associated with some of these functions.

One response by the agency and its staff was to explore innovative ways of working with community interests. A respondent explains:

> It was about using whatever regulatory resources we [Department] had to implement broader outcomes and objectives. We've always worked under this principle given we've had fairly limited resources to deliver fairly complex regulatory functions.

As described above, the Department re-allocated resources, such as funds, materials, knowledge and labour to assist the community to participate in various management activities.

Consultation processes, and the revision of the 1999 Draft Interim WAP itself, had to adapt to major changes in circumstances relating to the Ord River and land and water management in the region over the seven years from 2000 to 2006. Changes to consultative processes continue to be made by the Department, most recently in response to the Western Australian Government's re-consideration (in June 2007) of expansion of the ORIA. A Departmental officer reflects on the need to be flexible in designing and running planning processes that are contingent on changing broader political and economic circumstances:

> While changing consultative processes are always less than ideal, sometimes change is essential. This is especially the case when other wider negotiations and actions across Government impact your local consultation processes. In the Ord case, continued engagement with the local and broader communities [by the Department] over the intervening six years [from the release of the Draft Interim WAP to the release of the ORWMP] when major issues remained unresolved, was simply not practical nor probably desired to most in the community [Ord River

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[60] This observation is consistent with an interpretation of the RIWI Act by Tan (2008) who notes:

> There is no statement in the RIWI Act as to the specific legal effect to be given to the operation of a plan [water management plan] and the environmental allocations made under that plan. It has therefore been suggested that these plans are not binding on the DoW who need only consider the plans in the exercise of powers. (Tan 2008: 48)

region community]. The Department [DoW] deliberately worked towards supporting community-driven planning (eg: OLW) and partnerships across a wide spectrum of stakeholders (Shire, cross-Government, indigenous people, irrigators etc) to key into local issues and create opportunities for true participation in water management.

5. Barriers and Enablers for Improved Water Planning

This report demonstrates that there are a number of factors in the water planning process for the Ord River region that enhanced or limited the public participation in the process. While this set of barriers and enablers is drawn from the Ord review, these enablers or inhibitors are relevant to processes for water planning elsewhere.

Similarly this report has described the expectations of community members relating to water planning in the Ord River region. While these expectations are specific to Ord River communities they may provide an insight into the range of possible expectations that other communities may hold for water planning.

The public participation aspects of water planning in the Ord River region are evaluated using the well-accepted analytical tool for public participation in government-initiated planning processes that is Arnstein's "ladder of citizen participation' (Arnstein 1967). This tool provides a typology of participation on a spectrum ranging from non-participation (such as manipulation and therapy) to tokenism (such as information provision, placation and consultation) through to the delegation of decision-making power and direct citizen control (Tan 2008: 61). Collaborative planning rests at the end of the range of this spectrum where the relationship between the planning authority (government) and community involves greater negotiation in decision-making and joint identification of methods and solutions for planning (ibid: 62).

In the formal water planning process for the Ord River region, the community interests were assigned an advisory role in the process. Using Arnstein's typology the mode of public participation used can be classified as 'consultative': the planning agency sought to obtain public feedback on agency analysis, alternatives and decisions with respect to water planning (Tan et al. 2008: 62) but did not delegate any decision-making power to the community, nor jointly identify methods and solutions for planning.

5.1 Summary of Community Expectations for Water Planning

A range of community expectations for water planning in the Ord River region emerge in the reflections made by respondents in this study (or can be distilled from published reports). These are summarised below.

1. **Expectations around the role of the community in water planning**
    - The community needs to be treated as legitimate stakeholders with knowledge and practices to contribute to the goals of water planning and management in the Ord River region.
    - The community needs to be involved in decisions by government regarding water use and management and to have the rationale for scientific knowledge and other inputs clearly justified and communicated as part of the water planning process.
    - Indigenous community members expect to have their native title, heritage and custodial interests in land and water recognised and upheld as part of the planning process. They also expect the basis of any discussion about their rights and interests in water use and management to be negotiated (EPA 1999).

2. **Expectations around the water planning process**
    - The community needs to be consulted more fully about the changes to the water planning process (for example, due to delays in Ord Stage 2 developments).
    - The community expects to receive regular feedback about the progress towards finalising the water management plan for the Ord River.
    - All information relating to water use and management would be made available to these community stakeholders as part of the water planning process.

3. **Expectations around water planning outcomes**
    - The planning process needs to provide some certainty about allocations and to resolve issues of licensing to support development and future investment in irrigated agriculture in the Ord River region.
    - The community expects to see their contributions reflected in water planning decisions and official records (i.e. the ORWMP document).

5.2 Enablers for Collaborative Water Planning

One key finding from this study was a significant difference between two of the planning processes that had been conducted in the Ord region (the water planning process and the OLW process) and these differences provide some key lessons for enhancing community involvement in planning. Unlike the Ord water planning process the OLW was considered to have conducted sound social processes which were unfailingly praised by respondents. This process was regarded by respondents as inclusive, democratic, well-defined and appropriate for the context. (It should be noted, however, that we were unable to canvass the views of Aboriginal people or their organisations on the OLW.) Through consideration of both planning processes the following six key enablers were observed in the case study.

1. **Alignment across multiple planning initiatives**

When a planning process is designed to build on existing processes it can establish greater alignment across a range of institutional arrangements for resource management as well as build engagement with the community.

In the Ord, regionally based agency staff found ways to support small scale projects and community capacity building initiatives (see Sections 3.2.4 this report) that are not officially or generally recognised as part of the water planning process. Hampstead et al (2008: 522) referred to this strategy as ‘piggybacking on existing processes’. Through this regional planners enhanced trust and cooperation between themselves and certain community interests, and established the bases for improved communication and engagement about water planning.

Water planners also provided direct practical and administrative support to OLW process and by doing this were able to harness the improved capacity in the region for the ORWMP. Indeed, the ORWMP explicitly credits Ord River Valley communities for their contributions of time, knowledge and resources to water planning and management in the Valley (see DoW 2006: xii).

In the subsequent development of the water management plan for the Ord River, the Commission/Department used the commitment, momentum and social capital already built through the OLW process for the development of the water management plan for the Ord River. The water planning agency was able to recognise, capitalise and build on these attributes for subsequent public participation activities.

