



Collaborative Water Planning: Retrospective Case Studies

Volume 4.1

Water planning in the Gulf of Carpentaria

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Executive Summary

This report reviews the water planning process in the Gulf of Carpentaria undertaken between 2003 and 2007 by the Queensland Department of Natural Resources and Water. The context of the water planning process for the region is briefly summarised, through reference to the social and economic profile compiled as part of the planning process and other profiling processes for the region. The history of cultivation of water resources in the Gulf is then examined. A description of the water planning process is also provided. This process is then evaluated in section four against a series of criteria based on the literature review in Volume 1 of this report (Tan et al 2008). These criteria, derived from recent literature on the evaluation of collaborative processes, examine the effectiveness of collaboration:

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

The analysis presented here finds that water resource planning in Queensland is conducted according to a clear, transparent and well-articulated framework that is defined by both the legislation and supporting policy documents. After more than a decade of an adaptively managed planning program which has been subject to internal and external review, current water planning attempts to accommodate the best available scientific and technical analysis, comprehensive information provision and policy considerations to the production of water plans. Through this planning program, the scope of public participation is delineated, and considerable effort is made by the state agencies to render the outcomes of the stakeholder input apparent to all stakeholders. In the conduct of the Gulf water resource planning process, the legislative requirements for public participation and due process were observed, and in a number of facets the planners involved in the preparation of the water resource plan exceeded the requirements of the legislation to facilitate public involvement and stakeholder contribution.

However, due to the fact that the WRP process has been developed primarily to address issues of water resource planning in the southern regions of Queensland, the planning framework itself is less suited in application in Northern Australia. This created a number of issues with regards to its effective application to the distinct environs of Northern Australia. Firstly, effective participation was constrained by the scope of the planning area and the logistical difficulties in undertaking a planning process for an area larger than the State of Victoria, with limited human resources. Secondly, the different hydrology of Northern Australia meant that heavy reliance upon hydrological modeling and other technical assessments as decision-support were not as suited, particularly in the notable absence of appropriate data and information upon which to make apposite planning decisions. Thirdly, the water planning framework had been developed to correct the legacy of over-allocated systems and state investment in water resources. In the Gulf, where there has been limited cultivation of water resources, and where the majority of the major water

supply infrastructure has been privately funded, the application of the framework was not as appropriate.

In the Gulf region, the planning process was less about correcting the legacy of past water development, and more about providing a platform for the aspirations of the region for future development within ecological limits. The resulting plan, in using historical development as a framework for determining future directions of the region, is seen by a number of stakeholders in the region to inadequately incorporate the aspirations of the community for the future of the region. There is a demonstrable reluctance on behalf of the State government to articulate a water resource plan as a catalyst for the future development of the region. Notably, the impact assessment process was insufficiently developed for the planning process, and failed to assess the impacts of the conduct of the planning process itself – particularly the impact of the moratorium on the region in terms of demand for water resource cultivation and industry development.

In response to previous review processes, administrative limitations and requirements to meet the obligations of the National Water Initiative, the water resource planning process in Queensland had been streamlined. This has led, in turn, to an expedited role for public participation in the process, and a reduced role for the key community engagement mechanism, the Community Reference Panel. As a result, significant elements of effective collaboration and community involvement, such as the development of trust and greater understanding of the values of participants in the process, were not given sufficient opportunity to be fostered.

Of particular concern at present is the lack of appropriate engagement mechanisms for Indigenous participation in water planning. This is highlighted in the Gulf WRP, where the Indigenous population is as high as 66% in some of the catchments. Although specific Indigenous engagement has been undertaken for water resource plans in Queensland, such as the establishment of Indigenous Working Groups and the production of cultural assessment reports, this was notably absent in the Gulf WRP process and in general is not consistently or uniformly applied across the state. Processes for culturally appropriate Indigenous engagement have been subject to rigorous development in the field of cultural heritage management (for example, Wet Tropics WHA), and there is a high degree of opportunity for the current best-practice in this field to inform engagement for water resource planning.

Given the high degree of emergent interest in the water resources of the Gulf, and of Northern Australia, there was significant opportunity to build wider community capacity in understanding and contributing to decisions about the future of region's water resources. There remains a high degree of divergence in the vision of the future prospects of northern Queensland, with significant opposition between visions of environmental preservation and economic development. The water resource planning processes presented a useful opportunity for these competing visions to be mediated, but this was not pursued. In turn, residual tensions between the competing visions persist, and these tensions will continue to permeate through a wider range of policy-making and community engagement initiatives in the region.

Water planners have expressed a desire to better incorporate community knowledge, aspirations and values. However, the opportunity to do this is limited within the existing scope of the planning processes as applied in Queensland. Embedding local and Indigenous knowledge, expressed community values and socio-economic information into the decision-support and prioritisation systems, and providing greater clarity to the community about the relationship between the public participation and the production of the WRP all remain key impediments to the effective collaboration. This is coupled with increasingly high demands on both regional and central water planning staff to effectively facilitate community engagement practice, in conjunction with a myriad of other legal, compliance, licensing, implementation, monitoring and policy development roles, with limited training and support in the practice of community engagement. These findings confirm the need and utility for the advancement of community engagement methodologies in water planning, including:

- Communication strategies and techniques to address the specific information requirements of diverse constituencies;
- Capacity-building tools to increase community understanding of water planning, and the ability to contribute meaningfully to the conduct of planning process;
- Training and professional development for agency staff and science providers to better facilitate community collaboration in planning and research;
- Specific engagement strategies for Indigenous Australians, 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 modeling;
- Data, knowledge and information systems with the capability to handle multiple epistemological frameworks; and
- Decision-support systems for rigorous and transparent trade-off analysis in decision-making.

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1. Introduction

This report is a substantive outcome of the first phase of *Collaborative Water Planning in Northern Australia*, 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 has drawn on a variety of academic disciplines, including law, economics, cultural geography, policy science and sociology, to devise innovative methods for incorporating social, cultural and economic values in water planning and water reform in Australia. In the first phase of this project, water planning practices in Australia and internationally were reviewed water 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. To supplement this review, the research team examined and 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.

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

- **Nationally** by developing a toolkit 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 stronger, long-term relationships between stakeholders.

The project has three components:

- a review and analysis of the literature which provides the conceptual foundation underpinning the project;
- two retrospective case studies, one of the Ord River Water Resources Plan in Western Australia and another of the Gulf Water Resources Plan in Queensland that sought to understand contemporary water resources planning in north Australian settings; and
- two prospective case studies, one in the Greater Darwin region in the Northern Territory and the other in the Wet Tropics Region of north Queensland.

The two prospective case studies will involve participants in action research to implement and evaluate lessons from both the review and analysis of literature and the retrospective case studies. 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.

This report reviews the water planning process in the Gulf of Carpentaria undertaken between 2003 and 2007 by the Queensland Department of Natural Resources and Water¹(NRW). The context of the water planning process for the region is briefly summarised, through reference to the social and economic profile compiled as part of the planning process and other profiling processes for the region. The history of cultivation of water resources in the Gulf is then examined. A description of the water planning process is also provided. This process is then evaluated in section four against a series of criteria based on the literature review in Volume 1 of this report (Tan et al 2008). These criteria, referred to in this report as the Collaborative Monitoring and Evaluation Framework (CMEF) 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;
- as a facilitator of social process; including improved relationships, conflict resolution;
- as a means of obtaining improved outcomes, including efficiency, equity, and wider social perception of the process; and
- as a pathway for catalytic changes in the community.

The criteria for the evaluation, which include 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. Through this, the salient variables in determining the quality of the collaboration in engagement have been identified, and a series of generic and transferable indicators have been developed. These are illustrated by Figure 1.

Whilst this generic criteria has a general applicability for the assessment of collaboration and community engagement, changes to the model were necessary for its application to the specific area of water allocation and resource planning. 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 case as the analysis is not intended as a performance assessment, but as a rigorous evaluation of existing practice as a means to practical and achievable pathways for improvement.

¹ Over the period 2003-2007, the Department was alternatively named the Department of Natural Resources, Mines and Energy, the Department of Natural Resources, Mines and Water, and the Department of Natural Resources and Water. Other than in reference to specific publications, the most recent title, the Department of Natural Resources and Water, has been used in this report.

1.1 Research Methodology

To assess the effectiveness of the collaboration in the preparation of the Gulf Water Resource Plan, the research method consisted of:

- Review of the policy documentation published by the NRW through the course of the water planning process, including the Draft and Final Gulf Water Resource Plans, technical assessments, the community consultation report, and the community reference panel report.
- Review of non-agency documentation related to the process in the public domain, including community submissions, media releases, and independent assessments.
- Two research field trips through the region, which consisted of approximately 4215 km of travel, including visits to all major settlements, farm visits of all significant irrigation enterprises in the region, water supply infrastructure and some sites in the region of designated high environmental value, including the World Heritage Area and national parks.
- 31 semi-structured interviews with key stakeholders in the Gulf region.

The majority of the information for this report was derived from the interviews with identified key stakeholders. 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. 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, and any recommendations for improvements. The interview protocol is attached as Appendix B. Each interview lasted approximately 1 hour. Participants were selected on the basis of their involvement in the water planning process as a member of the community reference panel or their capacity to represent community, industry or environmental interests in the region. A breakdown of the interviewees by sector is also provided in Figure 7, Appendix B.

Before the interviews, respondents were provided with a research project brochure as a stimulus; this provided a broad overview of the project, the including its aims and objectives, and a context for the research in terms of national water reform processes. They were also provided with an Information Package, which outlined:

- Reasons for the research;
- 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; and
- 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 attitude 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 panel members of the community or technical advisory panels.

Interviews were partially transcribed, and coded by the author according to the four dimensions of collaboration adapted from the Engaged Government project as the CMEF (Oliver et al 2007). This framework identifies key aspects of successful collaboration in relation to collaborative efforts involving government partners (see Figure 1). Whilst this generic criteria has a general applicability for collaboration and community engagement, changes to the model were necessary for its application to the specific area of water allocation and resource planning. These are detailed in the text and summarised in Appendix C of the report.

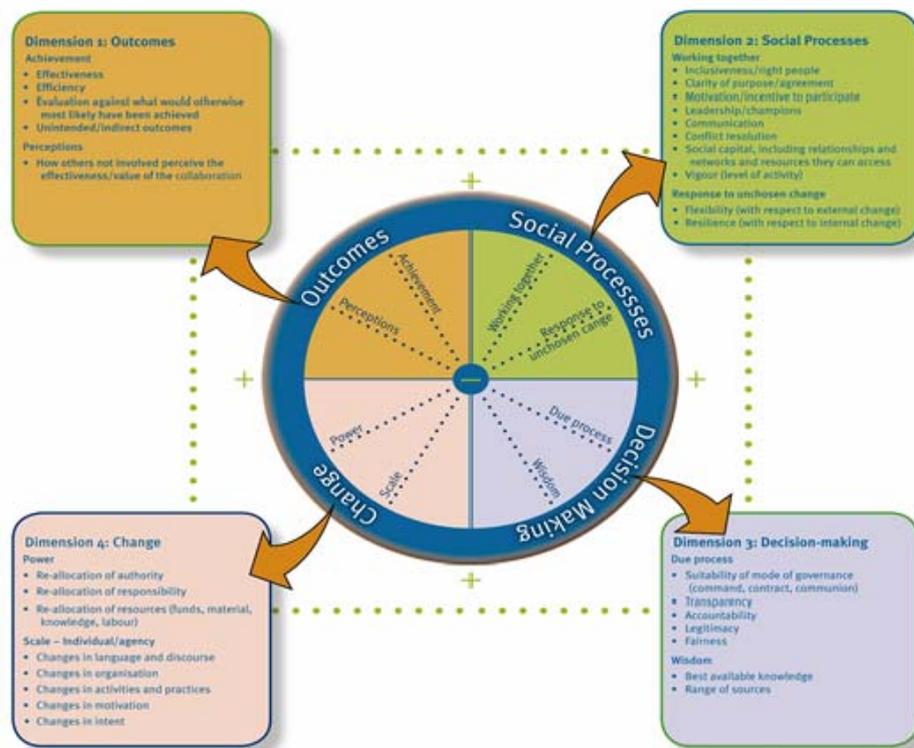


Figure 1: Collaboration Circle for Monitoring and Evaluating Collaboration

The draft analysis which informed this report was then reviewed by the research team, three external reviewers, and circulated to the participants for accuracy, feedback and further comment. This report seeks to describe the planning process, evaluate the quality of public participation, and to characterise the community's expectations, assessments and identified barriers to enhanced collaboration in the water planning process. In conjunction with the case study review of the Ord River water planning process in Western Australia, it will be used as a basis for the pilot of collaborative planning tools as part of the second phase of the Collaborative Water Planning Project.

2. Gulf Country and Its Water Resources

2.1 The Gulf Region

As defined by the Gulf Water Resource Plan (Figure 2), the Gulf Country of north-west and northern Queensland is vast against any criteria. At around 315 500 square kilometres in area, the region is approximately 17% of the total area of Queensland, and equivalent to one and a third times the size of Victoria, and larger than the states of Victoria and Tasmania combined. The region encompasses eight tropical river catchments, ten local government jurisdictions, two representative Aboriginal & Torres Strait Islander bodies, two natural resource management regions, and four distinct bioregions.

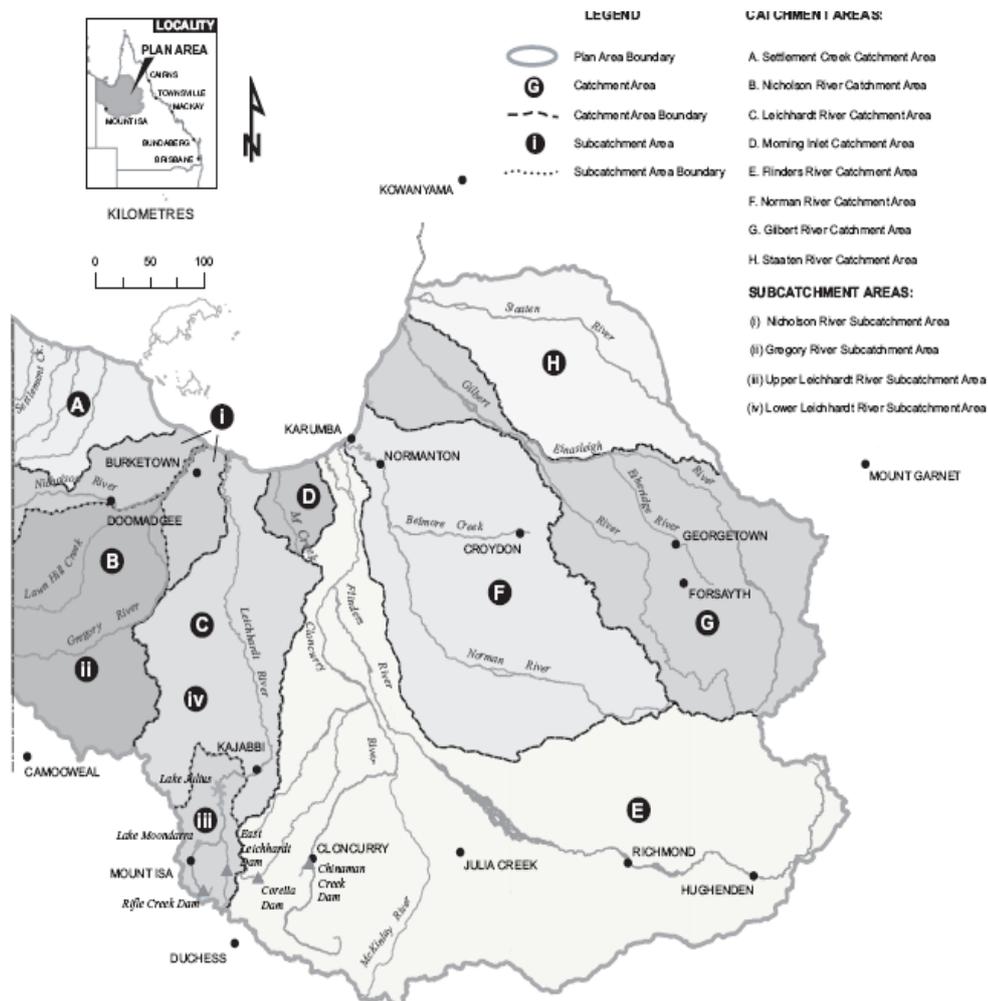


Figure 2: Plan Area for the Gulf Water Resource Plan

It is perhaps the bioregional differences in Gulf country that provide the most evident clue as to its diversity. The rugged stony hills and ranges of the semi-arid Mount Isa Inlier to the south and west rise above the alluvial salt-water country and tropical savannahs of the Gulf Plains bioregion which follows the southern shores of the Gulf of Carpentaria. Both these bioregions give way in sharp contrast to the seemingly endless open Mitchell Grass 'plains of promise' to the east from Julia Creek to Hughenden. The north-east of Gulf Country is characterised by sloping ranges and

plateaux of ironbark woodlands that comprise the Einsleigh Uplands that run from Hughenden to Georgetown (see DNRME 2004: 24; Sattler and Williams 1999). These divergent landscapes not only support different geologies, vegetation, climates and biodiversity, but importantly create quite disparate modes of settlement, patterns of land use, and the expression of social, economic and cultural modes. Consequently, and in general, the vast Gulf Country shares little more than a common designation under an administrative statistical division (the North-West Division), and a shared reliance upon tropical river systems that drain into the Gulf of Carpentaria.

Outside of the city of Mount Isa in the Leichhardt catchment, which is at once largest and most sparsely populated local government urban jurisdiction in the world, the population density of the region is only 0.04 persons per square kilometre (see Table 1). The types of settlement in the region range from the mining towns of Mount Isa and Cloncurry, to the pastoral towns of Julia Creek, Richmond and Hughenden, the Indigenous community of Doomadgee, to the recreational fishing tourist haven of Karumba, to the isolated cattle stations and rural holdings scattered across the landscape, to the historical villages and outlying communities which are remnants of past mining activities and old rail outposts. These areas differ significantly in economic activity and development, social infrastructure and dependence upon different resource based industry.

Catchment	Area km ²	Population	Population Centres
Settlement	11,800	N/A	
Nicholson	36,100	1,855	Burketown, Doomadgee
Leichhardt	32,000	19,342	Mt Isa
Morning Inlet	3,700	N/A	
Flinders	109,400	6,740	Hughenden, Richmond, Julia Creek, Cloncurry
Norman	50,400	3,446	Croydon, Normanton, Karumba
Gilbert	46,400	1,224	Georgetown
Staaten	25,700	45	

Table 1: The Catchments of the Gulf Region (DNRME 2004: 20; Economic Associates 2006: 11)

This diversity across the region tends not to be adequately illustrated by demographic data. In aggregate, census data for the region suggests that the population is largely proximate to other areas of regional Queensland in terms of education, family type, place of birth, language and average household size. The census data also suggests that the region has a younger population, with a higher percentage of people in the 20-39 age bracket, low unemployment, and significantly higher household income than both regional Queensland and the state overall (Economic Associates 2006). Most notably, the almost one-fifth of population of the region (18.4%) identify themselves as Indigenous, which is almost six times larger than the proportion of Indigenous people in Queensland on the whole. However, the depiction of the regional socio-economic profile as comprising of a young, affluent

population in career formation age group with young families by the data is misleading, and does not account for high degree of variation across the eight basins.

This depiction is skewed by the concentration of nearly two-thirds of the population in the Leichhardt basin and specifically in the city of Mount Isa. Census information may also be distorted by the high transient population of the region, both in the form of the 'fly-in, fly-out' mining workforce (approximately 1,000) and the high tourist population. Estimates as to the extent of tourist numbers is contested, but the figure commonly extrapolated from a study in the Carpentaria Shire suggests as many as 100,000 tourists per annum. The study on tourism of Carpentaria shire (Greiner et al 2004), with broader applicability across the region indicated, that the tourist population is dominated by retirees, commonly referred to as 'grey nomads'. The census data from 2001 indicates that 16.8% of people in the catchments were in caravan dwellings (about 5.4 times higher than the Queensland average), which is consistent with this tourist profile.

There are some notable differences between the basins according to census data and the State Government's population projections. An older population is evident in the Gilbert and Norman basins, and evidence suggests that much of population growth in the region attributable to an increase in an older age profile. Lower household incomes are evident in the Gilbert, Norman and Staaten areas, and these areas also have lower proportions of residents with tertiary education. The higher than average incomes for the region as a whole can be attributed to the bulk of mine employees in the Nicholson, Leichhardt and Flinders basins. Whilst employment in mining makes up 16% of the total employment in the region by sector, more than three-quarters of mining employees are located in the Leichhardt basin. The Leichhardt basin also accounts for around 76% employment in the region's small, but significant manufacturing sector, which is largely associated with the mining activities. Although the number of Australian born residents across the region is consistent, the Indigenous population varies across the catchments, and is as high as 66.6% in the Nicholson catchment and 28.5% in the Norman catchment.

The aggregated data masks the presence of high socio-economic disadvantage across the region, particularly in the more remote areas and the areas with high Indigenous populations. Census data is used by the ABS to develop an Index of Relative Socio-Economic Disadvantage, which uses a combination of social and economic variables to determine relative disadvantage of a particular region. It is derived from attributes such as low income, low educational attainment, high unemployment, jobs in relatively unskilled occupations and other variables that reflect disadvantage. When compared against Queensland averages, the local government areas that make up Gulf Country can be seen to endure high levels of socio-economic disadvantage, particularly the regions with high Indigenous populations, such as Burke and Carpentaria. Even the two local government areas with high advantage/disadvantage ratio, indicating higher proportions of high incomes or a skilled workforce, still display disadvantage in comparison to the rest of the state as a whole.