2. Community motivations and capacity

High levels of community knowledge and commitment are a pivotal component of a collaborative process, particularly in remote regions. However there is a risk associated with over-reliance upon a select group of highly motivated individuals within a community: this high demand on the time and resources of key individuals can also lead to 'stakeholder burnout'.

The Ord River Valley communities have shown their commitment to building knowledge about best practice resource management through their participation in OLW and various other planning processes. In the highly participatory process of OLW, community people in the Ord River region redesigned existing resource governance arrangements on their own terms by identifying their own priorities for management and seeking working partnerships with government agencies and industry and funding bodies (notably the OIC, the NHT and Department).

Many of the same community people who were involved in OLW also participated in the Departmental water planning process. As with most Northern Australian planning initiatives, the same collection of a few individuals participated in the range of government-led planning processes in the Ord River region. The personnel of the Department were aware of the potential for 'stakeholder burnout' as a result of these demands and sought to design a participation process that wasn't too onerous in terms of time and knowledge invested on behalf of community interests.

3. Administrative flexibility

A high degree of administrative flexibility is required in planning processes to be able to accommodate a range of regional interests.

In the Ord, as the above two enablers demonstrate, planning agency staff demonstrated their understanding of the need to work in flexible and innovative ways with limited resources to accommodate a range of interests in water planning. These capacity building initiatives would not have been possible without a high degree of administrative flexibility in the planning process. This was partially a consequence of the underdevelopment of the State government's policy and legislation.

While administrative flexibility is an enabler it can also be limiting through contributing to a lack of clarity for participants. This can be helped by negotiating the terms of engagement (and continual reinforcing of these terms) so that it is clear to all participants how their contributions will inform the water sharing arrangements.

4. Meaningful engagement

It is important in planning processes to acknowledge the need to invest time and resources in community relationships and also to value the knowledge that the community holds. This

supports meaningful community engagement in planning processes and better decision making outcomes.

In the Ord planning processes the Department developed close and enduring working relationships with some key community interests over many years. These relationships were achieved through the Department investing time and resources in maintaining ongoing, face-to-face contact with stakeholders through meetings and one-on-one communications (mainly through the period 2000-2006).

These stakeholders have a good knowledge of the water planning process and its rationale: even if they are not in agreement with all the outcomes. Some attribute their improved knowledge of water planning issues to participation in discussions with Department staff. Given the fairly centralised nature of Ord River Valley communities, and the networks that already exist among interest groups, there is an opportunity to tailor appropriate and ongoing communication with these communities as part of future water planning processes. Although in this case this targeted consultation/communication did not extend to the wider Ord River region communities, these efforts developed a platform for future planning initiatives.

5. Commitment of regional planning staff

It is important that regional planning staff understand and value the role of the community in the planning process.

Some Department officers in the Ord planning process, through their enthusiasm, knowledge and long standing service, were able to contribute to social learning among Ord River Valley communities. These planning officers and the community had ongoing discussions and interactions over many years about water use and management. It is important to recognise that these efforts were undertaken at a time when the formal requirements for community engagement were ambiguous and unresolved at a legislative and policy level. Thus the initiative demonstrated by the water planners to provide opportunities for community participation indicates their understanding of the value of community input into the plan and their commitment to ensuring a high degree of community ownership of the plan.

6. Multi-agency co-operation

Cooperation across government agencies can play an important role in effective planning processes. This can occur through sharing information, providing constructive reviews, and also by aligning or dovetailing government regulation and policy. However it is important that engagement across agencies is actively sought through the process.

In the Ord planning processes the EPA played a central role in the process as a review agency and ‘critical friend’ to the process. The EPA’s review resulted in significant adaptation to the plan and led to a number of emergent elements to the water planning process, such as the use of the Scientific Panel. When the WRC began the water planning process, there was very little scientific information available regarding the riverine system of the Ord River. The WRC’s original approach to determining the interim EWP for the lower Ord was criticised by

the WA EPA and its expert[61] and, as a result, the Commission/Department agreed to re-work its methodological basis for determining EWPs. This involved the Department having to consider what 'sustainability' and acceptable levels of environmental risks meant in the 'post-dam' environment of the Ord River. Establishing the environmental values (and therefore revised EWPs) for the 'post-dam' River required a lot of further ecological work which, although a barrier to the timely completion of the water management plan, resulted in qualitative improvements.

In the region, ensuring that a water plan is consistent with existing government regulation and policy across multiple agencies remains an issue. This can lead to a high potential for perverse water allocation outcomes in instances where planning decisions do not account for the prior decisions of other agencies. Active engagement of other agencies may support better cooperation.

5.3 Barriers to Collaborative Water Planning

This evaluation identified a number of barriers to successful collaboration in water planning.

1. Clarity of the process

The most significant barrier to an effective water planning process was the absence of a clearly articulated planning framework or policy. This is especially difficult in a complex planning environment such as the Ord.

The ambiguity of the institutional requirements for water planning created difficulties even for the agency staff: they had limited guidance in terms of their obligations and responsibilities. This extended to the types, methods and extent of community involvement in plan development. The ensuing lack of clarity in the water planning process also contributed to confusion among respondents, particularly about the purpose and outcomes of their involvement in consultations, for example, the role of the CRP. Some of the respondents who had participated in the CRP were themselves unable to identify a particular 'public participation' process in the development of the ORWMP.

The water planning process was initiated by the WA Government to facilitate 'the expansion of the ORIA' (DoW 2006: vi). The responsibility to clearly identify, define and communicate the goals of public participation to affected stakeholders fell to the planning agency, with limited experience or guidance in the design of participation processes. This resulted in the role and goals of public participation in this process being not broadly defined or communicated to participants. This produced confusion among participants and other stakeholders about the purpose of their involvement in the water planning process. It also led to feelings that this involvement was mere tokenism or of little importance.

The complexities of the Ord region from a planning perspective have been expounded at length in this report, and compound the difficulties of participation design. Collaboration in these instances requires a process that is both flexible and robust enough to respond to change and local circumstances and which provides clear guidance to how people can

[61] Dr Peter Davies was asked by the WA EPA to provide advice on the interim EWPs set in the Draft Interim WAP for the Ord River. His advice is summarised in the EPA advice to the Minister for the Environment on the Plan (see EPA 1999: 6).

contribute to decision-making and the outcomes of the planning process. Greater clarity and explicit statements about the role and objectives of community involvement would have benefited both planners and the wider community.

2. Existing legal agreements

Existing legal agreements can constrain a resource planning process through limiting available options. Many of the water supply agreements relating to the Ord River predate statutory water planning in Western Australia. Such agreements effectively constrain the Department to exercise its statutory responsibilities and discretionary powers in relation to water planning, especially if they contain substantive cost penalty clauses. As a result, the Department had the task of designing a water planning process contingent upon a series of contractual and political imperatives. As noted by Hampstead et al (2008: 514), it was difficult to develop a water allocation plan in such an environment.

Long term water supply agreements between governments and investors complicate statutory water planning processes. These agreements enshrine allocations that are perceived to be non-negotiable from the point of view of some public interests. As one respondent confirmed:

> The WRC was trying to do the science for the area [to enhance knowledge of the Ord River system] but it couldn't really deal with the commitments [water allocations for hydro-electricity production and Ord Stage 1 irrigation] that were already in place. Even the fact the dams were in place [and the attendant changes to the riverine ecology of the Ord River].

Legal agreements can also further constrain water planning through aspects such as confidentiality clauses. These can limit the way relevant legal agreements can be described in public documents prepared for public consultation/participation processes and compromise the transparency and inclusiveness of the process. For example, many of the ongoing communications between the Department and various interest groups regarding water use (i.e. with respect hydro-electricity generation and irrigation licenses) were confidential in nature which was detrimental to the process. A recent review of water planning, including WA, observed that the following in relation to this issue:

> The department reported that the existence of a previous legal agreement with Pacific Hydro Ltd proved to be problematic in the plan development process. This stumbling block should have been identified at the commencement of the process and better legal advice sought to work through some of these issues. As it was, the stakeholder in effect hid behind the agreement, and getting their open engagement in the allocation process was difficult (Hamstead *et al.* : 334).

The constraints on water planning afforded by prior agreements may be addressed through plan revision when certain triggers are reached or circumstances occur. Western Australia is currently reforming its legislative framework for water planning. The question of developing resource use agreements requires further research and consideration in this light.

3. Parallel processes

The existence of other planning processes and negotiations can confound and detract from public participation in terms of its timing and form.

The water planning processes for the Ord River spanned ten years mainly because it was linked to development proposals and resolution of other issues relating to Ord Stage 2. During this decade long process there was an incremental series of decisions by

governments. This produced a great deal of uncertainty with respect to competing uses, effected significant changes in water availability[62] and undermined the coherence and continuity of the water allocation planning process.

There were also other processes and priorities competing for the time, resources and energies of stakeholders, including the OLW process, Ord Stage 2 proposals, NRM planning processes and water licensing negotiations. The public participation process was impacted by these external processes and decisions.

4. Knowledge management

A challenge to any resource planning process is to acknowledge, validate and manage the tensions between competing versions and visions of the resource as will as manage the competing uses/demands[63] for the resource. Privileging particular knowledges, values or interests is a barrier to achieving sound social processes and management outcomes.

For example, there is a need to consolidate community understanding of and support for the environmental flows provisions in the ORWMP and the EWR report for the Ord River (2007)[64]. Better public understanding of the scientific rationale for allocations in the ORWMP requires attention to the methods of knowledge making within the public participation process.
Participants should be involved in answering the question 'What is our collective method for knowing and managing the Ord River?' This question is at the heart of the production and implementation of a water management plan for the river. It includes both a negotiation of the goals of the public participation process, and of the methods and justifications by which particular knowledge is accepted or privileged within the process. This includes designing a process that is validated by the participants themselves and caters to their differing needs. Not least are the needs of the Indigenous community who hold a strong attachment to the low-flow regimes that characterised the pre-dam environment.

5. Managing conflict

There are unresolved tensions among community members associated with the limited opportunities for participation in the process and the outcomes of the process, including the allocations in the ORWMP. The CRP in the water planning process for the Ord River was not required to achieve a consensus view. However, the participation process could have attempted to better acknowledge conflict and seek to manage it through mutually agreed mechanisms such as information exchange, learning opportunities, appropriate representation of interests, deliberative decision-support tools and negotiated trade-offs.

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[62] In the case of the Ord River, the commitments to power generation made in the 1994 WSA, and the subsequent 1999 EPA recommendation to protect the 'post-dam 'environment of the lower Ord River, combined to significantly limit the water available for irrigation. (Loh 2007)

[63] The ORWMP describes these water demands as 'needs': 'The Department [DoW] prepares water management plans to specify how water resources are to be shared between these competing needs in particular areas' (DoW 2006: v).

[64] This is recognised by Doupe:

> A sound and readily understandable ecological case [for environmental flows in the Ord River] needs to be communicated to all stakeholders and to the wider community. (Doupe, Froend et al. 2006)

6. Continuous feedback and engagement of stakeholders

An effective public participation process for water planning should have agreed objectives[65] that are negotiated with participants at the outset and reviewed regularly. This will help engender ownership of and commitment to the process from participants.

In the development of the ORWMP the goals of the public participation process were largely implicit. Community interests interviewed for this study did not feel like genuine collaborators in the process, and have not assumed responsibility for the process and its outcomes. As a result, many do not support the outcomes, in particular the provisions for environmental flows. The participants in the water planning process were also not kept fully informed of changes to the process and the reasons for these changes.

7. Inadequate Indigenous participation

In general, there was inadequate engagement of Aboriginal communities in the water planning process for the Ord River. Negotiations for native title appear to have significantly limited the opportunities for direct and effective interactions between the water agency and the community of native title holders. Some of the other contributing factors explaining the minimal direct involvement of Aboriginal people in the process include issues of: resourcing and/or experience on behalf of the planning agency; levels of capacity, energy and time on the behalf of traditional owners and other members of the Aboriginal community to participate in the process; a lack of appropriate processes and mechanisms for engaging Aboriginal people and their organisations; and, an inability to credit Aboriginal knowledge and perspectives within the legal and administrative framework of the planning process. Despite the best intentions of some Department staff, and the consultancy, to identify Aboriginal cultural values of the lower Ord River there was a lack of appropriate processes for engaging the Aboriginal communities and accounting for their knowledge and interests in the water management plan itself.

[65] Doupe, Froend et al. (2006: 34) advocate for the need to define a 'desired future state' for the Ord River that is a detailed management objective which includes scientifically defined endpoints, human values and involves wide community acceptance. Designing such an objective will clearly require community contributions.