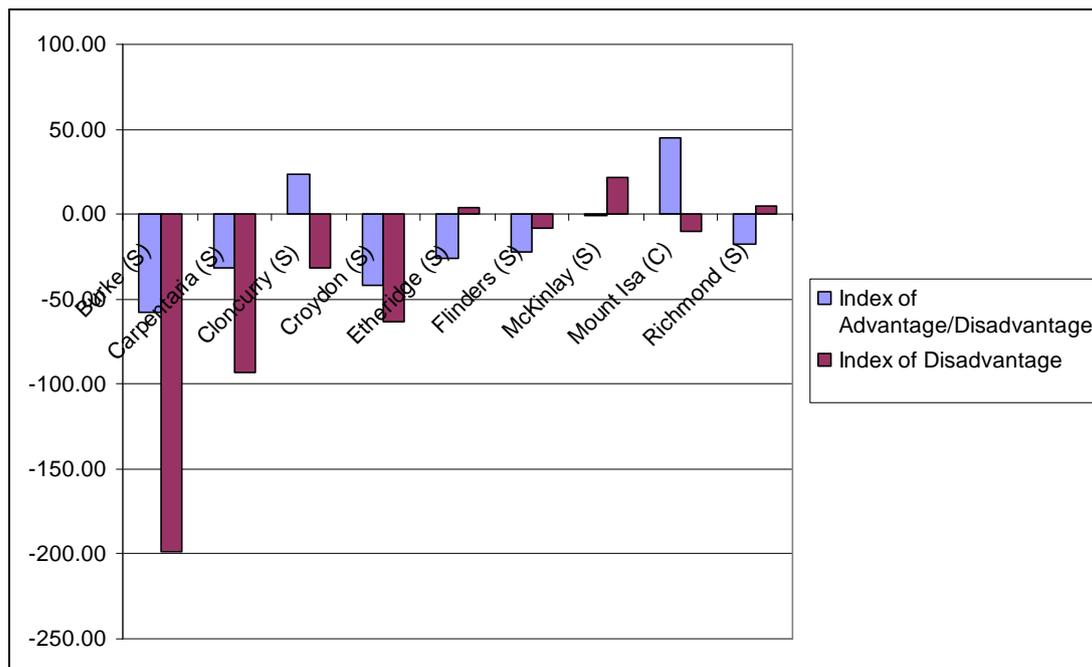


Figure 3: Variation of Advantage and Disadvantage Indexes from Queensland Average (BRS 2004; cf. ABS 2006)

In the Doomadgee community, which is recorded in census data as part of the Burke Shire, the level of socio-economic disadvantage is most apparent. The community, with an estimated population of around 1000 people, is managed by the Doomadgee Aboriginal Community Council, which under is a local authority under the *Community Services (Aboriginal) Act 1984* (Qld). A system of community level land trusts was established with a specific tenure called a Deed of Grant in Trust (DOGIT). Under these arrangements, the Doomadgee Aboriginal Community Council was established, located close to a mission site established in the region in 1933 by the Plymouth Brethren. According to 2001 Census data, over 50% of the population in Doomadgee is under 20 years old, and only 4.5% are over 60 years, which reflects the higher birth rates and lower life expectancies of Australia's Indigenous population across the country. Average per capita incomes for the community are estimated to be less than 50% of the state average per capita income, although these figures are masked by the average household incomes, which appear to be high. This can be explained by a high percentage (40%) of multiple family households in the community compared with the Queensland Indigenous population as a whole (4.5%). Average household size is 7.3 persons, which is 2.8 times larger than the Queensland average size. Unemployment in the community has relative parity with other regions of Queensland at 7%, and significantly lower than the Queensland Indigenous average, but around 75% of the total employment in the community is provided by the Community Development Employment Program (CDEP). CDEP, an Australian government work-based welfare system for unemployed Indigenous people, was subject to significant changes in July 2007, including its cessation in many regions, but was retained for the Doomadgee community (see Economic Associates 2006: Appendix C).

The profile of Gulf Country, like much of Northern Australia, is characterised by its extremely low population density, its high indigenous population, its low intensity of

land-use, particularly the pastoral industry, and its general high dependence on resource-based industries such as mining, pastoralism, tourism, irrigated cropping and commercial fisheries (Southern Gulf Catchments Inc. 2004). This exposes the region to a high level of economic vulnerability due to commodity price and market fluctuations, and climatic change and variability. The competitive advantage of the region in these industries is compromised to some extent by limited transport, communication, industry-support and institutional infrastructure, and the ability to attract and retained skilled labour. In the assessment of the Northern Gulf Regional Management Group, many parts of the

region lack access to a range of fundamental community facilities and welfare services, primarily due to the remote and scattered nature of the population, low population levels and the high costs involved in supplying community services (NGRMG 2001: 14).

In summary, these five factors - the size of the region and sparseness of its population; the diversity of the its communities within the region; the diversity of its economic profiles; and the high presence of disadvantage due to remoteness – not only provide a composite community profile, but additionally have direct implications for managing community involvement in government planning processes, including water planning. Further, understanding this community profile has a further critical implication for the preparation for the water plan, related to the aspirations identified by many in the community: that addressing issues of disadvantage and fostering development to improve community well-being in the region could be achieved through further cultivation of the water resources of the Gulf Country.

2.2 Water Resources in the Gulf

The tropical rivers of the Gulf Country have long been a source of identity, culture and associated practices for Indigenous Australians, vital for sustenance and economic life. More recently they have captured the imaginations of non-Indigenous Australians, particularly in terms of their environmental value and development potential. The eight river basins within the plan area have a combined mean annual discharge of approximately 24.7 million megalitres per annum (ML/a) which is more than twice the discharge of the Murray-Darling Basin prior to development (NRW 2006). However, the long-held assumption of abundant water resources in this region should be carefully checked. As tropical river systems, they are marked by highly variable flows in accordance with monsoonal weather patterns and the distinct wet and dry seasons: approximately 80% of the annual stream flows of these rivers occur between December and March. With the exception of the perennial Gregory River, in the Nicholson catchment, the rivers have intermittent flow during and briefly following the wet, and often are little more than dry beds late in the dry season, subject to yearly variations in rainfall. Peak flood events in the wet season create extensive inundated wetland areas and basin inter-connectivity. During this period, the aggregation of wetlands in the region comprise is Australia's largest wetland covering an area of 2 million hectares (The Wilderness Society 2007). Evaporation rates vary across the region's bioregions, but are generally extremely high at between 2.5 and 3.8 metres per annum (DNRME 2004: 21). The seasonal variability of surface water availability in the region creates a high degree of dependence, ecologically and for the communities of the region, on groundwater resources. The area is located in the Great Artesian Basin, but as this extensive water supply was subject to its own water resource planning process, it has not been considered in this report.

Prior to colonisation, the groundwater, creeks, rivers, water holes and their dependant biota in the Gulf region were vital to the sustenance of the Indigenous population of the region, physically, emotionally, legally and spiritually. It is beyond the scope of this report, and the knowledge of its author, to assay the complex of interrelationships between the land, law and lore of Indigenous Australians, and the specified role of water within this ontology. Suffice to say, acknowledgements of the embedded relationship between Indigenous communities and water are well-rehearsed in policy literature, but poorly understood and rarely afforded the same status as non-Indigenous knowledge and value in consideration of water resources. In the Gulf, the high Indigenous population and the continuation of this living relationship between this population and the water resources is highlighted by the continuing traditional ownership and the maintenance of cultural heritage values in the region. More than thirty claimant and non-claimant traditional owner groups have been identified in the region, including (but not limited to): the Indjilandji; Dithannoi; Mitakoodi; Kalkadoon; Kakatj; Gkuthaarn; Kurtijar; Galgalidda; Garrawa; Mayi; Yirendali; Wanamara; Ngawun Mbara; Tagalaka; Ewamian; Waanyi and the Minginda nations (see Memmott and Channells 2004). Each of these groups retain a highly specified and localised living relationship with Country that defines the knowledge, use and management of its water.

In addition, the region also had twenty-seven Indigenous sites, both indicative and registered, listed on the Register of National Estate prior to its closure on the 1 January 2004 as places of cultural significance and value (RNE). As is iterated by the Gulf Regional Planning Advisory Committee, this number is more of a consequence of the limited research effort in the region, and should not be considered exhaustive, but an indication of the acknowledged level of sites of cultural significance in the region (GRPAC 2000). Although the locations and specific information about is subject to cultural sensitivity issues, there is much to suggest that many of these sites are related to the water resources of the region:

Important areas for Indigenous cultural heritage are likely to be found along riverine corridors that may include habitation sites, and rock art sites, especially in areas of sandstone and granite. In the black-soil plains areas, sites are generally located around water holes, particularly those that are more permanent. (SGNRM 2004: 187)

To some extent, this is confirmed by Memmott and Channells (2004: 49), who have documented information from the Traditional Owner groups on the Gulf Plains who identified how the river systems operated as divides between the coastal territories of Indigenous nations in the region. Although the impacts of European settlement in the region have resulted in a lack of clarity about some aspects of traditional ownership in the region, the importance of the river systems in establishing the extent of country and the corresponding of law along the coastline are critical. Memmott and Channells document the importance of the Leichhardt River in particular, as marking a divide between the Kakatj and Gangalidda language groups, and also between the Tangkic people in the western of the Gulf, and also serving as the eastern extremity of male initiation practice. Whilst complete knowledge of the traditional knowledge, cultural values, and management practices of the Indigenous communities of the Gulf region may never be achieved (GRPAC 2000), there does exist established protocols for the

use of this information, and culturally sensitive research in this area is ongoing (LWA 2005).

Post-colonialisation relationships with the Gulf Rivers is significantly better documented, and tends to conflate the high degree of fascination for the environmental values of the region with its ostensibly limitless development potential. Following the coastal surveys of Mathew Flinders of the region in 1802, there was a “growing conviction that the rivers disgoring into the Gulf would provide access to a fabulous interior awaiting development” (Powell 1991: 14). John Lort Stokes, a marine surveyor who led several inland explorations into the Gulf Country, designated the region with the eponymous “Plains of Promise” in 1841, envisioning “ere long the now level horizon would be broken by a succession of tapering spires rising from the many Christian hamlets that must ultimately stud this country” (cited in Powell 1991: 14). The discovery of the Gregory District by William Landsborough was marked by his reflections on what he was to name the Gregory River. Landsborough, who was commissioned by the Royal Society of Victoria to search for the missing explorers Burke and Wills, camped beside the Gregory on the 19th November, 1861, and remarked that the river, “crowded with fine large weeping tea trees, large Leichhardt trees, tall cabbage palms, pandanus and other trees ... It is the finest and greenest looking inland river I have seen in Australia” (cited in Carrington 1977: 4). Yet for these all of these alluring depictions of the region circulating the country, and indeed the world, Powell points out that “over a century later the portentous plains maintained only a thin veneer of population on wide-strewn cattle stations” (Powell 1991: 14).

Active development of water resources in the Gulf was consequent upon the consolidation of the small but thriving township of Mount Isa, between an abundant mineral resource province and the Leichardt River in 1928. The unlikely establishment of what would become the city of Mount Isa is extensively documented in Blainey (1974), and confirms that from the outset of its settlement, issues of water supply would be defining of its identity. In May 1924, the General Manager of Northern Division Railways, A.J. Crowther noted the water shortage in the settlement, remarking that:

Settlement was taking place, the buildings being mainly in the centre of the field and about 10 chains from the river, from which at present the residents draw their water supply. The water has to be carted and the supply at present is precarious, and it was estimated would not last more than two months from now. (cited in Kirkman 1998: 9)

To address the serious problem of water supply, the Queensland Mines Department built an Experimental Dam, which was poorly designed and inadequate for the needs of the burgeoning township. Despite deputations from the Progress Association, the Cloncurry Shire Council as the local authority for the area lacked sufficient resources and capacity to establish the infrastructure for water reliability (Kirkman 1998: 15). Under the direction of Leslie Urquhart, who had recently taken direction of the Mount Isa Mines Company and with prodigious experience in remote mining ventures, the company placed an immediate priority on the establishment of a water supply. Urquhart was aware that the success of large-scale mining operations in the region was dependant upon investment, not only in decent housing and living conditions for mine employees and their families, but as a higher priority in the provision of a

reliable water supply. Urquhart commented that “without this, life and work here would be impossible” (cited in Kirkman 1998: 25). The Company financed, at an estimated cost of a hundred thousand pounds, the development of 128 metres wide and 18 metres high concrete dam at Rifle Creek. The dam was completed in April 1929, and a wildlife sanctuary adjacent to the dam was declared in October. Mt Isa Mines installed a caretaker, whose duties included the protection of the sanctuary (Kirkman 1998: 25; Powell 1991: 100-102).

Despite the demand on water from expanded mining operation, the Rifle Creek dam provided the requisite water supply for both town and industrial uses until the mid-1950s (Powell 1991: 273-275; Kirkman 1998: 100-102). A major expansion of the mines led to the investigation of new supply options, and in 1956 a site 19 kilometres north of the township on the Leichhardt River was selected. The dam was completed in September 1957, and although residents of the region had long referred to the impoundment as Lake Moondarra, the Leichhardt River dam was not formally given this name until 1961 (Powell 1991: 273). Again funded by Mount Isa Mines, the company excised a Dam Recreation Area and established a Board of Management to plan its development as an aquatic sport and recreation area, in April 1958 (Kirkman 1998: 100). In combination, Lake Moondarra and Rifle Creek had a combined capacity of around 88,500ML (Powell 1991: 273).

The high evaporation rates, rising consumption demands and a dry spell in the 1960s led again to investigation by the mines of additional storage options. The Irrigation and Water Supply Commission, notably absent from the previous infrastructure development, announced in November 1969 that they would assist in the investigation process, and upon selection of the appropriate site would be the constructing authority and owner of the dam. The site for Julius Dam, named after a former chairperson of the Mount Isa mines, was selected below the junction of the Leichhardt River and Paroo Creek. Despite delays due to prolonged wet seasons in the mid-1970s, the 123,000 ML dam was completed in April 1976.

The unique history of Mount Isa, where the mining company has in many cases historically acted as a surrogate municipal and state-level authority, necessitated a specific set of institutional governance arrangements. An Order-In-Council for the Mount Isa water supply in 1973 formally provided for the cost-sharing arrangements in the construction of the Julius Dam and established the Mount Isa Water Board. The membership of the Board was divided equally between the Mount Isa Mines, the City Council and with a chair drawn from the Irrigation and Water Supply Commission. Under these arrangements, the Board was to take responsibility for the supply of bulk water to both town and mining operations, and to operate, improve and maintain the Julius Dam in accordance with that function. Mount Isa Mines additionally transferred the management of Lake Moondarra and its surrounding Water and Recreational Reserve, to the authority and Trusteeship of the Mount Isa Water Board respectively, as a means to facilitate more effective management arrangements. Principally, the establishment of the Board was to ensure that in dry periods, difficult and contentious allocation decisions over water-sharing arrangements for mining or town-supply would be made by an independent authority. The management of the water allocations between the Board's two main clients, the Mine and the City Council, provides these clients and the wider community of Mount

Isa with certainty of allocation, which is clearly defined in the terms of the Order-In-Council. With the enactment of the *Water Act 2000* (Queensland), the Board was registered as a Water Authority and Service Provider and a commercialised statutory authority, and was granted an interim allocation of the water in the Julius Dam. These arrangements overrode the original Order-in-Council agreement, but retain the scope and intention of original role for the Board provided in the Order.

Outside of the greater Mount Isa area, the development of water storage infrastructure and other works has been minimal. Around 57% of the total water storage capacity of the region is comprised of Lake Moondarra and Julius Dam. Cloncurry Shire Council has twice developed plans for water storage to supplement town supply, neither of which proceeded due to lack of available funds: in 1968 for what would have been the Slaty Creek dam and a similar water catchment scheme in the Cave-Hill area in 1976 (Hardy 1983: 73). At the commencement of the planning process, there are five additional medium sized in-stream storages in the region with a volume of less than 20,000ML each, all established to support mining and industrial uses. Two additional storages at Lake Corella on the Flinders and the East Leichhardt dam were built to service the Mary Kathleen Uranium mine and township, and Greenstone Creek Dam (or Lake Waggaboonya) serves township of Gunpowder and the Mount Gordon Mine. The Copperfield or Kidston Dam on the Gilbert River formerly supplied the Kidston goldmine, which has been closed since 2002. In addition, a number of small instream dams and weirs service townships, provide stock and domestic water and for mining and irrigation. Of the five medium size storages, Lake Corella, East Leichhardt and Kidston Dam have little to no water currently in use.

Private irrigation works and water harvesting² infrastructure have been developed on the Flinders, Leichhardt, Gregory and Gilbert, primarily to support niche cropping, such as peanuts and mangoes, and cropping for feedlots to value-add and drought-proof existing grazing operations. Additional water harvesting was used to establish Lake Fred Tritton, a recreational lake beside the township of Richmond, named after one of the region's most outspoken proponents of irrigated agriculture for the region and Richmond Shire Mayor of 31 years. The lake holds some 314ML and was completed in February 2003. It provides significant amenity, recreational and quality of life value for residents and tourists in a region where summer temperatures frequently exceed forty degrees (see Richmond Shire Council 2005). Water levels in the lake are maintained through groundwater supply. However, off-stream storage in the region, although the most likely area of future water resource development, is estimated by NRW to be less than 20,000ML. Total water storage in the region is estimated at around 370,000ML, 88% of which is in in-stream storages, with additional off-stream water harvesting for irrigation on the Flinders and Leichhardt, and an estimated 23,100 ML overland flow storages on properties around the region.

Hence, for all of the identified potential of these river systems for water resource cultivation, the extent of development of this resource remains fairly limited. As

² Water or flood harvesting is the process of taking water directly from watercourses during high stream-flow conditions to store water in off-stream storages, usually for irrigation purposes. Off-stream storages in the Gulf are constructed to store water for use during the dry season, when there are no or low surface water flows.

evident from Table 2, the proportion of licensed entitlements prior to the water planning process remain less than 0.5% of the mean annual discharge of the surface water to the Gulf, and the total storage capacity in the region exceeds licensed entitlements. At the commencement of the planning process, there were 71 entitlements to take stream water in the plan area, totalling approximately 120,134 ML/a, based on estimates of both volumetric and area-based licenses. Consumptive surface water use in the region is roughly divided in thirds between irrigation (38%), mining and industrial (34%) and the amalgamation of other uses including urban water supply (18%), recreation and road works, and an unutilized allocation in the Julius Dam (9%). In addition to surface water entitlements, there was an additional 4692 ML in annual entitlements of sub-artesian water, of which 76% was for mining or industrial uses, 20% for irrigation and 4% for town water supply. The majority of this water (2490 ML) is in the Flinders catchment for mining and industrial purposes.

Catchment	Mean Annual Discharge (ML/y)	Pre-Plan Level of Entitlement (ML/y)	Entitlement as a % of Annual Discharge
Settlement	2,421,000	0	0.00%
Nicholson	2,237,000	3,068	0.14%
Leichhardt	2,179,000	74,552	3.42%
Morning Inlet	422,000	0	0.00%
Flinders	3,857,000	20,530	0.53%
Norman	2,346,000	2,149	0.09%
Gilbert	4,375,000	19,835	0.45%
Staaten	6,851,000	0	0.00%
Total	24,688,000	120,134	0.49%

Table 2: Annual Surface Water Entitlements as proportion of Mean Annual Discharge (DNRW 2006a)

However, based on indicative estimates of water use in the region, current licenses are under-utilised, with total water use in the region amounting to around 58,200ML, or approximately 46% of the licensed volume (Economic Associates 2006). Due to the lack of metering in the region outside of the Leichhardt basin, these estimates are indicative only, but as the graphs below indicate water use is lower than licensed entitlements across all of the catchments and by all of the water use sectors.

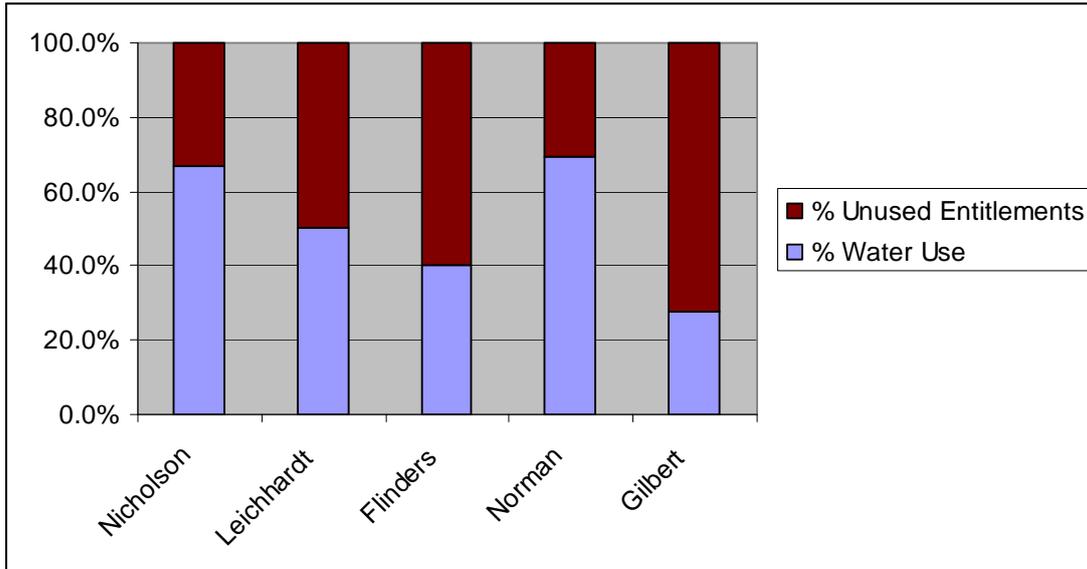


Table 3: Estimated Water Use by Catchment (Economic Associates 2006)

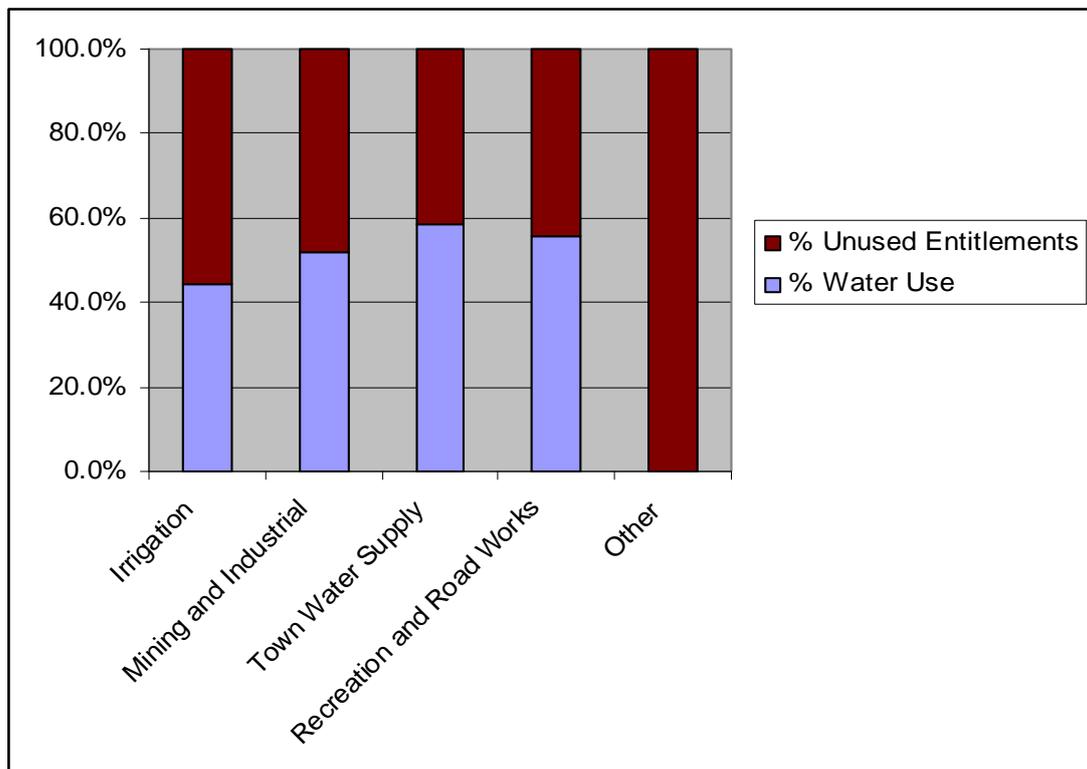


Table 4: Estimated Water Use by Sector (Economic Associates 2006)

According to the socio-economic study undertaken for the Gulf plan, based on licensing data and local knowledge, the under-utilised entitlements are attributable to:

- ‘ Sleeper ’ licences, where there are licences to take water entitlements, however, no works have been installed to allow water to be extracted. The report identifies 15 sleeper licenses which account for 17% of the volume of water allocated for the plan area, and 39% of the under-utilised irrigation entitlement.

- ‘Dozer’ licences, where there are licences to take water but the works have only been partially installed; and
- less than full utilisation, where there are entitlements to take water and works have been fully installed, however, the volume of water extracted is less than allocated. This could include, for example, if the area irrigated is less than the area provided for under the entitlements. This may also include currently unutilised entitlements due to the cessation of mining operations in the region (Economic Associates 2006).