6. Conclusions

The objective of the water planning process for the Ord River was to facilitate the development of Ord Stage 2 and to balance the water needs of the environment, irrigated agriculture and hydro-power (DoW 2006: vi and vii). This mandate to facilitate particular uses and development narrowed the potential scope of the water planning process which might otherwise have been more broadly aimed to consider the full range of existing and potential uses of water resources.

The Ord case demonstrates the need to consider the 'bigger picture' of resource planning such as the role of water planning in the context of other government resource development imperatives and the capacity of the community to engage in planning processes. In the Ord the protracted planning process was to some extent unavoidable due to the mandate of the process to facilitate the development of Ord Stage 2. Planning agency staff were frustrated by the contingent relationship between the water planning process and other issues. At the same time the staff recognises the pragmatic nature of planning in a context where multiple objectives and commitments of government complicate the ideal of a rationalist, linear, clear and transparent water planning process. Similarly extended participation in the Ord water planning process is also limited by the needs and capacities of stakeholders in the Ord River region, who are requested by governments to participate in multiple and often simultaneous planning processes.

The planning process for the Ord River spanned ten years and was fitful and protracted, which both improved and detracted from the public participation and plan outcomes. The delays in progressing Ord Stage 2 development and other contingencies (such as the demand for hydro-power for mining) exerted an inordinate influence over the water planning process for the Ord River causing it to be delayed and re-designed at different stages. Yet the long 'gestation period' assisted in the development of flow-ecology links and the quantification of specific flow requirements considered by a recent national review to have been 'ground-breaking' (Hampstead et al 2008: 519). There were, however, social consequences arising from the delay and the planning agency did not clearly communicate its reasons for delaying the release of plan. This resulted in feelings of confusion and frustration among participants in the process.

Clear definition of the role of the public in the water planning process is crucial to achieving appropriate levels and types of public participation. In the case of the Ord, although the legislative framework for water planning clearly identifies the role of the CRP as 'advisory', Ord River region community members had an expectation that they should be engaged in a participation process that involved them in level of power-sharing with government. The Department's model of community engagement was one of consultation and not collaboration with the community, and merely to advise in the decision-making process and thus it provided only sporadic formal feedback and limited opportunities for broad community participation. However community expectations were for more fulsome engagement and power-sharing – based in part on their experiences of instigating and participating in the community-driven OLW process. And in the case of Aboriginal people and their organisations, on their rights and interests as recognised traditional owners of lands in the Ord River catchment. Thus the process did not meet respondents' expectations for participation nor did it engender widespread support amongst them for the outcomes of the water planning process.

This mis-match of expectations contributed to the confusion and scepticism of many participants – toward government in general and the process in particular – although the efforts of water planning agency staff were broadly appreciated. Problems in communicating the outcomes of the planning process also contributed to negative impressions expressed in this report.

In the case of the Ord, existing legal agreements favoured current water users and compromised the transparency of the water planning process and, according to respondents, contributed to a lack of trust in government. Existing water users had clearly defined needs and were able to be readily identified as important stakeholders by WA government agencies. These needs were enshrined in legal agreements between the WA Government and this had the effect of privileging the status of these stakeholders in negotiations about water use and management. Given that the terms and conditions of these agreements were in some cases confidential, the wider public were not privy to some of the details of these negotiations, nor were they able to influence them hence limiting transparency.

The issue of reconciling or managing divergent perspectives and disparate knowledges is also a key issue in water planning in the Ord River region. This is a complex issue that relates both to the fact that the Ord River is a contested entity and also to the issue of translating various forms of knowledge into mutually-intelligible forms for planners and the community. For example, participants were unclear about the participants for the rationale underpinning some aspects of the water planning process, particularly for provision of environmental flows. This was due to the complexity of these concepts and a lack of understanding which led to contestations over the status of the pre-dam and post-dam rivers. This disparity between different types of knowledge for planning is most obvious when Aboriginal knowledges encounter the dominant planning paradigms based in positivist Western scientific knowledge. In the case of the water management plan for the Ord River, Aboriginal cultural values, although comprehensively identified in a separate consultative process, were not incorporated into water planning processes for the Ord River.

Notwithstanding the issues identified above, the Ord water planning process did build on the capacity and knowledge of community members as well as the capacity and skills of regional staff. It thus contributed to social learning and capacity building within Ord River Valley communities. Department staff acknowledged the investment and commitment of community members in the Ord River Valley to water use and management and worked in innovative and flexible ways to accommodate a range of stakeholder needs that are not formally recognised in records or outcomes of the water planning process. For example, they recognised and supported the OLW project and sought to build on the momentum gained through this community-driven process. They also administered project funds to support small scale initiatives aimed at community and industry capacity building. They also worked with Aboriginal communities in the Valley to undertake activities that engaged these communities in appropriate times, places and methods in water use and management issues.

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Appendix A. Environmental Flows Provisions and Revising the *Draft Interim Water Allocation Plan, Ord River*

The Western Australian Environmental Protection Authority (EPA) made a formal response in December 1999 to the WRC on the *Draft Interim Water Allocation Plan, Ord River* (Draft Interim WAP) which considered the environmental issues associated with the expanded allocation of water on the Ord River environment to support the proposed expansion of the ORIA (EPA 1999: i). This response was based on the EPA's own analysis, the advice of an expert, Dr. Peter Davies, and also reflected responses from individuals and organisations who made submissions to the WRC as part of the formal public consultation phase on the Draft Interim Plan.[66]

The WA EPA, in its advice to the Minister for the Environment on the Draft Interim WAP focussed on two aspects of the Draft Plan: the methodology for determining interim EWPs and the proposed research to identify the associated EWRs (EPA 1999: i). The EPA criticised the use of the pre-dam ('natural') flows as the basis for establishing interim environmental water provisions for lower Ord River (downstream of the Kununurra Diversion Dam). It questioned the use of the 20th percentile monthly flow volume estimate in the Draft Plan as the most appropriate methodology for determining the EWPs, recognising that 'the methodologies for defining Environmental Water Provisions are going through significant development…'there has been more recent developments suggesting alternative approaches, including some which could be applied in situations of very limited available information on environmental values.' (EPA 1999: i).

The Summary of Issues Raised in [Public] Submissions on the *Draft Interim Water Allocation Plan, Ord River* is appended to the Draft Interim WAP and includes statements relating to the interim EWRs proposed in the Draft Plan:

> 1.11 The current flow regime in the Lower Ord is very different to the pre-dam situation and its is therefore inappropriate to base the interim EWPs on a percentile of pre-dam flows as this would result in a radical change in the lower Ord and its ecosystems, from year round flows to almost no flow in the dry season.
>
> 1.12 The adoption of the 20th percentile of the 'pre-dam' monthly flow at the Dunham River confluence as an interim EWP will result in a river that is drier year round than now. The likely consequence of this is a dramatically altered environment.
>
> 1.13 It may be more appropriate to base the EWPs on the post dam flow regime as much of the current ecosystem and recreational/tourist development is a product of the flow regime of the last 30 years. (EPA1999: Appendix 3).

[66] This took place for 8 weeks ending on 20 August 1999 (EPA 1999: 1)

The Draft Interim WAP recognises the lack of empirical data from which to determine environmental objectives for the system as well as the need to quickly formulate allocations 'to allow current water users to continue their activities and to facilitate plan of Stage 2 [Stage 2 of the Ord Irrigation Scheme]' (WRC 1999: 20). The Water and Rivers Commission (WRC) therefore in its plan, designated a fixed percentile (for each month based on historical records) of the total water allocations for irrigation (and other uses) from the Ord (Ibid) for the 'environment' or a 'minimum environmental provision' (Ibid: 21). The Plan gives interim Environmental Water Provisions (EWPs) as well as acknowledging the need for Environmental Water Requirements (EWRs).

These Interim EWPs, the EPA notes in its advice to the WRC, are based on pre-dam flows in the Ord River. It recognises, however, that the 'post-dam flow is fundamentally different [to pre-dam flow]' (EPA 1999: i) in the Ord and contends that a 'new ecological regime' (Ibid: i) has been established over the 30 odd years since the damming of the Ord. The EPA contends that: '…the interim and final EWP should be based on protecting environmental values, which are sustainable under post-dam flows' (ref). It therefore recommends that the environmental flow regime be amended to protect the riverine values in the lower Ord River that had developed since the Ord River Dam was constructed in 1972 (Loh 2007).

The EPA thus declined to endorse the water allocation volumes proposed in the Draft Interim Plan asserting that the methodology used to derive the EWPs may be inappropriate (EPA 1999: 1) and therefore that the EWPs in the Plan do not constitute accurate bases for making allocation decisions. It advocates the need for further research into the environmental processes and components and hydrology of the Ord as well as 'a review of current best practice in defining EWPs for wet-dry tropical rivers' (Ibid: i). The EPA asserts that it will assess the WRC's final Water Allocation Plan under the WA Environmental Protection Act as well as any allocation licences lodged prior to the approval of the Final Water Allocation Plan (Ibid: ii).

Appendix B. Current Planned Actions (at August 2007) for Water Planning in the Ord River

The Department is putting together a package to be considered by the WA Environmental Protection Agency to progress the water related aspects of environmental approvals for proposed Ord Stage 2 developments.

The package includes:

- the report, *Ecological Water Requirements for the lower Ord River* (DoW 2007);
- the *Ord River Water Management Plan* (ORWMP) (DoW 2006); and
- proposed new water release rules for the Ord River hydro power station to be part of a new Water Supply Agreement between the WA Government and Pacific Hydro.

The package is planned to be forwarded to the EPA by around the end of 2007. The EPA will then determine the level of assessment required. A formal assessment under the WA *Environmental Protection Act 1986* is expected (and possibly also under the *Environmental Protection and Biodiversity Conservation Act 1999 (Cth)),* and would therefore involve public consultation conducted through an EPA process.

The Department is continuing its work to update the hydrology of the Ord River catchment and complete a comprehensive set of ecological water requirements for the lower Ord River. This additional information will be used, with the sustainable diversion limits of the current ORWMP, to assess water licence applications in the ORIA over the next three years. In the longer term, the ORWMP will be updated to provide an appropriate balance between further irrigation allocations and hydro-power generation (DoW 2007?). Some issues have been left to be resolved in a subsequent water management plan.

A future water management plan for the Ord River will need to address trade-offs between further irrigation allocations (above the addition 400 GL/yr currently available from Lake Kununurra), hydro power, and the environment, if power demands remain high if and when expansion of the M2 Supply Area into the NT is to proceed.

Appendix C. Interview Protocol

Respondent Typology Questions

1. How were you involved in the water planning process?
2. What were some of the factors that influenced your decision to be involved in the process?

Value Questions

3. In what ways were the outcomes from the process were likely to impact on you?
4. What were some of the outcomes you had hoped to achieve from the process?
5. What do you consider to be some of the reasons for community participation in the process?

Observation Questions

6. Did the process achieve what you expected it to achieve?
7. In what ways did the process meet the expectations of the other participants?
8. What do you think has changed as a result of the water planning process?

Analysis Questions

9. Were you satisfied with the ways that the participation process contributed to the Water Resource Plan?
10. What aspects of the process worked most effectively?

Visioning Questions

11. In what ways could the water planning process be improved?
12. What do you think would need to change for that to occur?

Strategic& Reflective Questions

13. What are some of the ways you think these changes could happen?
14. What would be the wider effect of those changes taking place?

Summary of Response Categories for Semi-Structured Interviews

Dimension 1: Outcomes

e.g**.** the extent to which the engagement process achieved its stated aims; the extent to which it was efficient in doing this; whether the outcome achieved – in terms of both the engagement process and any on-ground outcomes; the extent to which the outcomes achieved may differ from what would have most likely been otherwise achieved; how other people not directly involved in the engagement process viewed the process.

Questions: **2, 3, 4, 5, 6**

Dimension 2: Participant engagement as a social process

e.g. inclusiveness/ right people involved; whether the purpose of their involvement was clear to all involved and agreed; motivations and/ or incentives to participate; the leaders or champions of the engagement process; communication processes used and their suitability for context, participant and the issues at hand; conflict resolution processes that may have been used and whether these had been agreed to beforehand by participants; efforts that were made to build social capital – time spent building relationships, trust, norms of expected behaviour, network building; the vigour

or level of activity that took place within the engagement process; how flexible the process was to externally generated change over which the participants had no control; how resilient.