Although consumptive water use in the region is comparatively low, the non- and low consumptive water use supports a number of industries and customary Indigenous economic activity in the region – most notably the grazing, tourist and fishing industries. These industries have developed with opportunistic utilisation of the region’s water resources, and to varying degrees rely upon the continuation of relatively undisturbed environmental flows. Indigenous customary activity, especially hunting and fishing, are also dependent on these flows. Given the aforementioned low incomes of many Indigenous households, access to and use of aquatic wildlife is especially important to Indigenous livelihoods (Scambary 2007). It is not known what part the natural flow plays in other economic activity undertaken by Indigenous communities, but may include arts and crafts enterprises, recreational fishing and other tourism. Many of the rivers are in pristine or near pristine condition, with minimal disturbance and downstream affects due to water infrastructure development. The low level of alteration to environmental flow regimes is most apparent in the Staaten River, Morning Inlet, Gregory River and Settlement Creek catchments, where the high level of ecological value and near-natural flow regimes is reflected in their declaration as ‘Wild Rivers’ under the state government legislation.

The demand for future water resource cultivation has been buoyed by trials and successful farming ventures that demonstrate the potential of the region to sustain expanded irrigated agriculture. According to many in the region, the economic feasibility of irrigation has now been confirmed by the successful operation of private developments which have used the niche opportunities provided by the river systems to consolidate successful enterprises. This has prompted three Shires in the region to investigate the possibility of irrigation schemes. The Richmond Shire Council has undertaken feasibility studies, soil and land suitability studies and planning for a 192,000ML storage facility on O’Connell Creek. Investigation and planning into the feasibility of this storage has been considered for some time, with a pre-feasibility report commissioned in 1999 (North Australia Research Group (NARG) 2004). In 2003, SMEC Australia Pty Ltd undertook investigations into an in-stream dam with a capacity of between 110,000 and 125,000 ML on the Flinders River at Mt Beckford for the supply of two potential irrigation schemes. This inquiry, funded by the Flinders Shire Council, was supplemented with a Social and Economic Benefits Study in July 2004, conducted by the North Australia Research Group and supported with seed funding from the North Queensland Area Consultative Committee (NARG 2004). Both of these schemes have a high degree of local council support, particularly for the potential agricultural and wider economic diversification of the region, job opportunities, and wider flow-on, or multiplier, effects as a catalyst for growth, improved regional services and development opportunities. For both councils, the

provision of water infrastructure is a key element of their long term strategic planning for the region, and claim widespread community support for the schemes. The Cloncurry Shire Council is considering the sponsorship of a pilot project to develop an irrigable area for short-term horticulture crops using flood harvested water.

In response to growing concerns about water development in the region, Southern Gulf Catchments Inc. hosted a forum in Richmond in mid-2001 to discuss issues of water allocation in the Flinders River Catchment, with particular reference to the potential for cotton production in the Richmond area. The forum was intended to facilitate discussion around potential impacts altered water flows, and to minimise anticipated conflict between stakeholders in the region. The forum included presentations from representatives of local government, industry, Landcare and conservation groups, and from technical officers of the State government and cotton scientists involved in the 500 hectare trial cotton crop on a private farm outside of Richmond. Whilst the forum did not achieve any direct outcomes, it did provide scope for the conservation and downstream interests to voice their concerns in relation to irrigated agriculture in the region, particularly with regards to cotton. It also highlighted the level of latent conflict and competing regional aspirations in the community with regards to proposed future development pathways.

Due to the retention of their high environmental values, the rivers and wetlands of the Gulf Country, like northern Australian rivers generally, are increasingly considered public resources and subject to claims from advocates from outside of the region to restrictions on access and future development (Storrs & Finlayson 1997). Future allocation and management decisions, by their very nature, will be required to make complex trade-offs in the region to effectively balance environmental values and consumptive use, alongside community development aspirations. It is precisely to provide the foundations for improved management that the water resource plans (or WRPs) have been developed in Queensland.

3. The Water Resource Planning Process

As with all states and territories across Australia, Queensland has undertaken the successive implementation of the national water reform processes developed through the COAG agreements in 1994, and its reiteration in 2004. The Queensland Labor Party's commitment to the national water reform was affirmed in the 2004 election party platform, known as 'Team Beattie' (2004), which in turn informed the Government's approach to water policy:

When the Beattie Government came into office in 1998, it had to address a history of: overallocation in some water systems; lack of planning and foresight when establishing new water supplies inappropriate, inefficient investment in infrastructure and an absence of precaution in allocating water and making water decisions. Our water reform process is an integrated package of reform measures, such as: an integrated catchment management approach to water planning, monitoring and management ... and extensive public consultation and education on water planning.

As with most states, implementation of national water reforms is consequent upon the preparation of water resource plans (WRPs) by the Minister in accordance with the state's *Water Act 2000*. These statutory water plans outline the catchment-based allocation of water in the surface and groundwater systems for consumptive,

environmental and other purposes, detail water access and use entitlements and provide the management arrangements, including the establishment of rules for water trading. In the development of WRPs, the Minister is to ensure the preservation of the ecological function of water systems against the security of supply for current and potential water users in a way that considers the ecological, social, economic and cultural conditions, trends and consequences of future water management scenarios. WRPs are required for all State water resources, including streams, lakes and springs and in some instances to overland flow water and subartesian water.

As one of the last remaining WRPs to be completed in Queensland, the Gulf plan was seen by governmental staff to provide an opportunity for the Department to establish a benchmark of some of the accumulated learning from almost ten years of water planning and implementation. Given also increasing nation-wide interest in the water resources of Northern Australia, driven largely by protracted drought and climate change, it was also seen to provide the government with an opportunity to provide boundaries to ensure that future water allocations and management was taken within circumscribed and statutory limits to avoid future over-allocation scenarios and costly environmental rehabilitation.

In this context, the process for the development of a Gulf Water Resource Plan (WRP) commenced internally in February 2003. The pre-planning period, which consists of the preparation of an information report through data collection, mapping and preliminary hydrological modeling, is part of the well-established planning framework in Queensland, as evidenced below in Figure 4. The WRP process is outlined in Part 3, Sections 38-51 of the Queensland Water Act 2000.

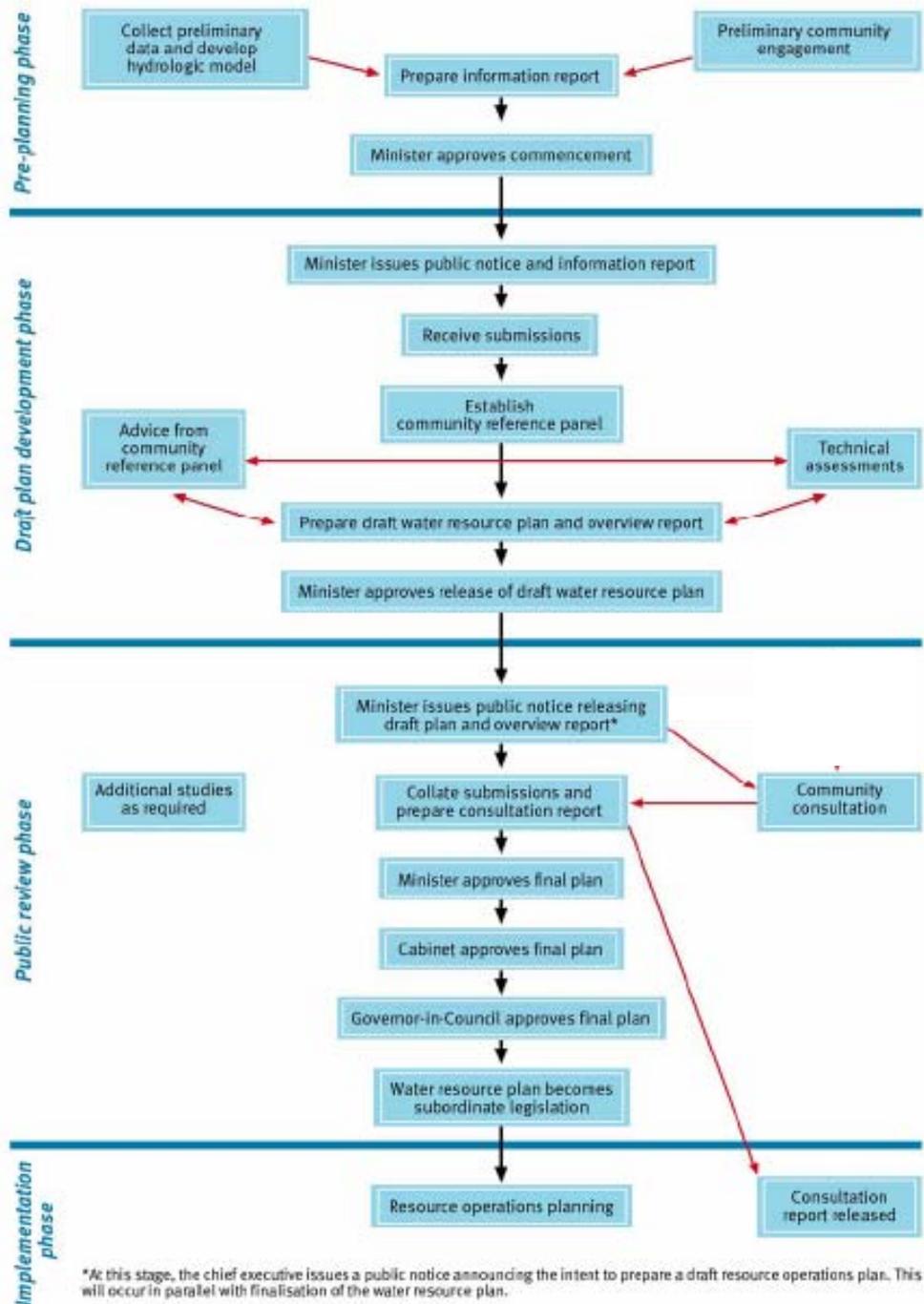


Figure 4: Framework for Water Resource Planning in Queensland

In the pre-planning phase, the decision was made by the Department to produce one WRP for all eight Gulf catchments. Under Section 38 of the Water Act, a WRP can apply to any area designated by the Minister, although in practice Queensland has tended to produce WRPs on an individual catchment basis. This decision to undertake one plan for the entire region was justified by a number of factors by the Department, related to expediency, and ecological continuity, specifically:

- hydrological interconnectivities between some of the catchments, particularly in the floodplains and wetlands during inundation periods;

- similarity between the communities in the plan area in terms of water dependency and economic profile;
- approximation of the area to the North West Statistical Division for census and other data concordance purposes;
- low population density; and
- common ecological and geomorphological processes as part of the larger Southern Gulf drainage division. (NRW 2003)

In recognition of the diversity across the region, however, each basin was to be subject to specific allocation and management strategies in the final plan, with their specific environmental, social and economic conditions and trends considered individually.

Further institutional complications for the WRP at the outset were due to the fact that the catchments of two of the river systems, the Settlement Creek and Nicholson River, include some 20,000 kms of the Northern Territory. It is beyond the jurisdiction of Queensland to regulate water development in the Territory, and there was potential for development to affect the desired outcomes of the WRP. A memorandum of understanding was proposed and discussed between the two governments to facilitate cross-border management, to be underscored by information sharing agreements. At the time of writing, those arrangements are yet to be formalised.

At the Minister's approval, the planning process commenced with the formal public announcement of the plan, the release of the information paper, and a call for written submissions on the 6th June, 2003. On the same day as the commencement of the WRP process, the government also announced a moratorium on new water development in the region, for the duration of the planning period and implementation. The moratorium applies to any activity that increase water consumption during the period of the plan, and prevents the installation of new works, the amendment of completed works, and prohibits additional take. This is an established convention in water resource planning as a means to maintain the existing levels of consumptive use to ensure that the planning process proceeds from a specified baseline, and to provide certainty for future allocations under the plan. Importantly, whilst stock and domestic uses and limited urban and mining supplies were exempted from the moratorium, it was applied to water harvesting license applications that had been received prior to the announcement of the planning process, but had not been processed. According to the Social and Economic Assessment, this amounted to some 74,000 ML/a, all for irrigation water. They comprise 5000 ML/a in the Nicholson Basin), 9000 ML/a in the Leichhardt, 54,000 ML/a in the Flinders and 8000 ML/a in the Gilbert Basin. The issues of social impact in relation to the moratorium are considered in this report in Section Three.

The WRP process proceeds according to three distinct phases – the pre-planning phase, the draft development phase, and the public review phase. Each phase has a distinct role for community involvement, as specified by the legislation. The public notice provides opportunity for community submissions at the initial stages of the draft WRP development phase. Through the draft planning phase, community involvement is provided through meetings of a Community Reference Panel (CRP), a

multi-stakeholder platform established by the Minister to provide a government-community interface for the preparation of the draft WRP. On the release of the draft plan, the public review phase provides for community involvement through publication and dissemination of the draft plan, and again through written submissions. A timeline is provided below.

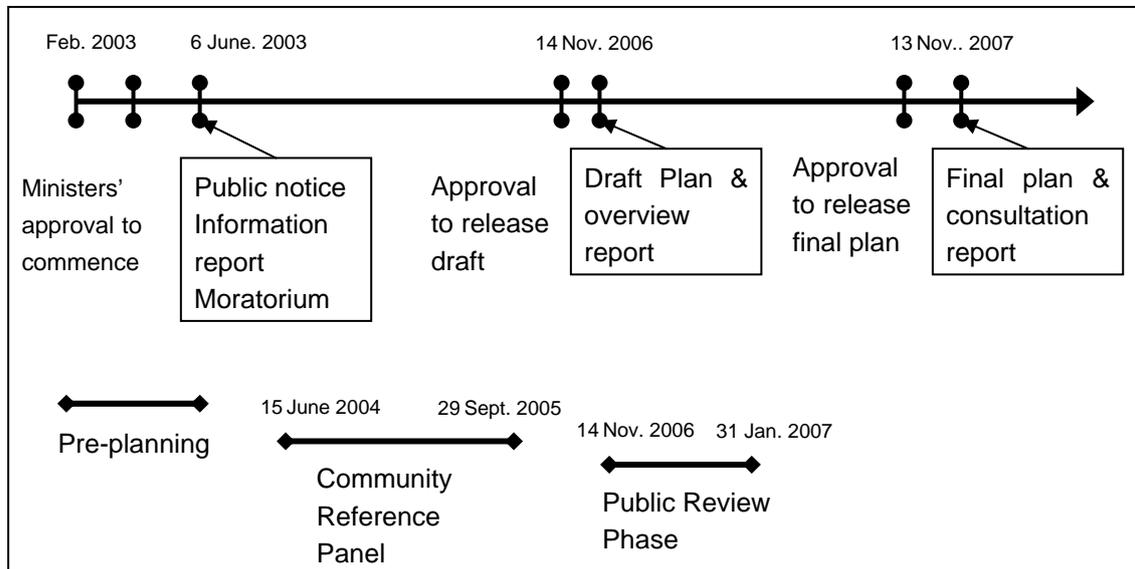


Figure 5: Timeline of the Gulf Water Resource Planning Process (compiled from DNRW 2006a, 2006b, 2008)

The majority of the WRP processes consists of the draft plan development phase, in which technical assessments are used in conjunction with advice, feedback and review from the CRP to develop feasible water future scenarios. Scenario development considers hydrologic, environmental, economic, cultural and social aspects of water resources that to assess allocation and management to meet future needs. These management scenarios, along with the technical assessments and CRP report upon which they are based, are then provided to the Minister for consideration of the specific entitlement, allocation, licensing and management actions specified in the WRP. The concentration of stakeholder input to the development of the draft via the CRP highlights its primary role designated for the Community Reference Panel (CRP) in water planning in Queensland in providing space for community involvement. Details of the CRP process are provided below. The utility of the CRP input to the plan is subject to its consideration of the technical assessments prepared by the department to determine environmental flow requirements, hydrological impacts and potential future demand and water supply options. Five technical assessments were conducted for the Gulf WRP, which were both the framework for scenario modelling and the basis of the CRP deliberations:

- **Agricultural land and water assessment report:** an assessment of the potential future agricultural development in the region, and to assess supply options for any associated water requirements. This assessment built upon the Water Infrastructure Planning and Development Study for the Gulf region, which had been conducted by the Department of Natural Resources and Mines, through the integration of available land and water information and the evaluation

of potential water supply options against the government's *Guidelines for Financial and Economic Evaluation of New Water Infrastructure in Queensland*. An advisory community and a technical assessment panel were both formed to provide feedback and review on the study. The report was completed internally by the DNRW in May 2004 (DNRME 2004).

- **Economic and social assessment report:** a profile of the socio-economic characteristics of the region specifically as it relates to water dependencies as a basis to assess future water demand. This assessment was conducted by external consultants using state, federal and local data and information. Drafts of this assessment were reviewed by CRP. The report was published in July 2006 (Economic Associates 2006).
- **Ecological and geomorphological assessment report:** an assessment of areas of high conservation assets in the region and the water requirements of those assets. This report was completed by the Technical Assessment Panel (or TAP) assembled for the WRP process. The TAP consisted of consultants and Departmental staff with an established history of completing such assessments and with a familiarity of the region. Although predominantly a desk-top analysis, a number of meetings with the community and the CRP were used to verify the assessment findings. This report was completed in 2004, and published by the Department in October 2005 (Smith et al 2005).
- **Subartesian water assessment report:** an assessment of the significant ground-water resources in the plan area, and the identification of any risks to those resources based on allocative scenarios. This report was conducted by external consultants using available literature, including technical assessments undertaken as part of the WRP process, and data provided by the Department. It additionally identified knowledge and information gaps in relation to the management and regulation of groundwater supply. This report was published in June 2006 (DNRW 2006c).
- **Hydrological modeling:** an assessment of the hydrological impact of development scenarios. NRW's Integrated Quantity and Quality Model (IQQM) was used in three (Flinders, Gilbert and Leichhardt) catchments to simulate pre-development flows, current water uses effects and to project effects of future allocation scenarios. The IQQM is regarded by the Department as the best available science for hydrological modelling. Other catchments in the plan area were not included in the assessment due to a lack of data for meaningful analysis and an expectation of low development. The models were reviewed by the CRP (DNRW 2006d).

Two additional legislative developments occurred during the development of the plan, which affected the outcomes of the plan. First, the Wild Rivers Policy was announced by the Labor Party in February 2004 as a state election commitment. The policy proposed legislation to preserve the State's remaining 'wild' rivers, those with the majority of their natural stream-flow and values intact, from development that may threaten the continuation of those environmental values. In December 2004, Cabinet

approved the preliminary implementation arrangements for the policy subject to peak stakeholder consultation. The Wild Rivers consultation paper was distributed on the March 1st, 2005, and submissions received by the 15 April. The *Wild Rivers Act 2005* (Qld) was proclaimed on the December 2nd, 2005. The original policy identified nineteen potential rivers in the state that could be nominated for Wild River status. Due to widespread public concerns about the limited consultation conducted to deliver this election promise, the actual number of rivers nominated for Wild River status was reduced to six, two of which were located in national conservation zones. All four of the remaining Wild Rivers were located in the Gulf Water Resource Plan: the Staaten, Settlement Creek, Morning Inlet and Gregory Rivers. These rivers are now declared Wild Rivers.

According to the Queensland Government, the Wild Rivers legislation provides pragmatic river protection which recognises existing rights and permits and provides for limited future development that maintains the ecological of the river systems. In some ways, the objectives of both the WRP and the Wild Rivers legislation have similar environmental objectives. The legislation imposes prohibitions on certain forms of development in declared rivers, such as new weirs and dams, and new developments that restrict floodplain flows, stocking of non-local fish species, in-stream mining or stream 'improvements' such as alignments or levees. In addition, the legislation places restrictions on extractions, off-stream storages and out-of-stream mining activities. This meant that regardless of the technical assessments or CRP input into the aspirations or future water options for these catchments, the WRP process relating to the four declared rivers was subject to the management conditions established by the Wild Rivers legislation.

After the release of the draft plan for public comment and review, a second legislative development had a direct impact on the WRP process. The Cape York Heritage Bill was introduced to the Parliament on the 7th June, 2007, and declared as *Cape York Peninsula Heritage Act 2007* 25th October 2007. This Act, arguably developed to offset the impacts of the Wild Rivers legislation, contains a series of provisions to balance conservation and economic interests in the Cape York region, and to provide legislative and symbolic support to the aspirations of Cape York's Indigenous communities. Amongst these provisions, the Act specifies that any water resource plan for the area must provide for a reserve of water for the purpose of enabling indigenous communities in the area achieve their economic and social aspirations. As defined by the Act, the Cape York Peninsula region included the Staaten River, a declared Wild River, and thereby required the establishment of an Indigenous reserve in the Gulf plan. The creation of a reserve of water for Indigenous purposes for other catchments within the Gulf region with high disadvantage may have been considered in the review phase of the WRP, although is not discussed in the public documents.

Following the public review phase, which is detailed below, the Gulf WRP was approved and established as subordinate legislation under the *Water Act* on the 13th November, 2007, more than four years from the initial pre-planning phase. As subordinate legislation, the WRP will expire after ten years, and the Minister must prepare a new WRP prior to its expiration. The plan is also able to be amended in certain circumstances, for example if additional water uses were identified or if water

entitlements were unable to meet future needs. It does appear likely that amendments to the WRP have already been considered by the Department of Infrastructure. This is evident in the Northern Economic Triangle Infrastructure Plan 2007-2012, published before the finalisation in of the WRP in August 2007. One of the key infrastructure development strategies for Mount Isa identified in that report is to “plan for water supplies that would support future development in Mount Isa and the North West Minerals Province” (DOI 2007: 18). Rather than working within the boundaries of the finalised WRP, the infrastructure development required is suggested to necessitate its own planning process:

Further planning is required across the Triangle to ensure that new or expanded water storage and transport infrastructure is available at appropriate locations to meet industry requirements. It is critical that this planning takes into account the need for sufficient volumes to secure water supply. Planning processes must also consider the option of expanding existing water schemes against the possibility of developing new storages at strategic locations. (DOI 2007: 14)

Although not specified, this expansion of water planning may require an amendment to the WRP, and provisions are provided for this to occur if necessary.

3.1 Community Reference Panel

The key element of community participation in the planning process is provided through the Community Reference Panel (CRP). Under the Water Act 2000 (Qld), it is a legislative requirement that the Minister establish a community reference panel to provide input and advice to the Department of Natural Resources and Water and the government generally with regards to the water resource planning process (Section 41). The Water Act specifies that the CRP must include representatives of the cultural, economic and environmental interests from the proposed plan area. In practice, the composition of the CRP tends to be selected to represent the social profile of the proposed plan area. CRP members are recruited through an open and transparent process which involves a public call for nomination.

The expectation of the members of the panel is to advise NRW as individuals and in some cases as representatives of their particular sector or geographical interest on the technical analyses, including reviews for accuracy and additional local knowledge and information to augment those analyses; and possible policy options, alternatives and recommendations proposed through the water planning process. Panel members are also expected:

- to communicate with stakeholder groups and the general community to inform on the planning process;
- to ensure that the diverse range of interests is communicated back to NRW;
- to provide input and advice on the communication and information requirements of their constituency; and
- to advise the department on proposed public consultation strategies.