Questions: 1, 5, 7, 10, 13

Dimension 3: Decision making and the engagement process

e.g. suitability of mode of governance, whether it was fit-for-purpose – command, contract or communion; transparency of decision making – who knew how decision were actually made; accountability – whether there were mutually agreed processes developed so that those both directly involved in decision-making process processes and those affected by these decisions could see who was accountable for these decisions; whether they felt that any decision-making processes undertaken met legal and regulatory requirements; whether they viewed any decision-making processes undertaken as fair and why; whether the decision-making process was informed by the best available knowledge; whether this knowledge was from a variety of sources; the context-appropriateness of this knowledge; how various forms of knowledge informing decision-making process were valued one against the other; the role participants may have had in development of the decision-making process.

Questions: 5, 7, 9, 14

Dimension 4: Changes that took place within participant engagement process

e.g in terms of power - any re-allocation of authority, responsibility, whether authority and responsibility were kept linked or whether some participants may have been made responsible for the decisions of others; re-allocation of resources, such as funds, material or labour to assist participation. In terms of scale - individual and group, for language and discourse, organisation, activities and practices, motivation and intent

Questions: 3, 4, 8, 12, 14

Dimension 5: Barriers and opportunities

e.g. the extent to which a re-allocation of power (authority, responsibility and resources engendered social capital); the relationship between achievement of outcomes and sound social processes; and the relationship between power (allocation of authority, responsibility and allocation of resources and how this impacted on the way different forms of knowledge were valued in any decision-making process).

Questions: 4, 5, 6, 7, 11, 12, 13

Appendix D: Interview Respondents by Sector

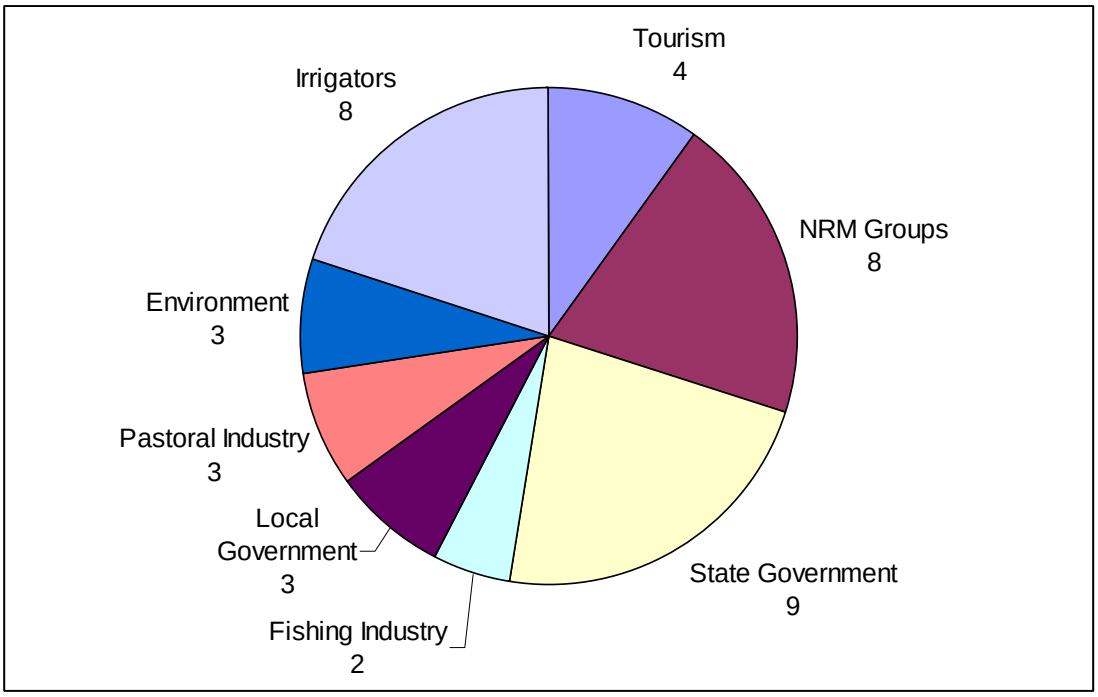
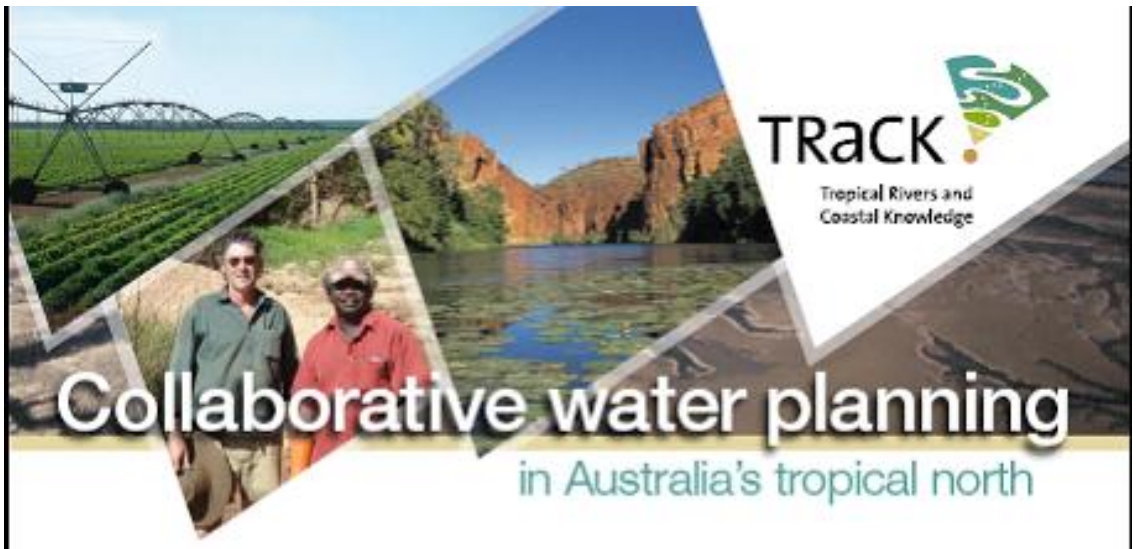


Diagram 1: Interview respondents by sector

NB: A number of respondents were categorised as belonging to a number of sectors, hence the total value does not reflect the total number of interviews.

Appendix E. Project Brochures



TRaCK

Tropical Rivers and Coastal Knowledge

Collaborative water planning

in Australia's tropical north

Developing new approaches for water planning

This project pilots new approaches to water planning in Australia's tropical north. It is part of TRaCK – the Tropical Rivers and Coastal Knowledge research hub. TRaCK brings together leading tropical river researchers and managers from across Australia to focus on the sustainability of rivers and catchments from Cape York to Broome.

Water planning – what is it?

Water is vital to all of us. It is also essential to the health of our rivers and ecosystems. Water planning is simply a process to allocate and sustainably manage water to meet our future water requirements. Good water plans provide for river health and community needs. Public consultation is integral to the water resource planning process. Regional communities, industry and other stakeholders, including conservationists and indigenous groups, all have a role to play in effective water planning.

Why participate?

Water reform is moving at a rapid pace. Despite attempts to consult and involve the public, the rate of change means some groups are left behind, confused about how to participate, or unaware of proposed changes to water planning. This research project aims to overcome these problems by providing clear, accessible ways for people to contribute to decisions on water use.

The project will identify pathways for community participation in water planning for Australia's tropical north. It will show how graziers, irrigators, resource managers, scientists, indigenous communities, catchment managers and others can learn from each other, and contribute positively to decisions about water sharing. The results will inform water policy-making at state and national levels.

Northern Australia has some of the most pristine rivers in the world – it is also the focus of a push for development.

New ways to participate

You can help in finding new and better ways to work together. The project will run until June 2009. Specifically, it aims to:

- identify barriers and opportunities for broad community participation in water planning
- map community expectations of water planning processes and trade-offs in water allocation
- identify effective tools and processes for engaging communities in water planning
- set targets that incorporate social values and transparent trade-offs in water planning
- promote tools that encourage participation by indigenous communities in water planning
- develop a training package for rural communities, including indigenous communities, to adopt better water planning approaches
- contribute to national guidelines for public participation in water planning

...providing clear, accessible ways for people to contribute to decisions about our rivers

How will it help?

The project will improve water planning effort at two levels:

Nationally by developing a tool-kit of good practices to engage industry, indigenous and rural communities; by setting guidelines and benchmarks to monitor and evaluate collaboration in water planning; by establishing procedures that integrate indigenous values into water planning.

Regionally by assisting water agencies to improve water planning approaches; by helping to minimise conflicts between parties; by providing models and case studies for good collaboration; by helping develop stronger long-term relationships between stakeholders.

One project, two phases

The research project will be undertaken in two phases.

Phase 1 will review water planning practices in Australia and overseas. It will assess how the community participated in water planning for the Gulf of Carpentaria, Queensland, and the Ord River region in Western Australia.

Phase 2 will pilot various tools and techniques used in water planning in northern Queensland and the Northern Territory. The tools will have been used elsewhere in similar situations. Successful tools and techniques that foster collaboration will be widely promoted. Training materials and guidelines will be developed to help others learn how to adopt them.

Who is on the team?

A small multi-disciplinary team is working on this project. They have skills and experience in water law, native title, public participation, social surveys, ecological economics, natural resource management in northern Australia, and community education. The team is working with Indigenous communities, industry groups, landholders, irrigators and government agencies in northern Australia.

How can you be involved?

Your views are important. By talking to you, the team will learn how to improve water planning in Australia's tropical north. Ideas on ways that communities can share water and work together for the future of our rivers and tropical regions will be used to guide water reform. Existing water resource plans will also be reviewed to develop better consultation approaches for the future.

From left: John, Peter, Marg, Sue, Wendy, Poh-Ling

Team contacts

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Further information

Collaborative Water Planning Project:
www.griffith.edu.au/centre/slrc/water/

Tropical Rivers and Coastal Knowledge:
www.track.gov.au

… the team will develop new approaches to prepare water plans

Australian Government Water Fund
Raising National Water Standards

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CSIRO

Funded by the Australian Government's Raising National Water Standards Programme

TRaCK

Tropical Rivers and Coastal Knowledge

Information package

Collaborative water planning project

Reason for the research

All around Australia governments are working with communities, industry and the public to try to plan the best way to manage water. In this research project we are looking at ways to:

- improve these collaborative approaches to water planning
- improve ways to involve communities, industry and the public
- include social, cultural and economic values in water planning, especially those held by Indigenous people.

Who is conducting the research?

This research is being done by Griffith University, Brisbane, and CSIRO. These organisations have also asked one other expert to be involved. The research team is made up of:

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What you would be asked to do

We would like to have a talk with you about your experience of water planning. We will ask about how you have been involved and what happened as a result. We will also ask you whether you think what happened was good, or how it may be improved.

We would like to make a voice recording of our talk with you and also make some notes on what you say. We may decide to get only some interviews typed up, and in other cases only make rough notes of the interviews. Your personal details are not recorded in the typed notes.

Why you have been asked to be involved

We have selected a range of river systems throughout Australia and are studying the way water planning has taken place in these areas. By reading the water plans and reports that have come from these areas and talking to others who have also been involved, we have become aware of your involvement in water planning.

Expected benefits of the research

By talking to you we will learn about different ways that water planning may be made better. We will use what we learn to develop and try out improved tools for collaborative water planning, in two river systems in northern Australia, working alongside government agencies that do water planning. We will also develop guidelines for collaborative water planning as a result of this project.

The potential risks relating to your involvement

Risks to you from your involvement in this project are very small. There may be some people who will not like what you tell us about water planning. We will carefully record and try to understand exactly what you tell us. We will not identify you to anyone else as the person who has said these things.

Confidentiality of records and reporting of results

We will store the records of what you tell us locked in a safe place. We will use codes to identify these records. We will keep the list of names of people and their codes locked in another safe place. If the interview is transcribed (typed up) the audio recording will be destroyed.

When we report what you have told us to others, we will either not do so in a way that will allow them to identify you or, if your comments are directly quoted in our report, you will decide whether you would like to have the comment attributed to you.

Voluntary participation

Your involvement in this research is totally voluntary. You do not have to talk with us. You can stop being involved at any time without anything bad happening to you.

Further questions

If you have any questions, please do not hesitate to contact any member of our research team. We are only too willing to talk with you and listen to any concerns you may have.

Concerns about ethical conduct

You may have concerns about the ethical conduct of this research. If so, please contact the Manager, Research Ethics, Office for Research, Bray Centre, Nathan Campus, Griffith University, phone 07 3735 5585 or email: research-ethics@griffith.edu.au

Feedback

We will send you a letter to let you and other people know what we have learnt about better ways government agencies can involve community, industry and the public in water planning. We also have a website where you can find out results of the research. We would welcome you contacting us if you wish to discuss this research project or your involvement:
www.griffith.edu.au/centre/slrc/water

Privacy Statement

The conduct of this research involves the collection, access and/or use of your identified personal information. The information collected is confidential and will not be disclosed to third parties without your consent, except to meet government, legal or other regulatory authority requirements. A de-identified copy of this data may be used for other research purposes.