Identified groups and the general community were invited to nominate representatives. Nominations closed on the 13 May, 2004. Following the closure of nominations, the Minister identified gaps in representation that warranted known stakeholder groups being encouraged to submit a nomination. These nominations

were reviewed by the NRW and representatives from Northern Gulf and Southern Gulf regional bodies to provide a shortlist. Nominations assessed against the selection criteria which included strong ties to community interests (geographically or sectoral) or the ability to represent multiple interests.

The nominations, assessments and shortlisted recommendations were provided to the Minister, who established the CRP on 15th June 2004. Whilst the majority membership of the CRP consisted of individuals within the plan area, a lack of capacity in the region for specific interests was addressed through the inclusion of some individuals external to the region, notably to represent environmental interests. A total of nineteen members were appointed to the panel, with sector representation indicated by the graph below.

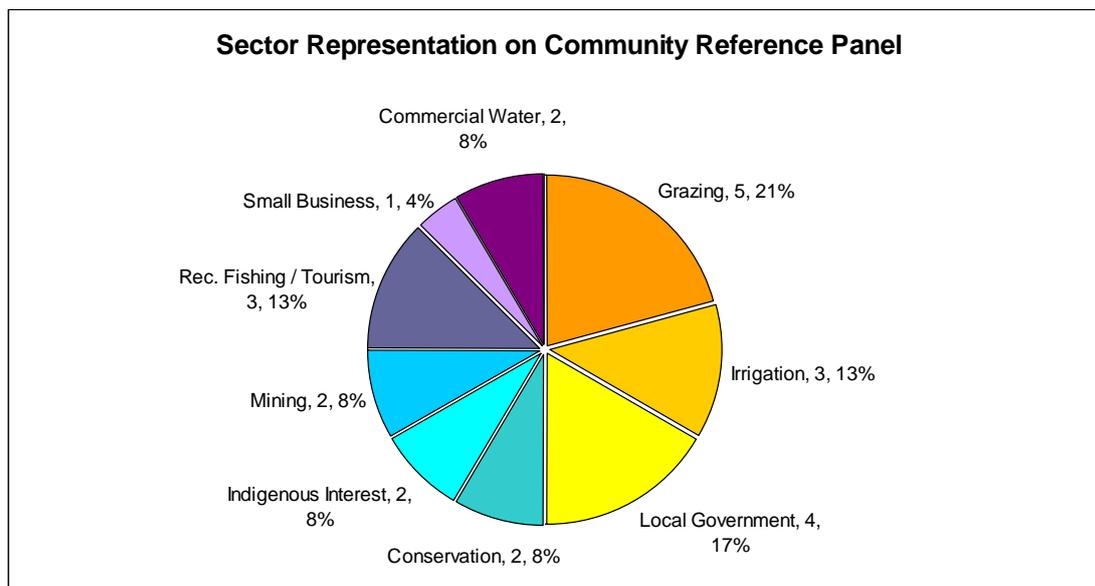


Figure 6: Sector Representation on Community Reference Panel (DNRW 2006b)

The CRP also consisted of representatives from a number of government departments with an interest in the outcomes of the WRP. Although this is not specified in the policy or legislation, it is accepted practice in water planning in Queensland to ensure a ‘whole-of-government approach’ to the development of water resource plans. Government agency representation was determined through an alternative process whereby relevant government agencies were invited to provide a suitable representative. Five government agency staff were included on the CRP to assist the community panel members from:

- Queensland Department of State Development and Innovation
- Queensland Department of Local Government, Planning, Sport and Recreation
- Queensland Department of Primary Industries and Fisheries
- Queensland Environmental Protection Agency
- Northern Territory Department of Infrastructure, Planning and Environment

The CRP met on 17-18 August 2004 in Mt Isa, 15-16 March 2005 in Hughenden, and on the 29 September 2005 in Mt Isa. A table outlining the objectives and broad agenda of each of the meetings is provided below.

Meeting	Objectives	Additional Considerations
CRP Meeting 1	<ul style="list-style-type: none"> - To inform the panel about the water resource planning process, including proposed technical assessments and community consultation; - To identify community expectations for the process; - To raise and discuss water-related issues. 	<ul style="list-style-type: none"> - Information sharing on the links with other natural resource management initiatives and overlapping policies; - Review of Gulf and Mitchell Agricultural Land and Water Resource Assessment Report; - Review of the key issues raised in submissions on the intent to prepare a water resource plan; - Discussion of proposed technical assessments for developing the draft plan; - Review an initial draft of the TAP assessment; - Nomination of potential future water demands of different sectors.
CRP Meeting 2	<ul style="list-style-type: none"> - To further discuss water-related issues; - To clarify community aspirations for the Gulf draft plan; - To inform the panel of progress and preliminary results of technical assessments; - To seek and clarify advice from the panel on future water demands including identifying differing views amongst panel members. 	<ul style="list-style-type: none"> - Review of first draft of the Economic and Social Assessment; - Table of the report prepared the latest hydrologic modelling findings were tabled.
CRP Meeting 3	<ul style="list-style-type: none"> - To discuss possible policies for the draft plan; - To gather community views on the policies; - To inform the community reference panel about the linkages between the water resource planning process and other natural resource management initiatives; - To inform the community reference panel of the community's role in finalising the Gulf Water Resource Plan and its implementation through a resource operations plan. 	<ul style="list-style-type: none"> - To review the results of the completed technical assessments to inform their input in identifying the sorts of outcomes.

Table 5: Agenda of the Community Reference Panel Meetings (DNRW 2006b)

3.2 Submission Process

The second aspect of the community participation is through written submissions. In the planning process, there are two opportunities for public submission (see DNRW 2008). Submissions from the public were initially called when the WRP was initiated in June 2003. Submission period closed 29th August and 16 submissions were received. Initial submissions covered a range of issues, including the process, technical analysis, expectations and concerns regarding future water supply, environmental concerns and socio-economic considerations. Submissions were supportive of the development of the WRP, the working in conjunction with the NRM bodies and supportive of the CRP and consultation mechanisms, including the technical assessments. There was a high degree of support for the hydrological and socio-economic analysis, and key interests in making the findings from those assessments widely available to the community. Other issues raised included:

- Concerns around issues of trading;
- Concerns over further water take and potential downstream aspects;
- Future water requirements for mining and urban use;
- Interest in water harvesting opportunities (specifically for value-adding to existing pastoral industries through aquaculture and agriculture);
- Interest in investment in new large infrastructure on Flinders and the potential economic benefits for the region; and
- Emphasis on the natural and conservation values and support protection of wild rivers.

The second submission period commenced at the release of the draft WRP. The call for submissions on the draft WRP was opened on 14th November, 2006 and closed on 30th January, 2007. In all 2,105 submissions were received, including two that were received after the close of the period. This is an exceptionally large number of submissions, and contrasts sharply with the 32 submissions for the Mitchell WRP, the plan for a neighbouring region drafted at the same time as the Gulf plan. Of these, around 1,800 were form submissions organised by The Wilderness Society. This extraordinarily high number was explained, by one of the interviewees, by the fact that the submission period coincided with the one of the largest folk festivals in the country:

We made our submission, along with the other key stakeholders in the region, and seventeen hundred people at the Woodford Folk Festival.

These submissions were collated and analysed by three government staff, according to an identified coding scheme, and cross-checked for consistency in coding. A consultation report was compiled, which was made available to the Minister in his deliberations, and published shortly after the release of the final WRP. This report identifies the 14 key issues raised in the submissions by theme, and addresses each of the issues in terms of the content of the submissions, what was required under the WRP, what was provided in the draft plan, and how the issues raised in the submissions were addressed in the final plan. The major issues identified through the submission were:

- the volume of unallocated water reserves specified by the draft plan

- the release process for unallocated water
- hydrologic modelling
- new overland flow works of 250 ML or less
- expanded provisions for water trading
- groundwater regulation
- Indigenous consultation
- specification of volumetric limits for existing water entitlements
- water metering
- the moratorium notice of activities that would lead to increases or changes in the take of water throughout the plan area
- entitlement and institutional arrangements for Moondarra and Julius dams
- relocatable water licences (Gilbert River)
- groundwater supplies.

In interviews with the planning officers, it was felt that the scope and content of the submissions reflected their expectations in terms of the types of issues and concerns that they had received feedback on during public information sessions and meetings. They also felt that the submissions reflected the community, although noted an absence of formal written submissions by Traditional Owner groups. The report also provides a table of the coding system used and the number of submissions raised in relation to each of the issues identified above.

3.3 Informal Participation

Under the consultation framework developed by the department, there was ongoing interaction with stakeholder groups to improve general public awareness and to gain input from specific water users in the region. This informal participation, although not required under the legislation varied from group meetings, discussions and negotiations conducted by planning and agency staff in response to specific issues. Several interview respondents commented about ongoing meetings with planners and other agency staff throughout the plan duration. An initial expectation of the Department was that the Northern and Southern Gulf NRM Groups would play an active role in the WRP process, particularly in coordinating access to community stakeholders. However, interview respondents from the NRM boards indicated a fairly low level of interaction between Departmental staff and the NRM groups, limited to initial discussions and later supporting the dissemination of information through their established networks.

Facilitated meetings between key water users were conducted to discuss implementation, particularly with the key water stakeholders in the Mount Isa region. The unique history of the development of infrastructure assets and governance arrangements meant that certain provisions in the plan would result in changes to the arrangements established under the order-in-council and adapted under the Water Act.

Upon its release, copies of the draft WRP and the overview report together with information about the submissions process were sent to community reference panel members, local government and more than 200 interested stakeholders. Media releases were issued by the department which discussed the WRP draft in broad terms and provided details of public information sessions in the region. Public

information sessions were conducted in seven locations between November and December 2006. In addition, planning staff traveled extensively through the region conducting in excess of fifteen public meetings, and providing presentations to all local governments. Additional targeted presentations were provided to Traditional Owner groups and the Doomadgee Aboriginal Council.

Planning staff also arranged visits to the properties of irrigators in the region, to discuss the outcomes arising from the plan, the implications for their establishments and the potential implementation issues in the development of the Resource Operations Plan (ROP). Due to resource and staff constraints, and the sheer magnitude of the area covered by the plan, water users and potential water users were prioritised over wider community engagement. Although this informal participation was not required under the legislation, most interview respondents were very supportive of the efforts of planning officers to visit community groups to ensure widespread dissemination of the draft plan, and their encouragement to make written submissions for information and feedback.

4. Evaluating Collaboration in the Planning Process

4.1 Collaboration as a Pathway for Improved Decision-Making

The decision-making process and the engagement process for water planning in Queensland is well defined under existing legislation, and the NRW provides a series of information papers and brochures to clarify the water planning process both generally and for specific plans. What is consistently emphasised throughout this documentation is that community involvement, whilst a valued component of the decision-making process, retains an advisory role only. This is because ownership of the state's water resources vests in the State government, and as such decisions on access, allocation and management are the responsibility of the Minister and the Government.

As a result, although there is a high level of responsibility placed upon the CRP to actively facilitate the government-community collaboration, it is at no stage given decision-making power. Its role is clearly defined in the legislation and in the terms of reference developed by the Department. It acts as an advisory forum for coordinated and effective two-way communication between stakeholder groups, community and government on issues associated with the preparation of the draft WRP. In achieving this function, the CRP is expected to identify and articulate relevant issues in the development on the plan on behalf of their respective constituencies and to assist NRW in the development of strategies to address these issues. Participants were expected to advise the Department as individuals, and where possible, as a representative or delegate for the sector or geographical area that they were selected to represent.

The terms of reference provided to participants were expansive, and clearly outlined the roles and responsibilities of the CRP and Government, and specified a series of protocols across a range of issues such as conduct, conflict resolution, confidentiality, media relations, communications, information requirements and reporting, quorum and proxies and observers. The terms of reference were discussed at the initial CRP meeting, with participants given the opportunity to clarify or amend these terms if necessary. This provided limited scope for participants to actively determine their role in the process, although none of the respondents indicated that there had been any changes to the Terms of Reference as a result of this discussion.

The deliberations of the CRP were synthesised and compiled into a Community Reference Panel Report, which was made publicly available on the website and available to the Minister to assist in considerations for the draft plan. The drafting of this report was done in collaboration with the CRP, and opportunity was provided at each of the CRP meetings to review and revise the report at various stages. The report was suggested by interview respondents to largely capture the discussions, however some identified that key discussion points that had been subject to lengthy deliberations by the panel were notably absent. For example, a number of respondents recalled extensive discussions within the group of an 80%-20% division between environmental and consumptive allocations, which was not reflected in the CRP Report.

In the course of deliberations, the CRP is not required to reach consensus on plan expectations, issues, values, recommendations or desired policy outcomes. This structures much of the format and meeting content of the CRP and the mode of analysis selected for the community submissions. Although some participants felt that facilitation in the CRP meetings favoured particular interests, the aim of the meetings was to document the breadth of issues and perspectives of the CRP as a whole, and was correspondingly facilitated to allow space for the range of views represented by the panel to be expressed. For the submissions, collation consisted in thematic review of the submissions to identify the range of concerns. This justified the decision to treat any form submissions, despite their indication of a high degree of community support, as one submission for the purpose of plan review. Due to its defined role in the WRP process, no prioritisation of issues is therefore required from the community involvement process.

Legal and Policy Requirements

Interview respondents indicated an overwhelming satisfaction with conduct of the CRP and other community engagement processes in accordance with the legislative requirement. A significant number specifically singled out the role played by the regional planning officers in particular, who were seen to go beyond the requirements of the legislation in terms of providing information, feedback and access to the planning process. Respondents similarly felt that the legal and policy requirements for community participation were adequate for the needs of the planning process:

Rarely do we have any issue with the intention of a policy. It is the implementation that creates issues... Overall, we felt that the headings and intent of the planning process was fine – ensuring sustainability of extraction, preserving natural functions and so on – no one has seen that as an issue.

Another respondent commented that

We, as an organisation believe that this is the way forward, that water reform is inevitable, that the WRP for the Gulf meets the needs of the community and meets the needs of our organisation.

Notwithstanding other concerns about the process raised by the participants, the legal and policy requirements, and their observance in the process, was considered beyond reproach.

Governance Arrangements

The specified advisory role and the absence of consensus were the defining features of the governance arrangements for community participation. Within the time allotted for the CRP meetings, and the wide extremities between perspectives, expectations for achievement on consensus on the CRP would have been unreasonable. Significant divergence was noted by most respondents between ‘conservation’ interests, with their stated requirement for no further extraction in the region, and the ‘development’ interests, particularly those advocating in-stream infrastructure: respondents considered that reconciliation between these interests would be highly unlikely, in the CRP forum or elsewhere. Several interviewees also identified that the difficulty in reaching consensus agreement was also due to the structural requirements of CRP participation for each of the members to represent their

interests – whether that be their shareholders, their local constituency, the environment or their industry.

It's not as though either party was just being difficult – there were some very good grounds on both sides.

...

But that being said, because this region is slightly different, and the presence of some immovable objects, in terms of us having the point of view we have, and [others] with points of view they have, has made the process a little more difficult as well.

In terms of the objectives of the CRP under these arrangements, the process was facilitated to allow all members the opportunity to voice their perspectives. Although this meant in practice that some participants felt as though they had been silenced by the government staff in discussions, and that the forums had been “tightly controlled and prescriptive”, the aim of the forum required a high degree of facilitation. This was considered effective by some of the respondents, noting that it attempted to create “a level playing field” within the forum where “everyone got their say”, which was particularly important due to the presence of personalities and interests that were considered ‘dominant’.

Some of the participants had been involved in previous processes, and one in particular recognised that the Gulf WRP was being fast-tracked, and that significant impediments which had stalled previous planning processes had been alleviated or minimised by the “cut[ting of] a lot of corners”.

This fast-tracking could have been a good thing, so that people didn't become burnt out by the process and weathered down.

Although one of the key criticisms of the process was the length of the time taken, the limited scope for community participation provided in the time frame was regarded unfavourably. Whilst most respondents recognised the inherent value of an expedient process, concerns were raised that the limited time allotted for the CRP meetings, in comparison to the length of the process overall, did not allow for the full articulation of issues.

To ensure quality of the advice provided to the Minister, the process also required to be focused on issues directly related to the WRP. This meant that some participants felt that their issues were not adequately considered, or not afforded the same level of priority in the NRW report. For example, issues such as water quality, pricing, storage charges, license conditions and the distribution of unallocated water featured prominently in interviews and the submissions.

The Department have really washed their hands of this process – they've said ‘we're not really concerned about your water quality issues. We're not concerned about the environmental management issues in the river beds, or how you manage the storages. We're not overly concerned about pricing. And we're not overly concerned about how tradeable the water is in the region. We just want to put the system in and get a tick from the Commonwealth Government.

Despite the fact that these issues are outside of the scope of the WRP process and this is established in the water planning guidelines and legislation, it meant that participants in the discussions felt that the government representatives were closing down discussion on issues and not adequately addressing concerns that were

important to the community, and gave rise to disquiet about the extent to which agency staff had preconceived notions about the outcomes of the planning process. Some respondents felt that many of these issues, despite being genuinely held and having the potential to expose stakeholders to high levels of risk, were dealt with “flippantly” by the Department, as though they were not legitimate concerns in relation to the process. As these issues were continually raised in CRP meetings and in submissions, frustrations were evident on both sides:

They felt that we were just being obnoxious, and why couldn't we just tick and flick the boxes. Why couldn't we just accept the fact that the water resource plan was being implemented and just get on with it.

Interview respondents were particularly frustrated by the absence of consideration in the process as to what the provisions of unallocated water would be used for, and that potential environmental, cultural and downstream user effects of expanded water use could not be assessed without this information. This highlighted the need for water planning to be nested within an integrated planning process that considers not only environmental flow and the availability of harvestable water, but is embedded within the strategic planning for the region.

Only one participant felt that community participation was irrelevant. According to this respondent, a more effective mode of planning would have been an expert-driven process, where the parameters of water availability and relevant issues were identified and agreed to by experts. This respondent still conceded that there would need to be consultation, but that this should occur after the scientific analysis, and not before.

Transparency and Accountability of Decision-Making

Under the WRP process, transparency of the relationship between community input and the final plan is provided through the publication and wide dissemination of three key reports: the overview report, the community reference panel report and the community consultation report. These are distributed via mail on request, are downloadable from the Internet, and also made available by planning staff at public meetings and information sessions. These document the thematic range of issues considered by the Minister in the development of the plan. However, interview respondents identified that the relationship between the community consultation and the draft WRP was something of a “black box”, and participants could not identify specifically how their contributions were reflected in the final plan. Participants also described the need for a certain leap-of-faith, and that they rely on an assumption that the information provided to the Minister is an adequate reflection of the discussion. However, the transparency provided by the process and its documentation was reassuring for some participants:

the Minister would have to have heard, there's no way through that process that he couldn't have heard if you talked up, so at least he hears that. And it's not just as if any bureaucrat did interviews and that's it.

As the plan requires the analysis of scientific information and technical assessments to produce statutory legislation, translating the demands of the community into this technical framework is especially difficult. The decision framework used to undertake this process is not documented – it is undertaken at the discretion of the Minister. This highlights one of the key issues with water planning decision-making, not confined to the Gulf WRP. The difficulties in providing this information limit

transparency in terms of how community involvement informs the plan development, but it is an issue which is not easily overcome:

There was a number of concerns raised by some of the beef farmers in the lower part of the Gulf that were not adequately addressed, in my opinion. I mean, I'm not a farmer, and I heard their concerns at the meeting and the notes and the outcomes didn't address their concerns, I wouldn't have thought. They were concerned about take, and the total size of allocation. I do know that at meetings that we had those issues were raised again by the same people – the lack of accountability of the government responses was an issue... To be honest with you, they really didn't have the answers.

...

They were not ending up with a balanced document. Everything that came out in that document had [the water planning staff's] bent. It obviously wasn't just coming from [them] they were sending the information along. Now, I don't know how these plans are done, whether government sets some unwritten rules that we never get to see, which says this is really what we want to achieve, not that we're into conspiracy theories, but it never seems to go the way that we see is balanced.

...

Some of the community views for the Gulf were that there should be a lot more water made available, whereas the socio-economic study shows that there is not really that much demand, and not likely to be that much demand. So in terms of transparency, how do you balance between those perspectives, and then how do you report that, and then justify it to people who have different views?

The gap between the information provided through public participation and the final decision does call into question value of participation for participants. One respondent felt that it created a need to "be on good terms" with the agency staff, to ensure that their particular issue would get better representation in the information provided by the Minister. Others noted that participation in the CRP, in and of itself, was not a priority, and although they recognised the need for participation they continued to work outside the formal process through lobbying, media, deputation and direct communication. This approach was especially true for groups with experience in water planning, including state level peak bodies, and also for key water managers in the region. For one participant, the CRP provided an opportunity, not to feed into the formal process, but to provide opportunities for the achievement of desired outcomes outside of the process.

Trying to put my opinions forward in the CRP was a waste of time, so instead I used the opportunity to get a sense of the demands that the other groups were making, and used that for lobbying behind the scenes.

The planning process in its current form, however, does clearly allocate accountability for the final decision with the Minister, and not with the CRP or any of the community contributors. This is a key aspect of effective community participation, and ensures that those both directly and indirectly involved in decision-making process processes and those affected by these decisions could see who was accountable for these decisions. The structure of the reports also preserves this accountability, insofar as the thematic lists of expectations, issues and desired outcomes are not attributed to individuals on the CRP. The CRP report is also drafted in the context of the meetings themselves, and agency staff provided ample opportunity for representatives to ensure that what was recorded in those reports

was an accurate reflection of the discussions taking place in the meetings. Whilst it is worth noting the “lack of detail in the reports, in terms of identifying what different groups felt and wanted”, it does preserve the anonymity of contributors, and ensures that responsibility for the decision is subject to democratic process. For some, the production of these reports in their current format is a commendable aspect of the process:

I think the best thing that came out of the CRP is that we had a general description of the feelings of the people on the CRP, and they were grouped. There was one statement that ‘we really value this landscape, and we want to see it protected, so we don’t want to see an increase in allocations.’ And then the next one said “I’d really like to see development, and I’d really like to see the towns grow”; or “I’d like to see cotton” or whatever. So what I thought was good was that the Minister got to see the arguments, for better or worse, and got to see that some people think this, some people think that. So at least then the Minister knows where people are at.

Fairness of the Process

Most respondents felt that the ability of the CRP process to capture the diversity of views around the table of the CRP participants was relatively fair, both in its objectives and in its outcomes. Where respondents identified failings in the process, this was more attributed to the types of inequities commonly identified for multi-stakeholder platforms generally, such as concerns:

- that some people were less experienced with being involved in open forums and found the process intimidating;
- that the process was captured by specific groups with clear agendas and unequivocal demands, such as the environmentalists or the development interests;
- that inequity was generated by the personalities involved, and that the process generally favours articulate, confident or dominant participants; and concerns;
- that the process reproduces general social inequalities, in the sense that many of these qualities required for effective participation are linked to wider differences of participants in terms of class, gender, and ethnicity.

One participant pointed out that there was a level of peer support, in the sense that often some of the other participants spoke on behalf of those who were quiet in the meetings, and that this was reflected in the ways that they would approach him after the meetings to thank him for speaking on their behalf. Another pointed out that although people were representing sectors, people were able to speak on behalf of a range of issues, and not only those related to their specific interest.

Fairness was raised in the interviews with regards to the perception that certain interests would take precedence in the determination of outcomes. Mining and environmental interests were frequently cited by respondents as having a greater degree of influence over the planning process. This was particularly raised by participants advocated irrigation:

They used these words – “If a large scale development such as mining was to occur, then we would review it.” We asked them to put those words

in, but to add if large scale irrigation was proved to be sustainable, then it would be reviewed. But they wouldn't.

...

It's the same old story – all of that gets thrown out the window if mining gets involved. Mining does create an industry and income and so on, but so does everything else. But they wouldn't even look at it.

Two participants felt that the presence of a majority on an issue should have been reflected in the CRP reports, and were adamant that the absence of this in the reports was not an accurate reflection of the discussions in the CRP meetings. Two additional participants who would be personally and financially affected by the outcomes of the plan, felt it inequitable that the level of risk that they faced in the development of the plan did not give them precedence in decision-making process.

The issue of fairness was also raised in relation to the creation of community expectation as a result of the approach to participation. For a number of participants, the opportunity to express issues and desired outcomes was insufficient, unless accompanied by a genuine commitment to addressing these issues through the process. In instances where issues had been raised, and even documented in the reports, those issues were not necessarily addressed in a way that satisfied the participants.

We don't feel our issues have been adequately addressed, at all actually... So we feel that the process hasn't worked for us.... They have not and will not address them, and they still refuse to acknowledge that they're issues.

Although there was never any implication in the process that all issues raised in the deliberations of the CRP or in the submissions would be addressed, certainly there was a notable assumption held by some of the participants, who were disappointed with the lack of response from the Minister or the Department in relation to their specific concerns.

A large number of respondents expressed a general scepticism towards the consultation process in general, and felt that the onus on government agencies to 'engage' the community had established a culture of token consultation within the Department. This was partially to do with the lack of resources that were generally provided to the staff for this purpose. Concerns were raised that the Gulf community had been "consulted to death", but that there was little evidence that this had informed or impacted on policy-making. Due to this history of poor consultation process, participants entered the process convinced that their contribution was token and of little to no value to the outcomes of policy decision-making. This created especially difficulties for the water planning process, such that any attempts to facilitate participation in the region necessarily had to be above reproach. In this regard, there was a widely held view amongst the participants that the consultation was not going to be afforded the same level of consideration in the final analysis as the technical analysis. This perception was evident from the outset. A number of sample quotations from the interviews confirm the sense that the participants in the CRP process were highly sceptical about their role as providing information.

I didn't find the CRP meetings particularly helpful. They were pretty cursory. The information was pretty much written.

...

We were given speeches by the bureaucrats, which were good, but it felt as though it was a case of *fait accompli*, like the nuts and bolts of the whole thing had already been decided.

...

The water resource planning process as it sits now is a good vehicle as a management system for a government to be in control of what happens in terms directing the preferred outcomes.

...

We did have some issues right at the beginning where we felt like they weren't listening to what we had to say, more telling us what they thought we should be saying. But we straightened that out.

...

We've got bureaucrats in George Street³, not interested in outcomes, just interested in ticking the box to get the pay rise, and not adequately addressing our concerns, and we have repeatedly raised these concerns.

...

What they were saying was that they wanted the community input so that their decisions could be based on community views, but we all had the feeling that they had made up their minds before the process began anyway – now that could be quite wrong, but that was the perception that people had.

...

Right through, it was as though DNR reps either had it written, or them and the greenies had it all organised. Because you would put up a valid argument and they would just knock you down.

...

Yet these are the people controlling the process. I don't know how they get their information, whether it is a directive coming down from someone else which says this is what we're going to do. This is the company line. Don't have an open mind about it – this is it.

A number of respondents referred to an ideal of 'real consultation' which was used in the interviews to contrast to the CRP and submission process. Although this notion of 'real consultation' was undefined, the perception of a more appropriate model of engagement provided an imagined ideal that oriented their expectations for the process. The qualities of 'real consultation' were differently defined by each respondent, but frequently included the equal weighting of contributions for all participants, equal representation for each sector, greater opportunity for representatives to get input and feedback across their constituency and a higher degree of responsiveness from government to the broad range of issues raised in the deliberations, including those which may have fallen outside of the scope of the WRP process as it currently operates. The expectations of the community for consultation for the plan were significantly higher than the level of resources provided by the Department for the consultation process, and undoubtedly reflected the level of satisfaction of each participant with the outcomes from the process.

Use of Best Available Knowledge

³ George Street is the address of a large number of Queensland State Government headquarters, including the Department of Premier and Cabinet and the Department of Natural Resources and Water.

The Queensland process for water planning does attempt to ensure that best available science is considered in the plan. This is reflected in the Gulf plan, which was marked by the use of five technical studies. Although these studies were not subject to a formal review process in the strictest sense, in all but two cases they were conducted by independent external consultants, and subject to review by the Department and by the CRP. Of the two assessments prepared by the Department, one was the Land and Water Assessment, which had included both a technical assessment panel and a community reference panel. This report had built on Departmental investigations into the region over a four year period, and several members of the CRP were also involved on that panel. The other internally prepared assessment, the Hydrological Modelling, has not been made publicly available, but was conducted using the Department's Integrated Quantity and Quality Model (IQQM) which has previously been employed for WRP processes across the state. According to the Department:

The model used to simulate flows in developed parts of the plan area provided the most reliable method of assessing the effects of existing water use patterns and possible scenarios for the future. The Integrated Quantity and Quality Model represents the best science available for the purpose. (NRW 2008: 11).

With the exception of the hydrological modelling assessment, all of the assessments were made publicly available, and there was opportunity in the submission process for people to comment on those reports. According to the Consultation Report (NRW 2008), only a small number of submissions directly addressed the technical findings, with the exception of the hydrological modelling, as indicated by the table below:

Technical Assessment	Issue	Submissions
Hydrological Modelling	Modelling	2
	Data	2
	Improved hydrological understanding	195
Technical Assessment Panel	Methodology	0
	Report findings	1
	Data	0
Socio-economic assessment	Process	2
	Results	25
	Report	1

Table 6: Community Submissions on Technical Assessment

The high level of submissions on the hydrological understanding in the region was also reflected in the interviews as a cause for concern. Particularly with regards to determining the levels of extraction and the assessment of rivers, the paucity of the data and the reliance of non-tropical river models was described as “contentious”, particularly given the limited number of metering stations in the region and its highly variable rainfall and flow patterns. Participants recognised the limitations of existing knowledge with regards to tropical rivers, and the impact that this has on the capacity for the technical models to assess the outcomes of different extraction scenarios or changes in water and land use. Respondents also identified that the models used in the technical analysis had been developed in relation to temperate and southern rivers, and may not apply to tropical rivers. Several respondents felt that this was a

severe shortcoming, given that “the ecosystem in this part of the world is totally different”.

Tropical rivers are not understood, partially due to the fact that the area is remote, and partially due to the fact that very few people have any experience in tropical rivers. Unless you’ve seen the floods and the thirty years of change, unless you’ve seen, felt and been a part of these river systems, you can’t understand them. They flow differently to other rivers. The Gulf rivers run their own show. You can’t treat them the same.

No additional field work was conducted for the Gulf WRP, despite these concerns being raised by the participants, and there is no evident acknowledgement in the plan or the accompanying reports to indicate the need for future assessment or improved research. The WRP does, however, make provision for expanded monitoring and metering in the region, which according to the Department

will provide a valuable tool for assessing the effectiveness of the final Gulf Water Resource Plan ... [and] will also improve knowledge about the water resources and environments of the Gulf Country. (NRW 2006a: 3)

The lack of data was seen to compromise the quality of the technical assessments:

[There are parts of the Gulf region] where there is virtually no data, so what do you do? You’re limited to aerial photos and talking to people, trawling through the depths of the university library trying to find some information about these areas. So I think that’s a problem in the process in that there is no field investigations required or allowed as part of the process. That’s a change in terms of these sort of assessments compared to ones that were done a few years ago.

This decreases the levels of confidence of the community in the reliance on the technical assessments by government staff. This lack of confidence was reflected in concerns raised in the interviews that technical analysis, particularly the monitoring data and the modelling process, can be manipulated towards desired or pre-determined outcomes. Although participants were given introductory presentations on the nature of hydrology and modelling by Departmental staff (affectionately described by one respondent as “Hydrology 101”), one participant felt that the key issue with the CRP process was its failure to provide specific information about the hydrology of the region. Another thought that it was unsatisfactory to be “estimating discharge with such a small amount of information”. Some participants additionally felt that, although part of their role was to assess the technical reports, they were unable to challenge or critique the validity of the science.

Well, I just said ‘You show me the evidence’. The trouble is, they’re trying to generate evidence over a ten year cycle, something like that. The information is just not there. So if you try and do that where’s it end up? You interpret it the way that you want to interpret it, so the experts use that and we can’t argue with them because they’re experts. You can say a lot of things because of the position that you’re in, but if we say those things, and they say you don’t know what you’re talking about.

Most recognised that something has to be put in place for strategic management of the river systems, but raised concerns that there was no acknowledgement of the need for improvement in understanding, and the need for more data and research upon which future planning processes can be based. Four of the respondents expressed specific concerns that there was no consideration of how flows would be affected as a result of climate change – according to participants, this was not considered.

One participant expressed concerns about the appropriateness of the CRP as a means of review of the technical reports. There is an assumption by the Department that the CRP will contribute to a review of the technical reports, as a means to ensure local knowledge is included in the process.

Our expectations from the beginning was for a science-based process, properly conducted. Instead what you had was good science mitigated by bad opinion... In the end, you had a whole bunch of amateurs sitting around questioning the science, hoo-hahing the technical advisory panel. This waters down good science.

This approach was contrasted with the perspectives of the science providers, who acknowledged the need for the community participation to be carefully managed in relation to the science. There is a need for separation between the information used for decision-making, and the 'hot-button' community demands which may compromise the validity of the technical findings. In terms of the CRP, it was seen by the science providers to provide:

a basic opportunity for information exchange and there is acknowledgment and respect for each others areas of knowledge, and everyone knows where they stand, so that's probably okay.

Estimation of future demands, which was arguably the most contested information used in the development of the draft, was developed by the consultant based on reasonable assumptions and projections. The report drew on existing data sources from federal, state and local government, previous research and the previous regional planning processes, including those by the Northern and Southern Gulf NRM groups. This was also informed by local knowledge, particularly in the review of the report through the CRP. One of the complicating factors in this analysis was access to appropriately concorded data, and although technical report does align the existing data sets to catchment boundaries, longitudinal evaluation to observe trends over time is limited by the predominance of data at scales not conducive to catchment-level assessment. However, concerns were raised by the participants in terms of the appropriateness of the information in terms of articulating regional water demands:

They'd sat in an office and used the ABS stuff, which distorts regional and remote areas – you can't use it, it doesn't delve down deep enough to deal with remote communities. In the Gulf's river systems, that's what you're dealing with, so it's utterly meaningless. In fact, it is dangerously meaningless.

In general, some participants raised concerns about the reports not providing an accurate reflection of the region, and this was specifically raised in relation to the conditions in the Doomadgee community. One participant felt that there could be specific reference in the reports at some stage about the levels of poverty and disadvantage in that community, and the potential for irrigation development to address some of these issues. It was felt that many of the issues were not given appropriate level of consideration, and that the value of what was essentially a descriptive report was insufficient basis to determine the growth aspirations of the region. It was also held by several participants that the nature of the reports was overly focused on the negative impacts of development, without due consideration of the potential flow-on effects from alternative development scenarios:

All the issues they raised were all negative – there were no positives in there. And we kept saying, well if you're going to put those in, put the positives in as well, and be fair dinkum with the negatives. For the socio-economic environmental impacts – and we said fine, put the impacts in. But look at the benefits, so you get to weigh it up... We argued that they should be looking at the benefits and they kept saying no, no, no. We're only looking at the impacts. You can make anything not work by looking at only one side of the story.

What was clear from the interviews was that the respondents had wanted a much higher degree of ownership and input into the technical reports – in particular, the land and water assessment and the social-economic profile. As little research has been done in the region, these reports take on a much larger role for the community, and were seen to have a direct impact on, among other things, the prospects for future investment and regional development. As the reports would be available on the internet and in the public domain generally, participants were particularly concerned about the impact of blanket statements regarding the suitability of the soils for agriculture, or the future development potential in the region. In this context, it is not surprising that the interviews display a high degree of doubt towards the research methodologies and the findings in those reports. The conflict between the technical assessors and the CRP was a defining feature of panel meetings, and is considered in the section of this report on social process.

Indigenous knowledge was not included in the analysis. This was largely as a result of two decisions by the Department based on discussions regarding an Indigenous Engagement Strategy with the regional NRM groups and the Aboriginal Land Councils in the region. Firstly, on the basis of these discussions, the Department decided not to establish a specific Indigenous working group for the development of the plan, but to use existing forums, “such as land councils and arrangements in some regional natural resource management groups” (NRW 2008: 16). Secondly, the Department decided to concentrate on Indigenous contributions after the publication of the draft WRP. This was felt to provide the most appropriate context for meaningful engagement. Part of the difficulty that was noted was that in early stages of the planning process, the two Land Councils in the region were in a state of flux, and had limited capacity to contribute to water planning in addition to their core business of native title issues. Access to indigenous knowledge is subject to issues of cultural sensitivity, which highlights the need for direct consultation in identifying the potential issues for Indigenous values with regards to alteration of water flows and associated changes in land use. One respondent reiterated the need for community consultation, and to move outside of the claimant Traditional Owner groups in identifying relevant Indigenous knowledge:

We have some underground wells in this area, and it would have been beneficial if they'd come and talked with the older people – the men I'm talking about... We need to get other people involved, outside of the Traditional Owner applicant groups, because there are other old people that do have knowledge of the underground springs and wells.

The limited use of indigenous knowledge is part of a general issue with regards to Indigenous participation generally, and will be addressed in Section 3.2.

A number of respondents felt that local knowledge was not being afforded the same degree of consideration as the technical assessments by the agency. This was not

only local knowledge about water use and demands, but also technical information that had been produced by the panel members themselves specifically to inform the plan. Three of the interviewed stakeholder groups had actually commissioned and funded independent assessments to inform their submissions and their contributions to the CRP. Other information had been sourced from previous planning processes in the region, particularly the Gulf Regional Development Plan, and some of the people involved in those planning processes were present on the CRP. Amongst the panel, there was recognition and mutual respect of the value of local knowledge, “because it’s such a vast area, we rely on each other’s knowledge, and we respect them for that”, but there was concern that this did not carry over into the government reports. Participants suggested that the government was relying on generalised studies, incorrect information, or information based on outdated reports, and yet were not amenable to CRP attempting to rectify these mistakes. It was also suggested that in some instances, the Department was open to the community correction.

We had a soil study that we’d already paid for that we put up for consideration for the plan – that wasn’t referred to for a while. They kept referring to back an old study that they had done around Maxwellton that showed some salt, and they kept bringing that up so we clarified that. So there were cases where they would push information that wasn’t correct. But we went through that.

That was the thing, right from day one. We’d get together in groups to say what we wanted as an outcome of this plan. And one of our group said if these are the outcomes, but for all of the inputs, we want the right science, with no bull attached, and you fellas look at it properly. But later on as we went through the day, they had a map there, which was a just this generalization, no good for irrigation. Salt issues. Non-arable land they kept saying.

It was acknowledged, however, that the government agencies may need to justify their decisions in a legal challenge, and respondents understood that the difficulties in justifying decisions based on local knowledge rather than by verifiable technical data. However, this does lead to people feeling disempowered and de-valued by the process.

To be fairly frank, it’s got to the point where we feel George Street doesn’t listen to what we say. It’s a waste of our time going to George Street with our concerns. They’re not interested in hearing us. I could show you things that basically say, we don’t really care. So where to? ... This is the only other option we have at this point, to make this a political issue... Or you accept it.

...

I think there was a lot of dissatisfaction, and a lot of people thought ‘what is the point of being here?’ There was a lot of that after the first meeting, a bit of doubt about the process.

...

The community has given up with respect to being engaged. They don’t feel like their local knowledge is taken seriously. And they don’t feel like anything can be done...People feel disempowered by not having their knowledge valued.

...

They said thank-you very much for your comments, and probably threw it in a waste-paper basket.

...

It was always us against them. You got the feeling that the government, they just had it written, and this was the outcome that they were going to give us, and they were trying to convince us that this is how it should be, right from the very first meeting.

...

the technical people probably had their mindset a bit. That's because they've got it all worked out on data and they can see it all there. But the best value out of that was that the technical people really wanted to know what we wanted. What do we foresee as the best option for us....I think the role [of the CRP] is to provide the government people with expectations of the community, what they want to do with the water. That's the most important part... It is all about striking that balance.

...

I don't think that the science they came up with was necessarily wrong, I wouldn't be prepared to say that. But it's all in the interpretation and how the information was then used...

It was also noted that some of the information provided by the community, especially the estimations of demands, is often not informed by the science, or the science is deliberately misinterpreted to justify the community needs. One participant identified that whilst "unfortunately, the Department have got to put up with some of that", there was a role for the CRP in the form of peer review:

That's just got to be put down by their peers, which is us.... And that's where you've got to have people speak up and say what they believe, otherwise they'll just sit there, and go away and feel as if they've been cheated, because someone has been strong and volatile and spoken up about what they want. The government can't always immediately respond – they have to take it all in, and then go away and work out if it is possible. But other people on the panel can, because they're in the same business, and they can say, hang on a second, you can't do that, you've only got to look on the DNR website to work out how much water is where.

One noted aspect of information that was not drawn upon in the development of water resource plans generally was information provided from industry, particularly from trials of individual landholders. However, industry respondents noted the difficulties in providing farm-level data to inform planning processes, which was described as "politically loaded". Whilst certain industry groups have access to data and information that they recognise as being useful for improved planning, some were "nervous" about providing that information, given that it was not necessarily gathered for the purpose of being included in a planning process, but also concerned about providing that information to the same agency that monitors aspects of compliance with regulation.

Its tricky for growers, because on the one hand they knew that the data was useful, but also felt that it was dangerous to give that information to the department.

4.2 Collaboration as a Pathway for Social Process

Representativeness

Due to the specified role of the CRP, the composition of the panel is pivotal to the quality of the engagement process. The composition of the CRP was sector based: in the words of one participant “everybody had a reason to be at the table”. In accordance with the legislation in the composition of the CRP is intended to reflect the social profile of the community, and also to be geographically representative. The diversity of the region meant that there was a need for significant diversity on the panel, and in the end it consisted of some twenty-five participants. Participants indicated in the interviews that, in general, the CRP was considered to have the right people involved, and an appropriate mix to represent broadly the range of community views in the region. To some extent, the CRP panel was an identified compilation of ‘civic leaders’ with a particular high level of awareness and understanding of the region and its resources. At the same time, it was felt by some of the participants that the even though the CRP was a very large group, there were still some important interests missing from the table, particularly a greater presence of mining interests and other industry representatives:

Although there were twenty-five people sitting around the table, there wasn't adequate representation. Because it's a huge area, an enormous area – there's no way in the world all of the interest groups were represented.

The CRP composition would have benefited from a local person representing the environmental interest, and in interviews the environmental representatives discussed the difficulties in their experience as the “token greenie” in the region. Local panel members also disputed the positions advocated by the environmental interests due to their limited experience in the region.

There were no greens from the local area, and that was a sticking point for us. We have no problem with greens being involved, from Landcare or any other group you can name, but why are you bringing people from the east coast, with their own agendas, who don't live out here, they have no intention of living out here, they just want to stop [development] because that's their wont?

In order to identify the appropriate person, the Department contacts the peak conservation organisation, and invites them to select appropriate members. In this instance, there was no specific person in the region who was identified as representing conservation interests – although other members on the panel disputed the extent to which they could not have represented these concerns. As one put it:

We're all conservationists up here. We wouldn't be living in the bush if we weren't.

The composition of the CRP should be considered in light of the fact that, despite the extent of the planning region, there was a limited number of people who would have the required knowledge and capacity to contribute effectively to the process. Interviewees recognised that these people are frequently called upon, and forced to wear “many hats”. In this sense, the people at the table were possibly the most appropriate for the achievement of the requirements of the CRP. However, this limited capacity was highlighted as being especially inequitable for Indigenous representation. It was pointed out that the Indigenous population of the region faces

“an overwhelming demand for involvement, which places a high degree of stress on an under-resourced community, who are simply unable to meet that demand”.

Although some members called into question the extent of their knowledge about water planning, the participants generally displayed a high level of knowledge of the region and of its water resources. In terms of the understanding of the CRP members about their role and the purpose of the involvement, most indicated that this was communicated effectively by the Department through the Terms of Reference and also in presentations at the CRP meetings. It was felt by one participant that there was more time spent on establishing the process than there was on discussion and debate around water policy scenarios.

Indigenous Engagement

Interviews with representatives of the Indigenous community and with CRP members indicated that Indigenous consultation for the plan was widely regarded as highly inappropriate, and showed a lack of understanding of protocols for engagement. The highly bureaucratic and technical nature of both the process and the discussion was not considered to be conducive to effective indigenous representation, and there was no opportunity to feedback into the process in a way that prioritised indigenous values. This was recognised by some members of the community reference panel, who indicated that they had attempted to speak on behalf of Indigenous interests:

Some of the indigenous groups really didn't get to have their say, but they were fairly well protected by the people that were on the group, by the rest of the people on the panel... But in saying that, the people who are up here have a good handle on what [Indigenous groups] were looking for, and they got protected as much as possible, and there's really nothing in the plan that would endanger anything that they would want to do.

Whilst noting the good intentions behind this, it is no substitute for appropriate engagement. The structure of CRP meetings additionally precluded Indigenous participation, through a lack of attention to appropriate cultural protocols. For example, as one participant identified, holding two of the three CRP meetings on Kalkadoon country made it impossible for a representative from a different region to speak on behalf of country and its water resources. It was also observed that the area defined as the Gulf for the purpose of the WRP had no correspondence with the accepted Indigenous delineation of Gulf country.

Concerns were raised by the respondents about the nature of Departmental interactions with Indigenous communities generally. Currently, high capacity individuals are frequently called upon to be involved in a wide array of policy discussions relating to natural resources of the region, and this tends to overwhelm their capacity to contribute. Isolation was seen to be a particular issue, and the need for face-to-face communication was also highlighted. In addition, community presentations to Indigenous groups were not tailored to the audiences, and relied on or assumed a high level of knowledge about water science. Tailored presentations for Indigenous communities were not developed, and although the planning staff did attempt to explain the plan and its implications, the presentations offered were generally more suited to irrigators and local government staff. One respondent indicated that although the Department did emphasise a commitment to Indigenous participation, measures such as the inclusion of specific names for river systems

could be part of actualising that recognition and acknowledgement of Traditional Owner values.

Limited effort was made to incorporate Indigenous knowledge and values into the WRP process, and whilst this is a failing of water planning nationally, it is not due to the absence of precedents or established practice. Developments in the field of cultural resource management, for example, have established procedures and processes for ensuring cultural values and heritage are assessed and protected on a case-by-case basis. One interview respondent felt that these processes were available for NRW to incorporate into the WRP process, and that “the vehicle is already there”. These include community consultation, data management, site assessment and management strategies, and the Gulf Development Plan indicates that these mechanisms exist in the region to “assist to identify and protect cultural heritage values in any situation where there is a change of land use or potential for impact on cultural heritage places” (GRPAC 2000: 50). Emphasised here is the need for specific consultation strategies and engagement at a local level, because as one respondent forwarded, with regards to respect for country and the relationship between practices for caring for country: “It is unwritten, it is unsaid, it is just known.”