However, your anonymity will at all times be safeguarded. For further information consult the University's Privacy Plan on: 07 3875 5585 or by visiting:
www.griffith.edu.au/ua/ea/vc/pp

CSIRO

Griffith UNIVERSITY

Australian Government Water Fund
Raising National Water Standards

This project aims to develop a new approach to water planning in Australia's tropical north. It is a part of TRaCK – the Tropical Rivers and Coastal Knowledge research hub. TRaCK brings together leading tropical river researchers and managers from across Australia to focus on the sustainability of rivers and catchments from Cape York to Broome. Visit www.griffith.edu.au/centre/slrc/water or www.track.gov.au

Funded by the Australian Government's Raising National Water Standards Programme

Appendix F: Amendments to the Collaborative Monitoring and Evaluation Framework (CMEF)

Dimension	*Indicator*	*Used*	*Justification*	*Amended approach*
Decision making	Suitability of governance	N	Decision-making vests with Minister, legally specified role for community	Focused on legal and policy requirements and governance arrangements
	Transparency	Y		Merged with accountability
	Accountability	Y		Merged with transparency
	Legitimacy	N	Statutory plan has legitimacy through legislation	Changed to legal and policy requirements
	Fairness	Y		
	Best available knowledge	Y		
	Range of sources	Y		Merged with best available knowledge
Social Process	Inclusiveness/Representativeness	Y		Included additional section on Indigenous engagement
	Clarity of purpose	Y		Merged into governance arrangements
	Incentives for participation	Y		
	Leadership	Y		
	Communication	Y		
	Conflict resolution	Y		
	Social capital	Y		
	Vigour	Y		Referred to Conduct of Engagement Process
	Flexibility	Y		
	Resilience	N	Not intended to be long-term arrangements	

Dimension	Indicator	Used	Justification	Amended approach
Outcomes	Effectiveness	Y		Evaluation against stated outcomes
	Efficiency	Y		
	Other likely alternatives	Y		Focused on changes to the outcome
	Unintended/indirect outcomes	Y		Merged with Change Dimension
	External perception	N	Insufficient interviewees to establish external perception	
Change	Authority	N	Decision-making vests with Minister, legally specified role for community	
	Responsibility	N	Decision-making vests with Minister, legally specified role for community	
	Resources	Y		
	Language/Discourse	Y		
	Organisation	Y		
	Activities and practices	Y		
	Motivation	Y		
	Intent	Y		

Appendix G. Timeline of Events Related to Development and Water Planning in the Ord River region

Pre-1990s

The Ord River Irrigation Project commenced with construction of the Kununurra Diversion Dam in the early 1960s. This enabled the distribution of water from Lake Kununurra to irrigate 9,100 ha of farmland on Ivanhoe Plain.

Construction of the Ord River Dam in the early 1970s ensured a reliable water supply to the Irrigation District. A further 2,200 ha of farmland on Packsaddle Plain is developed for irrigation. Through much of the 70s and 80s, the District struggled financially in the search to find the right crops.

1990s

Irrigation increased as the horticultural industry expanded and sugar production commenced. The wetlands of Lake Argyle and Lake Kununurra and the lower Ord River floodplain gain formal recognition for their international importance (i.e. Ramsar-listed wetlands).

In 1995, Pacific Hydro constructed a 30 megawatt hydro- power station at the Ord River Dam.

The WA and NT Governments called for expressions of interest to develop a Stage 2 Supply Area. The Department of Water (DoW) commenced a water management plan (water management plan) for the Ord River in 1997.

In 1998, a joint venture of Wesfarmers, the Marubeni Corporation and Water Corporation proposed to develop 33,000 ha of serviced irrigation land on the Weaber, Knox and Keep River Plains.

In 1999, the Department released a draft Interim Water Allocation Plan for the Ord River. Subsequently, the EPA advised on the need to maintain post-dam ecological values.

2000s

In 2000, the Department established a Scientific Panel to provide advice on flow regimes and ecological values for the Ord River. A Community Reference Panel assisted in identifying the social values of the lower Ord River. This Panel is convened twice in 2000.

The Department used additional information on the ecological, hydrological, social characteristics of the Ord River gained through the Scientific Panel, further investigations and the CRP process to develop a revised water management plan for the Ord River.

In late 2001, the Wesfarmers-Marubeni Corporation joint venture withdrew its proposal for Ord Stage 2 due to concerns about world sugar prices and uncertainties about native title issues and water availability. The WA Government thus became caretaker for the development of Ord Stage 2.

In 2002, the WA and NT Governments gave conditional environmental approval to an irrigated agricultural development of 30,500 ha in the Stage 2 M2 Supply Area.

In 2003, the Federal Court approved an agreement between the WA Government and the Miriuwung Gajerrong people recognising their traditional rights in the Ord River region.

In 2005, the Ord Final Agreement (OFA) resolved native title and Aboriginal heritage issues over land needed for Ord Stage 2 developments in Western Australia.

The Department further refined the ecological water requirements using a holistic (whole-of-flow regime) approach, with input from the Scientific Panel.

Rio Tinto decided to extend the life of the Argyle Diamond Mine with plans to conduct underground operations until 2018. This had implications for power demand in the region.

In 2006, the State Government appointed Kimberly Expert Water Panel examined the feasibility of transferring water from the Ord River catchment to the Perth region. The Panel concluded it is not a feasible option.

In July 2006, the Department published a report on environmental values, flow related issues and objectives for the lower Ord River. The report summarises knowledge gained since 2000 on riverine ecology of the lower Ord River.

In September 2006, the WA Government called for expressions of interest from the private sector to develop between 7,000 to 16,000 hectares of farmland in Western Australia as the first phase of development of the M2 Supply Area.

In December 2006, the Department released the Ord River Water Management Plan.

In May 2007, the DoW published the ecological water requirements for the lower Ord River, updating interim requirements used in the 2006 Water Management Plan.

In June 2007, the WA Government announced that it intends to extend the expressions of interest process to respond to changing circumstances, especially the Commonwealth Government's interest in seeing the whole M2 Supply Area developed.