The reliance upon Land Councils as a conduit for indigenous engagement was also seen as problematic. These organisations are established under a tight funding ambit centred upon the resolution of Native Title claims, and issues which are seen to involve land and resource management must be carefully managed by these organisations so as to not operate outside of their funding arrangements. The workload of these organisations was also a limiting factor for their involvement, as Land Councils in general have taken on much of the work around engagement with Traditional Owners. This means that Land Councils have to carefully manage their resources, and also operate selectively and strategically in terms of what they become involved in. Another noted aspect of Indigenous engagement concerned the diversity of capacity of Traditional Owner groups in the Gulf region, and whilst some are well organised, there are others which do not have as much capacity, and access to these groups is extremely difficult.

For Indigenous respondents, their participation in water planning was seen as part of a commitment to environmental management responsibility, but also extended especially into other areas including the protection of natural, cultural and recreational values.

We have a lot of recreational activities and that, people go camping, fishing, taking the kids and teaching them. And with our bush tuckers and bush medicines, we don't want those springs to dry up. We want to be able to protect them...

In addition, though, respondents expressed a desire to understand more about the WRP process to identify the possibilities provided for Indigenous peoples in areas such as knowledge and capacity building, employment opportunities and the flow on social affects. The Doomadgee Council, for example, had identified a population increase in the region, and were particularly interested in the possibilities for industry development through water extraction. The relationship between cultural heritage, environmental protection and community development was articulated by one respondent:

Land is precious to us, that's the mother, that's the identity, that's all about caring for country. And obviously cultural heritage is linked to that, but its more than that, its about an educative process and its about building the capacity of everyone in our community to have an understanding of how to utilise all of the resources on country to keep it sustainable.

It was indicated by several respondents that that governments are well intentioned when it comes to indigenous engagement, but often are not adequately resourced to undertake the required consultation, and are more likely to respond to the demands of sectors with well-organised representation, particularly in the north-west region. The resource requirements of indigenous-specific engagement, including travel expenses and staffing, are high, and it may be that when agency staff are made aware of these requirements they are less inclined towards appropriate engagement.

Incentives for Participation

CRP Panel members all expressed that there was sufficient incentive for their participation in the first instance, and the reasons were generally linked to professional, economic and political objectives. For the environmental interests, for example, building community acceptance of Wild Rivers and other recent environmental policies in the region was a major reason, but also their political objectives with regards to preservation of natural systems, and building relationships within the community. Members from the Councils expressed their responsibility in terms of the representing the needs of their local communities; industry representatives in terms of their members and shareholders. For a number of the local landholders in the region, they were concerned that they would be personally and financially impacted by the outcomes of the plan, and they expressed direct concerns that few other members of the panel would feel the affects of the outcome to the same degree. Most of the landholders on the panel had self-nominated, out of concern that without their presence, the potential demands of irrigated agriculture in the region would not be raised.

A large number of participants were keen to participate in the water planning process, and the awareness of its importance for the region was identified by many as a significant motivation for involvement. At the same time, however, their participation was subject to verification that their contribution would be valued, and not used as a “rubber stamp” to progress agency expectations. Some saw their key motivation as “facilitating the voice for real people in the region”:

It would be impossible for us to speak for everyone. But by facilitating involvement, we try and ensure that the person on the ground that has to live with the decision *can* live with that decision. It is extremely difficult to not have the total experience of an issue and to then act for that issue.

Panel members in particular noted that the level of accountability in acting for the region as its representative, and identified this as a key motivation to contribute to the process.

Within the broader community, they know that you're on there, and they expect you to do it.... People are out there working, and they expect you to make decisions that will suit them and be in their favour – you can't always do that, but if you can't, they expect that you can explain to them why. I think the reference panel was a very similar set up. People knew who was on it, and they represented a group of people whether they be irrigators or local government or indigenous groups or whomever that may be. So people recognised that was fine.

For some individuals on the panel, the decision to be involved in the process was considered against the risks of not being involved. Respondents reflected that non-involvement may give rise to decisions that are not in their interest, but also recognised that continual call for participation in planning processes can create issues of planning fatigue for community members who had the sufficient capacity.

Conduct of the Engagement Process

The CRP process was regarded variably by the participants, with some suggesting that they felt that government had a preconceived notion in the process as a “tick a box process”, and another describing the meetings as “scripted”.

You rocked into Mount Isa, you had a meeting, you had a dinner, you had meeting on the morning on the next day, and then hooroo everybody thanks very much. That was it.

Although the individuals representing of each of the sectors varied over the course of the three meetings, sector representation remained consistent across all meetings, with attendance ranging from 25-30 members. The process was facilitated by Departmental staff, and consisted largely of presentations by government staff and technical consultants. Interview respondents suggested that these presentations tended to be interactive

in the sense that... there were usually a few red-hot issues that the community wanted to get across. So, the first five or ten minutes might be a one-way presentation, but there is a fair bit of banter going on. It's all structured though, and it becomes a bit more of a question and answer session, punctuated by slides. So, there's certainly no barrier to that kind of two-way communication.

Small break-out sections were included in the agenda to discuss key issues. A field trip to an irrigation farm in the Richmond region was also organised as part of the process. Although panel members were able to prepare information to be made available for discussion at subsequent meetings, there was no formal interaction between panel members between meetings. Although the participants recognized the value of the break-out sessions, these were generally regarded as a failure, and inappropriate for the participants.

It was facilitated and it was fairly controlled...Everybody just sat in a big ring at the tables around the room, and you had twenty-five people, quite a crowd, so the capacity to take a topic or an issue, and then give a group of people the opportunity to debate and work through the issue, and then report back to the larger group with a general debate – that just wasn't there.

Different levels of experience with previous WRP processes were evident for some participants in the conduct of the meetings. One participant noted that the environmental groups were pre-prepared, which created suspicion amongst the panel members there had been collusion from the outset. Others indicated that the meetings themselves provided little to no opportunity for meaningful engagement. Those who were satisfied with the meetings expressed low expectations for government engagement process, and that these expectations were achieved. One commented that they found the process “incredibly frustrating” due to the lack of progression in discussion, and that ultimately it consisted of “meeting after meeting going nowhere, with the same people raising the same arguments.” However, the

conduct of the meetings did provide an opportunity for the diversity of views to be expressed, and again this was seen as a positive process.

It gave some of the regions or subregions an opportunity to voice their views and opinions. And in that sense, it was an interesting process, because you had those wanting development and cotton production sitting beside environmental interests groups, which was the last place that either wanted to be. It was quite clear that certain groups wanted more water, and the environmental groups wanted no water to go out. You had those two extremes, and some of us in the middle saying, 'fellas, let's sort this through.' But there was never going to be any agreement anyway.

...

I think we could communicate sufficiently well to get our message across. I think everybody got an opportunity to put their message across. Some of the people that may not have felt they got their message across, I think other speakers covered for them. Some people on the panel didn't attend often and didn't say a lot when they got there. They may have found it a bit daunting, and that's understandable, if you're not in public life a lot, you can find it daunting if you're a private individual and you're selected to go on one of these panels, you've got things you think about.

Frequently noted in the interviews was that the staff involved did make every attempt to actively facilitate the community involvement in the CRP process, but they were constrained by the process, which was seen to emanate from decisions made at a senior level. This further substantiated the belief that the process was designed to garner community agreement for decisions which had already been made at a senior departmental level:

What I was hoping to see was genuine community engagement and proper consultation – and that never really occurred. It was a very scripted process that they had and very controlled, and the people that were on the ground and ran the meetings had their hearts in the right place, and they really did try, but they were controlled by the Minister and DG or whoever, and they were very much under the thumb themselves.

One respondent noted the difficulty in conducting community engagement processes, and identified that the staff involved in water planning are not generally skilled at facilitation or community engagement:

From a general perspective, and I'm not referring to the specific staff involved in this plan, but from a general perspective, the departmental staff aren't overly skilled in that line of work, they are tightly resourced, they have a lot of jobs to get done. The department staff do genuinely try to gather the views, but their skills in doing that [are limited], and then how you then translate those demands into the technical outcomes of the plan?

Concerns were frequently raised about the planning process not being linked to broader regional planning, and this theme was raised time and again in the interviews. Participants thought it was inappropriate that they were requested to indicate levels of desirable water development in isolation from broader consideration of the needs and aspirations of the community as a whole.

I think it would have been improved if there had been greater opportunity to look at the whole forward planning for the region, the whole economic, social, community planning, and link it to that. But there was none of that. It was a very technical process. They paid lip-service to trying to bring in the whole community and social stuff, the economic development stuff, but there was no opportunity to tease that out and get it incorporated into the plan.

Social Capital

The conduct of the panel meetings related directly to the development of improved relationships amongst the panel members. Respondents noted that the nature of the process allowed minimal scope for building trust and understanding between members of the panel – one respondent noted that even after three meetings they were not even sure who the other people were. It was felt by some respondents that the time in the meetings could have been usefully spent creating improved understanding of the different needs of interests and regions within the area, and one respondent spoke of the value of building pride in the CRP as a means to diminish some of the confrontational aspects of the approach. The lecture-comment approach was seen to create more conflict than to achieve improved levels of understanding between participants:

Instead of somebody sitting up the front giving a Powerpoint presentation saying, 'There, now you've got the information, see you later', there should have been greater opportunity for the interest groups to actually start to collaborate and get to talk to each other and get to understand each other's issues. There wasn't any of that – it was a confrontational approach in some ways.

...

It left people diametrically opposed to one another, and placed people in positions of conflict rather than trying to understand views.

Respondents noted that the nature of the process forced participants into adopting caricatured positions, as a clearly articulated position was more likely to be reflected in the reports and advice to the Minister. Participants increasingly advocated for their individual agenda in the process, which eroded potential for collaborative agreements between participants:

Everybody stood on their patch and supported their patch, but there was no way in those meetings to bring people to a better understanding of those needs and concerns and those sort of things. They were too short, and too controlled.

This also meant that ingrained attitudes were magnified, and this was expressed most fervently by the environmental interests, who believed that they were operating from a position of negative credibility from the outset. This was evident, for example, in the description of a situation where a representative from the conservation sector was described by the Government staff as "a Green":

It didn't help lessen any of the ways that we would be described by the group or be pigeon-holed by the other panel members. We even had a bureaucrat come and call us the Greens, instead of an environment group. Something as simple as that shows that there are some ingrained philosophical differences that need to be cleared up with the people presenting at the start, so you don't continue to fuel this terrible feeling of us and them, and that's a real shame, and a pain. And then you have to correct them, and everybody laughs, 'you kind of are the Greens'. And that's sad. Because there's so much more that goes on here, and so much more that I could continue to learn from the other stakeholders as well. It would have been good to break down the barriers by introducing who we were, and how we operate. We didn't have that – it was very much you are in that pigeon hole, and you will say the same old things.

Although efforts to build relationships between the panel members were frustrated by a lack of trust and a lack of time allocated in the panel meetings, this was not seen to be a problem by some of the participants. As one interviewee put it plainly, "I wasn't

there to play nice. I was there to get results.” Another interviewee suggested that such mechanisms were unnecessary, because all of the panel knew each other, and even though it covered a large area, there was a high degree of social capital amongst panel members in the region to begin with.

In the region we live in, everybody looks out for each other - we need everyone to be doing well, we can't take from one. We all know each other, up here. I know plenty of people right up to the Gulf, and they know people right through the river system. Even though it's a vast area, there's not a lot of people living in it. And most people know of or know people on the panel – you soon get plenty of feedback.

Outside of the meetings, some opportunity for improving collaborative relationships was provided through community interaction in the development of the technical assessments. Some of the TAP members did undertake field trips to the region, and included opportunities in that research process for linking with landholders in the region. However, as one member of the TAP identified, the contribution to the overall quality of the technical analysis is ambivalent:

We actually had a couple of field meetings with Northern Gulf NRM group, I think we had a joint barbeque one morning, which was quite good. We were certainly able to set up some good links there, and I remember one of the property owners invited us back to their property a couple of days later as we were passing through the area. So that worked out quite well. But again, we didn't get down into the nuts and bolts of the detail, it was more of a meet and greet.

Respondents noted that there is a need for those involved in the plan development to gain credibility with the community, and especially with the CRP. Insufficient time was spent by the Government staff in the region, and respondents felt that much of the planning took place from 'Head Office'. It was this perception that led to misgivings amongst respondents about the level of understanding of the region reflected in the plan, but created much of the antipathy in the panel meetings between the community and government agencies. To facilitate a process as envisaged by the water planning guidelines was seen by several respondents to require the building of relationships with the community, and in the isolated region of the Gulf it was suggested that “so much relies on face to face discussion”. One participant felt that without spending more time in the region, it is impossible for the government staff to understand what is actually being said in the context of the panel meetings, noting that for the community “it's not just about feeling valued but being actually valued by the process”. Without devoting significant time to understanding the context of the region, government staff were not privy to what “is really being said in the meetings”.

Champions of the Engagement Process

One of the expectations for panel members is to actively engage with stakeholder groups and the general community to circulate information about the planning process and ensure that the diverse range of interests is communicated back to NRW. There was also an expectation that CRP members would input and advise on the communication and information requirements of the constituency, and to advise the department on proposed public consultation strategies. A number of participants pointed out that this expectation, whilst possible for some members of the panel, was unreasonable for individuals or low-resourced groups. Nor was the structure of the CRP set up to facilitate this feedback.

We had very few meetings, three, hardly enough. And there was no capacity after the meetings, although they might have expected everybody to do it, to feed information back into the broader community and then get feedback from them and get in into the whole process. There was no set-up to do that.

Participants were provided with reasonable out of pocket expenses incurred from attending meetings, including transport, accommodation and meals in accordance with the departmental standards on reimbursement. But this did not necessarily take into consideration the lifestyle and vocational commitments of community participants. This did not also take into consideration the difficulties in acting as a facilitator for Indigenous community representatives, who are working with a highly disadvantaged community, to the extent that, as one respondent put it, “some of them are flat out getting a telephone”.

In this regard, The Wilderness Society (TWS) and several of the local shire Councils did take on a much more active role in getting feedback and assisting their respective constituencies to engage in the process. Both TWS and the Flinders and Richmond Shire Councils developed form letters to assist their members and communities with writing submissions of the draft water resource plan; the extent to which they were successful in this regard is reflected in the number of submissions. These groups also kept their constituencies updated on the plan development. To some degree, it was assumed by the Department that the NRM bodies would take on this role of facilitating wider community involvement. Whilst both groups actively promoted the WRP process through newsletters and their meeting updates, they did not consider this part of their responsibility. Rural industry groups expressed concerns over the notion that regional bodies should act as surrogate mechanisms for surrogate engagement, and recognised that whilst regional bodies could provide a conduit for a range of interests, they are not appropriate organisations to represent those interests. This was also agreed by the regional body staff interviewed, who recognised that they could operate as a means to access the community, but were not suited to represent the interests of the region.

There is an expectation in the community that regional and local planning processes conducted by government agencies and non-governmental initiatives will be consistent. Community time and resources are frequently called upon to contribute to planning processes, and the lack of integration across planning instruments contributes to scepticism and mistrust about the purpose and value of community input. As with most regions across the state, the Gulf region was subject to a number of prior and concurrent planning instruments that had implications for water resource plans:

- Mt Isa – Townsville Economic Zone
- Northern Economic Triangle
- The North West Queensland Development Initiative
- The North West Queensland Community Benefits Strategy
- The Multiple Use Strategic Plan
- The Northern and Southern Gulf Regional Natural Resource Management Strategy plans
- Gulf Regional Sport and Recreation Plan
- Gulf Savanna Integrated Regional Transport Plan
- Gulf Regional Development Plan

The preponderance of planning creates often acknowledged difficulties for alignment and consistency in objectives, strategies and outcomes, but less acknowledged is the level of 'plan fatigue' for the community. This is especially pronounced in the Gulf region, which due to its low population tends to rely heavily on specific individuals to contribute to these planning processes. Respondents suggested that a mechanism which enabled local champions to be identified and resourced could serve as a means to improve the process; "at present they [the government] just hopes they do it on a voluntary basis."

The wider issue of integration and alignment relates to the extent that the water plan was viewed as a stand-alone process that was not tied to regional planning as a whole. This was frequently raised as a concern by participants. One participant in particular was outspoken on this issue:

I think that it can come into the whole regional planning process, when they start to look at revamping the Gulf Regional Plan... If you do your regional planning properly, you bring in your whole community, economic and environmental aspirations and everything like that, and that is when the whole water resource planning should be revisited. So that it sits in some sort of context. This was a water resource plan for the Gulf, totally out of whack with regional planning processes, it was a stand alone study of 'let's look at these river systems, let's see how much we can get out of them or not', and that was that. Whereas if it had been part of a regional planning process, it would have had a context. How do you decide how much water if you don't know what for? ... Let's look at it as part of a regional planning process, even if they have to scrap what came out of the ten year plan. It has to be made more meaningful to community and futures and future planning rather than a stand alone look at river systems. A lot of work that they did would still be relevant, there was a hell of a lot of technical data that was produced, but let's link it back to a more holistic approach to future usage and what the needs might be, and to do decent analytical studies on what is the demand, what is the potential? You need to do that in a regional planning process, not just a water resources study.

This issue was framed differently by the advocates of irrigation development in the region, who cited that the water resource plan was excessively based on historical water use development, and unable to take into consideration the larger issues of regional development. Respondents noted a reluctance by the planners to consider the wider impacts and benefits to the region derived from water resource development.

The thinking is historical. It's not visionary. Right through the whole government. And their vision is not real flash.

...

It's not just water for irrigation, its community building, taking the pressure off the coast by providing other resources. But they don't seem to work that way. It's a closed mind they've got.

...

For us, water is the gold that can create the future for us.

Communication Processes

The variety of communication mediums used by the Department in an attempt to gain widespread and diverse community feedback was noted by the participants, although many raised concerns about the appropriateness of that information for the rural and regional audience. It is worth noting that the wide range of reports and information

packages produced for the plan were made available in a range of formats by the Department – including large-print and audiotape versions on request. The extent of communication with the wider community was considered to be well-intentioned, but generally regarded as ineffective beyond raising awareness of the existence of the planning process. Information was sent to a large number of stakeholders in the region, but as one respondent noted that there is a tendency for such information to be ignored, or dismissed as “more crap from government”. The approach to communication was seen to display a fundamental misunderstanding of what was described by one participant as “bush culture.”

The sharing of stories is so important. People don't just want to receive paperwork. They want to know why: 'what does it mean to me?' It has to be communicated so that people can decide for themselves whether or not they're interested.

However, the large number of submissions on the draft plan in addition to the form letters produced by some constituencies, indicates that the decision by the Department to utilise existing information channels was effective to some extent. Interview respondents cited that they relied on information from local government and from the regional NRM groups more than the communication from the Department. Respondents also disputed the level of understanding in the wider community about the implications of the draft plan.

In terms of the communication methods within the CRP process, two major issues in communication were frequently cited. Firstly, respondents noted the lack of communication between panel members between meetings – this was compounded by the limited number of meetings and the large elapse of time between meetings. The second major concern was the manner of communication of the technical material. Respondents noted that they received large amounts of technical information shortly before, or even on the day, of the panel meetings, and were not given sufficient opportunity for consideration, review or to elicit feedback on the findings. Respondents also suggested that the high level scientific information contained within the reports was not well communicated by the Department, and that additional effort should have been made to communicate this in “layman's [sic] terms”. The value of Powerpoint presentations was particularly critiqued as an appropriate means to communicate complex issues.

There was no real communication between meetings – you'd just receive volumes and volumes of technical information or you might get that just before a meeting, with limited capacity to absorb it all, or work out what it all meant, especially the technical stuff.

...

It was an information dump – especially the technical stuff, subsurface water flows and all that, and understanding the scientific impact of what all that information meant. It was quite hard, actually. It was a very technical process, and yet there wasn't any real attempt to put it into layman's terms so that you could understand what it was all about. So you tried to do a bit of work before the meetings, or you rang the planning officers to ask 'what the hell is all this about?'... It was an information dump, and you either swam, or didn't.

...

You had to really know what sort of questions to ask, to tease out what information might have been relevant to the community or to an industry,

so really in terms of the whole process there is probably an expectation that the technical knowledge of the people sitting around the table would be higher than it actually was.

...

I always wondered if it was a plan of government to bombard people with information and then desensitize them to some of the information because it is bloody hard to understand it.... I would wonder who out of this room actually understands what is being said. You'd have people sleeping during the presentations, and people dozing off. There's got to be a better way to get input from everyone involved, and that data out to people, rather than here's the report, what do you reckon. Because people don't read it, and people just glaze over when the science is presented.

...

They're paid to sit down and read it all, whereas, it would have taken so long - I'd get to end of chapter one and that'd be it, it'd be put to one side. Because it was all high level, scientific reports, not put in basic style that was going to show us where they were coming from. We had our idea, they had their idea, and they made sure that they baffled us enough to push their idea through, and even if we had got our idea across, the report was already written up anyway.

...

You'd get a thick report that you were supposed to read through, and all the professors from the universities, it would be night-time reading for them, but you can't do it – baffle them with bullshit is the expression that comes up for me.

...

He'd come in with a stack of papers which we'd get not long before the meeting – how I am going to read all these, he'd say – and we'd sit down and have a quick flick and say, jeez, there's some weird information in here, where did this come from? They'd say this is all the expert stuff. Well, it's from the experts, so I guess it must be right...

...

They snowed us, they totally snowed us. And the level of technical data was such that you thought far out, how can you absorb all this? And how can you contribute a meaningful comment when you don't know enough

Respondents made a number of suggestions to improve the process, such as the production of a newsletter, regular e-mail discussions, or the production of forms that participants could use to get feedback from the wider community. Some respondents potentially over-exaggerated the lack of communication with the Department between meetings, as Departmental staff did make themselves available for assistance.

I used to contact [the planning staff] outside the meetings to pick up on the implications of certain findings, you'd try and read this technical stuff – I would just talk to her about what are the implications were... via email. That helped me personally to understand what it all meant, because it was highly technical some of that stuff. And if you didn't have any prior knowledge of what it all meant, a river is just a place you sit beside and think, gee that's nice, look at the water. There's a bit more to it than that. That feedback certainly helped.

Information was supplied to panel members throughout the process, via email and post and included minutes of the meetings and the drafts of the CRP report. What is more apparent, though, is the extent to which interaction between panel members

was not facilitated – this could have provided some opportunity for building a greater degree of collaboration between members of the panel.

Departmental staff also communicated directly with key stakeholders, but due to limited resourcing and the logistical difficulties of travelling around the plan area, direct engagement with stakeholders was fairly restricted. As such, direct engagement tended to focus on current water users, or those who would be directly impacted upon by the outcomes of the plan. These respondents found the communication methods of the Department commendable. However, such an approach cannot take into account the extent of the potential users, or provide the wider community with the opportunity to discuss future possibilities. Stakeholder identification was based on what one participant described as “looking into a crystal ball, and a murky one at that”.

I think they communicated quite well, they came and addressed us after they got our original submission, and we had discussions in the Townsville office, then we went down to Brisbane when they called a discussion with Policy and Legal and got us to go down for that. They made visits to Mount Isa and [the project staff] came over and kept us updated.

...

We didn't get together probably as regularly as we should, but we did maintain contact very closely while we were trying to drive the process to where we were hoping to get to, and then Department took the foot off the accelerator to a certain extent.

One respondent identified a glaring fault with the policy for water planning insofar as only written submissions are accepted for consideration by the Minister in the development of the plan. Although the planning staff organised workshops and public meetings around the region at various stages of the WRP development, any discussion arising from that was only taken into consideration if included in a written submission. In general the submission based approach was seen to alienate participation of the rural sector, and regarded by the respondent as particularly disadvantageous to Indigenous people.

Conflict Resolution

Conflict in the CRP process remains relatively latent. Although there are a number of competing interests and views presented, and often passionately, the absence of a requirement for consensus meant that conflict within the process was not overt or expressed. Respondents referred to the professional and cordial nature of the conduct of panel members, such as: “everyone was treated with due respect”; and “we're all professionals at the end of the day”. Respondents noted a much higher degree of conflict between the panel members and the technical consultants, and for one respondent this was created by the nature of the process:

The biggest mistake that was made in the process was to go to water users in the region and ask them ‘how much water do you want?’ So straight away the process was not based on science, just the expression of demands. From the first meeting, this created expectations of the bureaucrats to either deliver on those demands, or to justify why those demands could not be met... It meant that the departmental staff were working backwards from the expectation that had been built.

As participants were not competing with one another, the major source of contention the validity of the technical information. Contestation over the imperfect nature of the

technical data was frequent, especially where panel members felt that the government was using the technical information as a basis to undermine the legitimacy and validity of their demands. The major concern was framed in terms of the equity of the process, as respondents felt unable to respond what they regarded as inaccuracies in the scientific information that was being used:

Salinity issue was another one we had a lot of issues with. In every report which came out, whenever they wanted an excuse to say irrigation shouldn't be happening, they'd say look, salinity is bad in this area. We asked them how they knew this, and they said we've done the studies. I said great, give us a copy of the studies. Then they came back, and then they said we did some high level studies. Then it became we did some high level studies in a few locations. So everything kept coming back to less and less information. I said that I'm happy to accept there is salinity, I'm just asking where your information came from.

...

That was the thing, right from day one. We'd get together in groups to say what we wanted as an outcome of this plan. And one of our group said if these are the outcomes we want, but we also want good inputs too – we want the right science, with no bull attached, and we want you fellows look at it properly. But later on as we went through the day, they had a map there, which was a just this generalization, no good for irrigation. Salt issues. Non-arable land they kept saying.

This conflict was prevalent within the conduct of the meetings, as indicated by two respondents:

I think a lot of the time the people presenting got a bit of a hard time, like with the social-economic report. They got whacked around by people on the CRP who didn't believe it, and started asking where did you get your data? They didn't agree with the findings, "Everyone's leaving the towns? That's not true..." It almost got to the point that it didn't matter who was presenting what in the end, no one was going to believe anything. So, that's a problem.

...

[The technical consultants] start off from a position of very negative credibility and ... [are seen as] blow-in consultants who wouldn't know a bit of black soil if it hit them on the head, sort of thing.

Interviewees additionally noted that the conflict between panel members was not as apparent as the conflict between panel members and agency staff, and between regional agency staff and those from 'Head Office'. One participant described the process as individuals "all trying to get the most water for their community" and exercising "overwhelming force against junior departmental staff who were trying to please everyone. The staff were fairly young [and some participants] disputed everything that they said". Another participant noted that:

Some of the bureaucrats looked like they really didn't want to be there, you could tell they hated that part of their job. They were under a lot of fire, and it can't be a nice place for them to be, with some people really questioning what the government was doing.

...

There were some of us that just rolled over because of the way that the representatives from Government behaved – you'd bring up a point to try and get an answer from them, and they'd sort of get wound up and want to beat you on the head type thing.

...

We got information pushed down our throats by the bureaucrats, and they seemed to control this whole water resource planning process, without really letting the people have their input. It was all lip service I had plenty of arguments with the [water planners]... who started to lecture, at a public meeting, started to lecture the graziers about what they should be doing.

The other conflict was related to the relationship between regional staff and staff from Head Office. In this regard, the “George Street bureaucrats” that were present at the meetings were seen to have a high degree of knowledge of river systems and water policy, but also to lack an understanding of the needs of the “rural sector”.

the regional people seemed to be at odds with the corporate, Brisbane HQ people, in terms of how the system works, what the priorities are, and how best to manage the system.

Although it could not be described as a conflict *per se*, the water planning process did contribute to an impasse in negotiations for stakeholders in the Mount Isa water supply system. Due to the uniqueness of the historical of this system, the imposition of the planning process was seen to create a degree of uncertainty and risk for stakeholders, including issues such as security of entitlements, responsibility for water quality and the potential for increased water pricing and storage costs. Stakeholders vary as to whether these complexities were created through the WRP process or existed prior and were highlighted through the application of the WRP process to specific supply system. Irrespective, the resolution of these issues fell outside of the scope of both the planning process and the implementation of the plan through the Resource Operations Plan, or ROP. Key water users in the Mount Isa region felt that the process could have benefited from concerted facilitation provided by the department in the resolution of issues, despite the fact that they were outside of the process, but were still directly attributable to proposed provisions of the WRP.

They tried to say ‘you stakeholders in the region, you go away and you try and work it out yourselves’... If there is seen to be difficulties in getting the key stakeholders in a particular system, [one solution] is to look at maybe putting a body on the ground to try and facilitate some resolution, rather than saying you guys go away and work it out and come back to tell us when you’ve finished.

As such, resolution of these issues required separate commercial and contractual arrangements be established between the affected stakeholders. As this impasse was acknowledged by the Department as an impediment to the finalisation of the WRP, senior bureaucrats did make an attempt to work directly with the stakeholders to move towards a resolution, however this was also viewed cynically by the participants:

When they say ‘let’s resolve this’, what they mean is ‘let’s resolve this so we can move our part of it forward’, not ‘let’s resolve this so everyone is happy’. That’s what the outcome was, nothing more, nothing less.

Flexibility of the process

The process was not considered to be flexible by interview respondents, and in particular to accommodate the specific requirements of the Gulf region. Issues that respondents had with the applicability of the modelling to tropical environments were reiterated in relation to the planning process itself:

To have to have a plan where one-size fits all, when you compare a situation like we have to a situation like Greater Brisbane or South-east Queensland, and you're using the same models as you go right across the state, then the Department struggles when its something slightly out of the ordinary with private ownership in key assets, it does at times become frustrating. But if water was the same where we were using 97% and not 3%, you could probably see how that would work.

...

It's the old one policy fits all. And it doesn't always work, it doesn't always fit. It's nice to have uniformity, I understand that, we try to achieve that in our operation, but every now and again you have to make an exception. Because it's the outcomes that are important, not the process.

...

I think one of the things we tried to identify was that our water resource plan needs to relate specifically to our system. And our system has no pressure on it, there's only 0.2% now being extracted from the river.

...

[The planning staff] really tried their best, they did try to be collaborative, but they were constrained by the processes that they were required to follow. They didn't have a chance.

The latter quote once again reiterated the extent to which community dissatisfaction with the process was not directed towards the regional planning staff, but towards the priority given to a uniform process across the state. It was felt that the planning staff was placed in an unenviable position in terms of attempting to meet the needs of the community, and their requirements to adhere to state-wide planning guidelines. This lack of flexibility was seen to both prolong the planning process, and to frustrate the expectations of the participants in terms of a regionally appropriate water plan.

We do appreciate that this is a unique scheme, and we appreciate that the social impacts of this WRP probably aren't felt anywhere else.... The WRP process in this instance is really not appropriate – it's a three steps backward approach. It's one step forward for policy, but it's three steps back for the community and commerce.

Three respondents were adamant that the reliance on unsuitable technical analysis and historical projection in the development of the plan served to limit the scope of innovation in the region, particularly in examinations of the potential of the region to support irrigation. These respondents suggested that the nature of the planning process meant that the planning process was resistant to the wider societal changes, such as technological advances, sophistication in farming techniques and the adaptability of farmers to the specific ecological and climatic conditions of the region. He felt that the process was:

locked into an old paradigm which creates mental barriers and limits the potential for innovation. They over emphasise these historical boundaries, and that limits the scope for new possibilities. It is possible to work around the barriers – they are mental barriers - but inevitably [the process is] resistant to this.

4.3 Collaboration as a Pathway to Improved Outcomes

The outcome from the water planning process is the production of the water resource plan adopted as subordinate legislation by the Government of Queensland. In assessing this criteria, the focus is not on an evaluation of the plan *per se*, but rather on the ways in which the engagement and participation from the community and industry contributed to the development of the plan. As such, the key criteria are:

- the extent to which the engagement process achieved its stated aims;
- the extent to which it was efficient in doing this;
- levels of satisfaction with the outcomes by participants;
- the extent to which the outcomes achieved may differ from what would have most likely been otherwise achieved; and
- how other people not directly involved in the engagement process viewed the process.

In addition to these criteria, following Beirle (1999), there are a number of implied social goals in the use of public participation. These are: educating the public, incorporating public values and knowledge into decision-making, building trust, reducing conflict, and assuring cost-effective decision-making. As such, evaluation of public participation in terms of outcomes is analysis not of the plan itself, but the ways in which public participation and engagement contributed to the outcome.

In the development of the WRP, the Department determined that using the existing development profile of the region was the appropriate measure by which to predict the direction of future growth. The analysis identified that the balance between the risks, opportunities and competing aspirations of the community and environmental imperatives was best ascertained in this way. In effect, the Minister based his decision on water allocation on how the Gulf community had used the opportunities provided in the past as a lodestone for identifying future trends. The underlying objective of the plan was to maintain the direction of sub-regional economies by enable water growth to progress in parallel with other regional advances, notably infrastructure. On the basis of previous development, with little or no subsidies and government infrastructure intervention, the best benefit of water use had evolved under local market forces, innovation and investment. There was a key assumption that through the 10 year life of the plan, private investment will evolve in tandem with infrastructure improvements.

General outcomes from the provisions of the WRP include:

- Providing for the regulation of surface water, including overland flow water, and subartesian water;
- Defining the availability of water in the plan area with regards to the preservation of ecological values, entitlement security and additional water needs;
- Honouring all existing entitlements in the region, including those unused and partially used, and the establishment of mechanisms to define those entitlements within a compatible framework;
- Establishing tradable water allocations for Julius and Moondarra dams;

- Promoting the efficient use of water and other means of adjustment to meet future water requirements;
- Establishing conditions on new licenses to meet the water requirements of local ecosystems;
- Recognising the cultural value of water for Traditional Owners;
- Improving monitoring strategies through the installation of metering systems outside of the Mount Isa supply scheme; and
- Establishing clear pathways for the review of the WRP by the Minister due to changes in water demand or environmental needs.

In addition, the plan reserves additional (described as unallocated) water to meet future needs, based on projected demands from population growth, expansion of mining operations, further irrigation in key catchments, and for Indigenous enterprise. Under the plan, the unallocated water is divided into reserved for 'strategic' or 'general' purposes. Strategic reserve refers to water to be drawn for state purposes, including projects of state or regional significance, town water supply or to facilitate Indigenous enterprise. General reserve water refers to water set aside for any purpose, including private irrigation, aquaculture or industrial uses. Although not defined under the WRP, the process for the release of unallocated water and the access conditions for new licenses will be subject to specific conditions, including an approved land and water management plan to ensure the ecological sustainability of water use. The specific volumes of unallocated water specified by the plan are outlined below:

Catchment Area	Volume of Unallocated Water in the Water Resource Plan (ML/y)		
	<i>Strategic Reserve</i>	<i>General Reserve</i>	<i>Total</i>
Settlement	1,000		1,000
Nicholson	9,400	6,900	16,300
Leichhardt	16,100	15,000	31,100
Morning Inlet	1,000		1,000
Flinders	22,500	80,000	102,500
Norman	2,000	3,000	5,000
Gilbert	5,000	15,000	20,000
Staaten	1,000		1,000
Total	58,000	119,900	177, 900

Table 7: Unallocated Water by Catchment

Although not specified under the plan, it is evident from the accompanying reports that most of the increased demand would come from the expansion of irrigated agriculture in the region via water harvesting operations, with a smaller amount reserved for mining expansion in the Leichhardt, Nicholson and Flinders basins. In effect, due to the water requirements for irrigation operations, the plan provides for the establishment of one medium to large sized irrigation operation (of around 10,000 ML) to be established in the region per year for the life of the plan.

Importantly, the plan made no provision for in-stream storages, which had been the key demand of some of the Shire's in the region. On the basis of review against the

State Government's criteria for investment in water supply infrastructure, the two potential storage options on the Gilbert and Flinders Rivers were considered, but were not recommended by the Land and Water Assessment report. The Green Hills Dam on the Gilbert was rejected due to the lack of an identified viable use, and the O'Connell Creek off-stream storage on the Flinders was excluded with the Department citing the high variability of flow and soil issues limiting the feasibility of large scale irrigation in the region. This latter decision was heavily criticised by some of the participants on the CRP, and was seen to directly limit the future development potential of the region. The proposal for a water supply at Mount Beckford was not subject to further investigation as a result of its unfavourable assessment against the State Government investment criteria in terms of environmental sustainability and economic viability. The Mount Beckford scheme had been heavily advocated by the Flinders Shire Council, who undertook independent assessments of the feasibility and socio-economic benefits of the development. Much of their dissatisfaction with the outcome of the plan resulted from this decision, which they considered to have not taken adequate account of the appropriate technical information.

Satisfaction with the plan amongst respondents ranged across the spectrum, and largely centred on the release of unallocated water and the provisions made in the Mount Isa supply system. In terms of the unallocated water, some respondents wanted more water made available, others less, others none at all. Conservation interests saw the plan as a loss in terms of their objectives due to the further release of water in the region. Some participants expressed concerns that the "limiting the use of water in the region is going to stifle economic development". Three respondents expressed a concern that the plan was indicative of a government objective to deliberately stifle development in the Gulf in order to preserve it as the "feel-good zone" for urban residents in the south east corner. In general, though, the plan itself was considered satisfactory by the respondents as the first generation of water plans, in light of its ten year scope and potential for review. There was also recognition that the assessment of the quality of the plan would need to be observed and amended over time:

We need to get it operating first, to see how's its going to work. We need people building the storages, extracting the water, to see how it's going to work, and then go through and look at the positive and negative effects to see what happens.

Changes to the Outcomes

Respondents generally did not believe that the contributions of the CRP, the submissions or the general community engagement process had much impact on the final plan. Initial concerns about the value of the community involvement were confirmed for participants, who reiterated their sense the "nuts and bolts" of the plan had been determined in advance by the Department. Participants identified slight amendments to wording and emphasis in the technical reports, and the use of additional research that had been identified. Outside of this, no respondent could identify how their contribution had substantively changed the outcome, nor could they really see how the process of the community reference panel had been reflected in the discussions. In terms of the relationship between the plan and the community involvement, participants reflected:

When we got the draft, I had a look through it and said, this isn't really what we were looking for.... I went through to check the dates to see when it was actually printed – to make sure that it wasn't July 2004!

...

You'd have to look bloody hard, I would think [to find the community contribution to the plan]. Which again led people to believe that they'd made up their minds before. And we were all just wasting our time – driving over to Mt Isa for meetings, two days and then back again, that's a whole week shot, for a two day jaunt in Mount Isa.

...

There was sort of opportunity in the meetings for debate and for difference of opinion, but you couldn't really see where that fed into the outcomes.

...

At the end of it, we thought that we had wasted our time. Well, they had wasted our time. You'd never bother to do it again, put it that way. Why would you? It took up a lot of time, it cost our organisation time away, travel, all that sort of stuff. It took mayors away from their electorates for three or four days at a time, property owners away from their businesses. People can't afford that time if the whole process is going to be a fizzer at the end, and you can't see a lot of beneficial outcomes.

...

[Water planning] is a very necessary process, so that community should have their say. But I think it get shelved once everything's put away and they say see you later. It just seems to be put on the shelf and nothing seems to happen, unless there is pressure.

...

The recommendations of the reference panel, which was the majority mind you, was ignored. All we did was waste our time. The reference panel decided by a huge majority that twenty percent of the flows be allowed and eighty percent be kept in the rivers and to flow out to sea. Now, that wasn't allowed, we're left with 1.5%, and they think that's justice.

One respondent did identify, however, that the lack of change to the outcome could be explained by the degree of dissension on the panel about the desired outcomes. It was felt that had there been greater consensus amongst the panel members, this would have been more likely to have been reflected in the outcomes. For example, if the entire panel had agreed upon specific reserve allocations, there would have been greater incentive for the Minister to ensure this was reflected in the plan. The divergence in the demands of the reference panel, particularly between environmental interests and the shire councils advocating for expanded development, created a greater level of onus upon the Minister to determine a balance between these perspectives. Participants raised concerns that the methods used to determine how this balance was to be achieved remain undisclosed.

As such, assessing the extent of community input into the plan is speculative. One way to examine the impact of the community participation through the CRP is to compare the probable additional demands estimated in the social and economic assessment (Economic Associates 2006: 34-43), the future demands for unallocated reserves nominated by the CRP, and the quantum of unallocated reserves designated in the WRP. For the purposes of this comparison, the estimated additional demands provided by the technical analysis combines the reasonable

outstanding license applications and the consultants estimates of future water use demands for general reserve allocations in the region. The CRP nominated demands were derived from the first meeting of the CRP, where representatives were requested to put forward preliminary volumetric estimates of future water demands for each sector (irrigation, mining, town supply, and recreational/road works) and for each basin. It is not clear from the consultants report (Economic Associates 2006: 40-42) which members of the CRP are responsible for which nominations, whether these nominated demands were agreed to by the group, or whether they were compiled as an average or as an amalgamated total. These recommendations are summarised in Table 8 below.

Catchment Area	Estimated Additional Demands	CRP Nominated Demands	Unallocated General Reserves in WRP
Nicholson	5,200 - 8,500	27,000	6,900
Leichhardt	11,700 - 24,700	17,000	15,000
Flinders	58,840 - 82,340	75, 000	80,000
Norman	0	Not quantified	3,000
Gilbert	5,740 - 16,745	27, 200 – 87, 200	15,000
Total	81,480 - 132,280	146,200 – 206,200	119,900

Table 8: Comparison of Nominated Water Demands for Plan Period Against WRP (Economic Associates 2006; DNRW 2006a, 2006b)

What is evident from this table is that the amount of unallocated reserve is generally closer to the estimation of the technical analysis, and not of the CRP. Key differences are observable in the Gilbert and Nicholson catchments in particular, where high levels of community nominated demands are not reflected in the final reserve volumes. In general, it appears that the amounts reserved are at the higher end of the consultant's estimates, and the CRP discussions may have had the effect of increasing the final volumes. Whilst some respondents recognised that the CRP demands were overly ambitious, the CRP was required to provide specific detail about where that demand would occur. It should be noted that the differences between the CRP estimates and the technical estimates are largely in relation to irrigation demands, and that industrial and town supply was similar for both.

In accounting for changes in the Plan, according to the Overview Report published by the Department, at least three changes to the "original vision" for the plan were a result from the community consultation (2006a: 12):

- Consultation with stakeholders in Mount Isa extended the establishment of tradable water allocations to both Julius and Moondarra dams, rather than just the Julius Dam Water Supply Scheme;
- Consultation with the Gregory River stakeholders identified potential for irrigated agriculture in that catchment; and
- Through the demands of the CRP, additional strategic reserves of 1,000 ML for the Wild River catchments of the Gulf were designated

as a prudent measure should future water demands emerge in these catchments.

Additionally, the Community Consultation report identifies that as a result of the submissions, an additional allocation was granted to the Mount Isa Water Board to account for distribution losses from Moondarra to the mines and town. A nominal volume of 2,500ML was granted to the Water Board. Other changes included the definition of 'project of regional significance' and substitution of the word 'subartesian' with 'groundwater'. In essence, the changes to the WRP as a result of the community consultation does appear to be relatively minor, and does lend evidence to concerns raised by participants that their contribution was under-valued. However, the community contribution to the outcome is only one of the objectives of the consultation. Further, the information gained from the CRP and from the submissions is collated in a thematic format, which does make it difficult to identify how that information was incorporated into what is effectively a technical plan concerning volumetric allocation. The community input, as summarised in the CRP report, lists the desired outcomes from the plan as provided below.

<p>Panel input to plan outcomes for the regional, state and local economies</p>	<ul style="list-style-type: none"> • Maintain tourism use • Allow for future development • Enable grazing to diversify • Support employment opportunities • Allow for future expansion/opportunities in tourism development • Encourage future development through access to water • Flexibility in water transfer/trading • Water availability for mining • Tourism, fishing and mining increases government revenue through taxes • Growth helps to establish industry and brings recreational activities/options • Allow for new industries • Water security creates industry continuity • Facilitate development of ecologically compatible industries and enterprises such as ecotourism and cultural tourism
<p>Panel input to plan outcomes for social and cultural values</p>	<ul style="list-style-type: none"> • Better quality of life, including improved health services and road networks • Ensure community ownership of the water resource plan • More jobs to retain population—stop leak of people to the coast • Sustain and develop regional communities for long-term social outcomes • Decentralise state growth • Ensure Indigenous involvement in plan • Maintain recreational use • Meet Indigenous cultural needs • Tourism growth and population growth • Protect culturally significant areas • Employment opportunities through water developments • Ensure water flows for sustainable Gulf fisheries • Improve water use efficiency in all developments • Enable plan to create discussion of long term (10 years) water use/allocation • Ensure plan identifies suitable triggers for review/change of plan • Consider impacts of seasonal variation and water allocation on economic, environmental and social values
<p>Panel input to plan outcomes for the</p>	<ul style="list-style-type: none"> • Enhance wildlife • Protect environmental values of rivers

environment	<ul style="list-style-type: none"> • Protect significant wetlands • Protect riparian function • Decentralise impact on state system • Develop local/basin based science • Maintain water quality • Science-based balance between uses • Maintain and protect ecosystem, hydrologic and geomorphic processes • Ensure environmental flows for Gulf fisheries productivity • Better protection of resources and better system for management of floods • Protect natural values of rivers, catchments and integrity of wetlands, floodplains, billabongs and estuaries
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Table 9: Community Input Into the Outcomes of the Plan (DNRW 2006b)

The nature of this information makes it exceedingly difficult to identify how it has been incorporated into the decision-making structures. Again, this highlights the difficulty of obtaining and translating community values in a way that can directly feed into the technical requirements of the WRP. Although there is no clear way to identify the relationships between these desired outcomes and the volumes of unallocated water reserved under the plan, there is potential for the information provided by the reference panel to feed more directly into the final decision-making process. Improvements in this regard would serve to provide greater transparency, but also provide participants with a sense that their contributions had been valued in the process.

Achievement of Objectives

One aim of the community engagement process was to improve the quality of the technical assessments through the inclusion of community knowledge and understanding. A number of process issues in the CRP generally undermine the ability of the participation process to do this. According to respondents, some examples included the fact that technical reports were not presented to participants until the CRP meeting (some of which were more than 200 pages of dense technical material), the heavy reliance upon Powerpoint presentations in the dissemination of information, and the limited scope for capacity building for participants. Agency staff attempted to provide the technical components to participants in an accessible form and devoted significant time within the process to providing information on hydrology, institutional arrangements, modelling and other technical aspects. In addition, many of the participants had an advanced and sophisticated knowledge of water resources in the region. However, the process itself does not provide apposite conditions for reconciling community knowledge with the technical knowledge.

The second key aim of the participation was to provide a representation of community interests and perspectives to be considered in the development of the plan. Issues of representativeness were subject to the varying capacities of the panel members. Whilst some panel members were able to represent the stated interests of and directly mobilise their constituencies more effectively, others were frustrated by the lack of constituency, and by the resources available to canvass wider community opinion. This is reflected directly in the number of submissions. The question of representativeness was considered problematic by the irrigation interests on the panel, who identified that due to the low numbers of irrigators in the region, they did

not represent an established community as such, but a 'potential community'. One respondent posed the question "How do you represent a potential?"

There is no proven history of irrigation appeared to be what they were saying. Every time you'd talk to them, there has not been a history of irrigation here. So therefore irrigation is not going to grow. They kept coming back because it wasn't historical. We would keep saying, look, five years ago we didn't have any irrigators here. Now we have - they've proved that it is viable, they've done it on a small scale, and its working.

Efficiency of the Process

Through the use of the CRP at key points in the draft planning process, the Department demonstrated a commitment to obtaining making the most efficient use of community involvement. Given that the opportunity for public participation comprises such a small proportion of the total plan time, this was a critical consideration. Effective public participation requires significant time and resources, particularly given the vast area of the region and the dispersion of the population. In this sense, the process can be regarded as efficient. Perhaps the major concern voiced in the interviews, however, was the lengthy nature of the process generally. In particular, the impact of the moratorium was seen by a number of participants as directly limiting investment and development in the region. Councils in the Flinders catchment noted that the potential of an expanded agricultural sector in the region had attracted significant interest in investment from farm machinery and supply, and potential landholders, but that interest had dissipated in the area over the duration of the continued moratorium. Participants also felt that the agency had not been sensitive to the economic impact, regionally and at a landholder scale, of the extended moratorium:

People understand why that has to happen, but they get really shirty when the process is dragged out. And this has a real business implication for people. Wherever you go, people recognise that the only way to survive is increase production, so if you've got a limited water supply then that has serious implications on your ability to stay competitive.

...

We've got communities that were really humming along before the moratorium with development starting and value adding to our cattle industry which is extremely important to us.

...

Everything has stagnated... The existing ones can't do any expansion, new ones can't get involved, so everything is just sitting.

Changes to planning protocols within the Department had previously attempted to fast-track the water planning process, in response to similar feedback in other regions. The move towards expediency is reflected, for example, in the decrease in the frequency of CRP meetings for the Gulf WRP. Some participants were very keenly aware that the move towards expedited outcomes and efficiency of the process was done at the expense of the quality of the engagement process, particularly in the context of CRP meetings:

And while the process was dragged out over a long period, the actual amount of time that you had to actually sit down and debate what the issues might be, through workshopping and those sorts of things, where you could get cross-fertilisation of views and really start to look at what the implications might be – there was none of that.

However, the unique character of the Gulf from a water planning perspective, including the ecological, social and economic diversity across the region, the amalgam of competing aspirations, its remoteness and the private ownership of key water assets, dramatically increased the complexity of the planning process. The effect of this for future planning, and on the community perception of the Department, was noted: “Every day that this process goes on, the department loses credibility”.

It has also given rise to speculation within the region about the reason for the delay. Because of limited ongoing feedback, interview respondents had a series of assumptions about why the Department had taken “the foot off the accelerator to some extent”. Opinions ranged from the turnover of staff in the agency, to the number of submissions, to conflict with other government departments and Federal agencies, to amending the plan in light of mining expansion and infrastructure planning, to competing priorities in other regions. For example, one respondent identified that:

I do appreciate that the Department has had greater priorities and pressures that are far greater. Mount Isa still has water, there’s still 90% plus in Lake Julius and 40% in Lake Moondarra, so therefore the focus needs to be, in their eyes, the South-East is where the chronic water shortages are so that probably needs to take priority.

The delay to the process was particularly problematic for respondents who recognised that the process should have been faster due to the limited development in the region.

I don’t think anything has changed much – nothing has happened yet. Everybody has recognized that the water planning process had to happen, we’re just frustrated that it has taken so long. And the reason we’re frustrated is because we’re talking about river systems which don’t have any pressure on them. And we continue to say that because of the level of extraction. You can count on one hand the number of people who want licenses.

It also served to fuel general misgivings within the community about the lack of consideration given to the North-West region by government agencies generally. The decision to combine the Gulf catchments into one plan was concerns about the lack of consideration that is given to North-West. When asked why they considered the plan had covered such a vast area, one participant felt the department decided to “do them all at once, not because there’s implicit benefit, but because who cares?”

The problem was that the time frame was an absolute joke. When they started, I stood there in a meeting when they said we are going to have this done in 12 or 18 months. And I said, “There’s no way known you’ll have this done in that time. You can not possibly consult and deal properly with all of the issues when you’re looking at all these catchments together. I said there’s no way known you’ll have this done.” Where are we now? It’s like there’s a conspiracy – like if you leave it long enough people will forget about it and say who [cares]. What do you do? They treat the non-populated areas with absolute contempt.

...

If you go right back to the start, the moment they announced it, I thought, “Oh no, what have they done?” Because it wasn’t a catchment based study. I thought, “How can you put the Gilbert and the Staaten and the Flinders and the Liechhardt in the same plan?” I told them that this just showed their total disrespect for our communities. You’ve lumped us all in

together and assumed it's the same. We know why you're doing it. There's no votes out here, there's no population here – you don't care. They didn't like hearing that. They didn't make any comments other than you've got a lot of similarities...But they just didn't take any notice of the differences in our communities. The whole study, I said, you cannot do justice to this. And I think that's exactly what they did do – no justice to it. They treated us pretty poorly.

Covering all catchments in one plan was certainly a decision to maximise efficiency and expediency, and reflects a Departmental assumption that due to the limited water development and environmental issues in the region, the WRP would be more straightforward than in over-allocated or highly degraded catchments. The emphasis on expediency displayed a misunderstanding of the complexity of water issues in the region. It also meant that specific issues in the finalisation of the plan were seen by participants as taking priority over the concerns of the community:

All of a sudden it became too hard. We get the impression that the Department, have gone very quiet over the last six months.... They may be busy beavering away on the report, and not worried about the community, which I suspect is the case.

...

We have a legitimate issue with this process and this legislated approach, and simply because it's on a bureaucrat's desk, and he's got a KPI and a salary bonus at the end of it that says he's got to get it done, that's why its getting done.

For respondents, this emphasised both their isolation and lack of political power with regards to the process; and several participant felt that this was indicative of a prevailing attitude of government towards the region in general: "It's just another case of too hard, too bad, so sad".

It's the same old story – we don't have the growth so we don't get the infrastructure. But it comes back around the other way – if they put some infrastructure or opportunities in place, you'd get the growth.... The opportunities are there, but they say we haven't got the votes so we don't get looked at.

4.4 Collaboration as a Pathway to Catalytic Change

Evaluation under this criterion recognises that an effective engagement and collaborative process can yield change in the participants and the wider community that are supplementary to the process itself. These changes are often indirect or unintended outcomes, and may include changes in knowledge, language, organisation, practices, motivation or intent. Effective collaboration can also produce changes to the power dynamics within a community, and these changes may include the reallocation of authority and agency, responsibility and resources.

Within the context of the Gulf WRP process, changes were observed by respondents in terms of their knowledge and understanding of water planning processes. Some were able to identify a greater understanding, not only in terms of planning process, but additionally in terms of an understanding of the operations of the Department and of the aspirations of the community generally.

My understanding has certainly improved. And I have a better appreciation of what their long term planning objectives would be, in a broad brush sort of way. So I know more than what I did before I started.

...

We all learn, because everyone talks about what their needs are, their future needs and their existing ones. It's all information that you wouldn't have known before, right through the catchment.

This improved knowledge and awareness was seen to be a catalyst for some participants in their obligations as members of the CRP. A number of individuals on the CRP identified an expanded role as a liaison in the community for the water resource plan. Two participants, in reflecting on the role that they now play in the community in communicating the outcomes from the planning process:

When I go down to the pub, and people ask me, 'what's going on with the water plan?', I can tell them. I could have been critical of the outcomes of plan in my ignorance, but having seen what happens behind the scenes, I'm now enlightened.

...

I get used a lot as a sounding board by a lot of the community. I've had councilors from Normanton ring me to ask about the best way to use their water, that sort of thing. And a lot of other people in the area ring me up to ask what's going on, they don't have access to the same information, so they ring you up to ask you. They might have concerns about some of the river systems, can we do this, can we do that? Anyone on the panel would get the same treatment, I suspect. And that's fine. That's what you're expected to do. It works pretty well up here, where everyone sort of knows each other.

In this regard, the WRP process has engendered a community of practice within the region of specific individuals with knowledge and expertise in water planning and management. What is evident, however, is that this select group, largely consistent with the panel itself, has taken responsibility on behalf of the wider community as the community voice on water planning. In this regard, community capacity to contribute to future planning and implementation is streamlined to a set of individuals with expertise, and some participants noted that beyond this group, wider community understanding of the plan is limited.

I don't think people understand the Gulf WRP plan at all, outside of the small community reference group. It hasn't been widely discussed or populated. Nor have the implications of it.... In my view, it is not a transparent process.

One participant expressed concerns that the lack of wider participation limited community ownership of the plan, and that this may have wider ramifications in terms of implementation and community support.

There's no ownership over what came out of it. It probably created more divisions than it did anything else.

Respondents were not convinced that relationships within the community, either between individuals or across sectors were overly improved through the process. This was attributed to the nature of the process, in the sense that limited scope was provided for relationship development. Respondents had identified that many of the panel members entered into the process with good relations, and noted that these were not directly impacted by the process itself. In terms of the relationship between the community and the Department, one participant noted that this relationship did not improve, but was satisfied that "it didn't deteriorate either". However, some participants were able to identify opportunities provided by the process for open communication between sectors which may not have otherwise occurred in the absence of the CRP process.

I had some pretty heated discussions with some of the members, that turned into good discussions in the longer run at a pub later afterwards, so it definitely facilitated some open communication.

The WRP process also provided an opportunity for the identification of knowledge and capacity gaps within the region, and gave some participants greater clarity in terms of the potential for further development in this area. For example, one respondent noted that the water planning process had identified the need for improved Indigenous resource management, and that this could provide employment and training opportunities:

At the moment, there isn't sufficient capacity in the community for the establishment of Indigenous waterway managers. There needs to be capacity building and instruction and all of that kind of stuff. We haven't got the people here working in that area, and we want our own Murri people to be working in those areas. Even in development of curriculum for improving indigenous employment in assessing environmental impacts and management of waterways and river system, and flora and fauna.

The process also provided an opportunity for participants to further advocate for their particular aspirations, particularly for environmental interests. Participants representing the conservation sector identified the value of the CRP as a vehicle for building community acceptance for the Wild Rivers legislation. Some of the Councils also recognised the opportunity provided by the engagement process to explore the potential social and economic benefits of water development. Both interests, however, saw that the CRP was insufficient of itself in the achievement of these objectives, and noted the engagement process as only one of multiple fronts for their agendas. The role of media in this regard was highlighted, and it was recognised that local radio provided limited coverage each of the CRP meetings, and using the media in this regard was beneficial.

To some extent, the process also provided participants with greater clarity with regards to the needs and aspirations of the community as a whole. Although informal, there was

an implied consent by many of the panel members to a specific vision of regarding future development in the region. Five of the interviewees specifically mentioned that there was agreement by the panel members that they did not want expansive irrigation development in the region, citing examples of the Ord and the Burdekin as undesirable directions for the community. This vision was also seen by a number of participants to address state-level issues with regards to population pressures which exist in the coastal regions. Although there was dispute over the extent to which the water resource plan supported that vision, the role of water in its achievement was widely acknowledged:

Attitude is a big problem. Attitude to do nothing. If Richmond was a town of three thousand to five thousand, which is about all it could be with the amount of water that we have, suddenly all your health services improve, your schools improve, it just flows on. We firmly believe that the coast is getting pretty overloaded. And not everybody wants to live on the coast, they'd be quite happy to live in these bigger centres, as long as the services are here.

...

Everyone is taking the ultra-cautious approach, which unfortunately then is limiting development. We're talking about taking the pressure off the east coast population boom, and we're saying we've got natural resources, plenty of space, affordable land, housing, and everything that goes with it.

The process provided participants greater clarity with regards to the potential of the region, but also space to recognise the competing and conflicting perspectives on that potential provided by environmental or Government interests. There was a high degree of unity by the panel members for a vision of development that would maintain current lifestyle in the region, but would additionally provide quality of life opportunities. The recognition of the competing visions for the development of the region could have initiated wider discussions in which these competing aspirations of the region could be resolved, but as noted earlier participants did not feel that the process was conducive to this type of activity. This means that some of the competing visions for the region remain subject to underlying tensions. Arguably, it is not the role of the water planning process to provide this opportunity, but certainly the expectation from participants was that it would foster improved relationships in the community, and bring people together under a shared vision for the future of the Gulf Country.

5. Barriers and Enablers for Improved Water Planning

The foregoing evaluation of the planning process in the Gulf gives rise to a series of observations for improving collaboration in water planning in Northern Australia. Firstly, it provides some insight into anticipated community expectations for water planning. Although the expectations for community involvement gathered from the interviews and the community reference panel were specific to the Gulf WRP, they are largely generic and would potentially have a high degree of transferability to other planning processes in Northern Australia. Secondly, it provides an opportunity to clarify some of the key enablers and barriers to collaboration in water planning. In assessing the importance and priority of these factors, attention has been paid to the extent to which the interview respondents identified these as key to the effectiveness of the collaborative process overall. Each barrier and enabler is then defined according to one of the three following categories:

1. **Context:** These factors were specific to the Gulf region and the Gulf planning process itself. Although they were defining attributes of the process, they may have limited transferability to other regions.
2. **Structure:** These factors are related to the decision-making structure, governance arrangements and institutional design of water planning in its current form in Queensland. Changes to the structural arrangements may require higher level policy or legislative change in order to be enhanced or mitigated in specific water planning scenarios.
3. **Process:** These factors relate to the specific social processes of the collaboration in the Gulf region, and include the nature and conduct of panel interaction, dialogue, negotiation, conflict resolution and facilitation.

These expectations, barriers and enablers will have important implications for the trial of collaborative methodologies in Phase Two of this project, and are also of general interest for the improvement of collaborative efforts in natural resource planning and management.

In the assessment of the collaboration for the Gulf WRP, it is important to note that the extent of community participation in the process was not strictly collaborative, but rather *advisory*. This designation is derived from the spectrum of participation developed by Arnstein's "ladder of citizen participation" (1969). According to this model, public participation lies on a spectrum ranging from non-participation to information provision to advisory consultation through to the delegation of decision-making power and direct citizen control. In the planning process undertaken for the Gulf, participants did not engage directly in the decision-making process, nor is it appropriate for water resource planning to be entirely devolved to the CRP. Nonetheless, evaluating the Gulf WRP process against collaborative criteria, in the preceding section highlights areas for improvement and development in the achievement of water planning processes that are adaptive, collaborative and directly improve the quality of water resource plans.

5.1 Community Expectations for Water Planning

As part of the CRP process in the Gulf, the agency staff actively sought the panel's feedback to identify community expectations of their involvement in the planning process. This information, in conjunction with the responses to the interview questions, has been used to articulate a suite of key expectations which were common to all of the participants in the Gulf WRP process. These are summarised below:

- *All interests in the region and its water resources be considered.* Although panel members differed in their expectations of the weighting of the respective interests, all recognised the need for the diversity of interests to be included. Particular note was made of existing water users and downstream interests, and reflected the high degree of interdependence of the Gulf communities as recognised by the panel.
- *All contributions, including those of the panel and obtained through the submissions, be valued and respected by the agency, and be taken seriously in the development of the plan.* Participants wanted to ensure that their contribution was not merely token or perfunctory, and sought verification that it would not be used to justify or validate decisions made previously by senior government staff.
- *The plan and the planning process would contribute to meeting the region's development aspirations previously articulated through preceding planning instruments.* There was an expectation that a considered alignment of the water resource plan with existing regional plans would ensure that water allocation supported community-defined goals. For a number of participants, this was both an incentive and a condition of their participation and commitment to the process.
- *The resulting water resource plan would reflect the contributions made during the planning process, and not override them.* The community identified the need for transparency and fairness and open, accountable process in the decision-making.
- *The issues raised in the context of the CRP meetings would be afforded due consideration and that they would receive feedback on those issues from agency staff.* This included issues which were tangential to the development of the plan, but key issues to the community in the future development and management of the region's water resources.
- Although the panel expected a science-based plan, based on appropriate technical information and defensible research, there was a widely held expectation *that the community contribution would be used to supplement the science.* Participants wanted recognition that they had access to local, including Indigenous, knowledge which may not be available to the technical assessors, and expected that their

own information would be afforded parity with the findings of the science.

- *The participants were there to facilitate wider community involvement in the development of the plan.* The panel recognised the wider implications for the plan for members of the community not present on the CRP, and expected that their role would not only be advisory, but could also serve to facilitate wider community involvement.
- *The panel would be provided with appropriate resources to fulfil their role in the process,* including the large role of facilitating and co-ordinating community feedback and input into the plan.
- *The diversity of the region, and the specificity of each river, be afforded due consideration in the process.*
- *The cultural values, including Indigenous, non-Indigenous, and recreational, be recognised and embedded in the process.*
- *The process be flexible enough to accommodate potential changes to the region during the planning process and the ten-year duration of the plan.*

5.2 Enablers of Collaborative Water Planning

This research has identified a series of enablers of collaborative water planning specifically in the development of the Gulf WRP. Key barriers are summarised below. A complete list of enablers is provided in Table 10.

Clarity of process and terms of reference

One of the significant enablers of collaboration in the Gulf case was the clarity provided to participants with regards to the water planning process, the scope of their involvement and the agency expectations of their participation. The agency staff clearly outlined the process through public notices, the terms of reference, and also consistently reiterated the process throughout the CRP meetings. This allowed participants to independently determine the value of their participation, and provided certainty and legitimacy to the process itself. It also clarified the motivations behind the involvement in the process, and prevented false expectations in the community for how their involvement would contribute to the plan.

Role of Non-Indigenous Community Leaders

A number of participants demonstrated a high level of motivation and commitment to the process which is reflected in the use of independent research and communication with their stakeholders. Environmental interests and the Shire Councils demonstrated particular commitment to the process. This reflects their specific agendas in terms of obtaining specific outcomes from the process, including conservation or development outcomes. Notwithstanding Indigenous participation, the CRP panel was broadly representative of the region, and in this way was effective in ensuring a fair hearing for a wide array of interests. It meant that the process was able to additionally draw

upon the existing relationships between panel members and the wider community, which due to the low population were extensive. The use of the existing communication channels through well-connected stakeholders meant that there was a high degree of awareness in the community about the water planning process amongst the non-Indigenous communities.

Strong sense of identity and connection to place amongst participants

There was a strong sense of identity and connection to place amongst participants, which led to a consistent vision for the region in terms of the desired outcomes from the plan. Although there were divergent visions displayed by the CRP, the core and common objectives were for sustainable growth in the region to support quality of life improvements, including health services, employment opportunities, industry development and population retention. There appeared to be consensus amongst participants that the development of large irrigation infrastructure was undesirable. At the same time, there was a shared understanding of the importance of water in developing and sustaining regional economies. This in turn meant that the disputes raised in the context of the CRP meetings were predominantly conflicts of interest, rather than conflicts of principles or values, which may tend to be easier to negotiate. There was also an evident shared identity amongst the panel as a 'community of fate', in the sense that they recognised their interdependence upon each other in the region, and the specific role of the health of the region's rivers in maintaining the community viability and resilience. However, this shared identity did also create an 'us-and-them' division within the social process, which was particularly acute for the 'external' environmental interests and the agency staff that were not seen to understand the community.

Regional staff commitment and support

Numerous respondents identified the value of the regional staff in providing ongoing support and clarification of technical information, but also in facilitating the process in an equitable manner. The facilitation provided by the regional staff was crucial, and although some participants did sense pre-determined objectives, they tended to see this as being one of the difficulties placed on the regional staff from agency expectations and directives.

Community Support for Water Planning and Reform

The collaborative processes of the plan development were assisted by a high level of community support for water planning, and a high degree of recognition of urgency for that planning. The community were very much in favour of the objectives of water planning, in terms of providing security of water supply and entitlements, and for maintaining the ecological health of the river systems in the region.

Exclusivity of CRP Process

The community recognised the value of the CRP as the key forum for input into the planning process. The fact that it provided this opportunity was sufficient incentive for many of the participants to be involved. However, some of the stakeholders in the region recognised that there were alternative opportunities for input, through direct lobbying or through informal meetings with agency staff, and this will tend to diminish commitment to the CRP process itself.

Enablers of Collaborative Water Planning	Context, Process or Structure
High Priority	
Clarity of process and terms of reference	Structure
High motivation and commitment from community leaders	Context
High sense of identity and place amongst participants	Context
Multi-agency representation	Structure
Shared regional vision amongst majority panel members	Context
Regional staff commitment and support	Process
Opportunities for review of technical information	Process
Active pursuit of broad community representation by agency	Process
Community support for planning and water reform	Context
Medium Priority	
Open process of CRP selection	Structure
Existing relationships between panel members	Context
Multiple public submission and review processes	Structure
Joint development of CRP paper with review opportunities	Process
Exclusivity of process	Structure
Effective use of existing information channels	Process
Independent technical assessments	Structure
High level of representativeness in panel selection	Process
Community recognition of urgency of water planning	Context
Ongoing information provision through multiple mediums	Process
Low Priority	
Compliance with legal and policy framework	Process
Transparent and neutral agency facilitation in panel meetings	Process
Varied expertise and technical knowledge of panel members	Context
Recognition of interdependence	Context
Self-facilitation of panel members	Context
Opportunities for informal interaction among panel members	Process
Low levels of risk for participation (confidentiality)	Structure
Defined community expectations for the planning process	Process

Table 10: Enablers of Collaborative Water Planning

5.3 Barriers to Collaborative Water Planning

This research has identified a series of barriers to collaborative water planning specifically in the development of the Gulf WRP. Key barriers are summarised below. A complete list of barriers is provided in Table 11.

Competing Expectations

A major impediment to effective collaboration in the development of water resource plans is the different expectations for the process held by the State Government and the wider community. From the State Government's perspective, the driving expectation was the production of a water resource plan, which is part of their commitment to the implementation of the national water reform agenda. Whilst individual staff members recognise and value the community involvement in the process, from an agency perspective the key criteria for the success of the WRP process is observance of due process and meeting their obligations under the legislation. There is a demonstrable reluctance on behalf of the State government to articulate a water resource plan that directs future regional economic development. This is evident in the reliance on historical patterns of water use and limited consideration of potential benefits of alternative water development scenarios. The agency displayed a greater preference for plans that establish security of water entitlements for the community and for preservation of identified environmental assets, in compliance with their obligations under the Act.

In contrast, community members interviewed expressed a clear preference for a water planning process that created opportunity for sustainable economic growth and the improvement of the quality of life aspirations for the community. Although the exact parameters of this vision was subject to disagreement by members of the CRP, there was a high degree of agreement about the desirability of a water resource plan which considered the wider social, cultural and economic future of the region. Community members recognised that the plan itself was being undertaken in a region with currently low levels of water extraction and a high degree of intact ecological function, and recognised that in these contexts, water planning plays a different role in terms of its capacity to stimulate future development and investment. In the Gulf region, the planning process was less about correcting the legacy of past water development, and more about providing a platform for the aspirations of the region for future development within ecological limits. This highlights the need for water planning to be integrated into the wider regional planning processes, including economic and infrastructure plans, community development plans, and natural resource management plans, and for these other process to also be cognisant of ecological limits.

Scope of the Plan

The scale of the area covered by the Gulf Water Resource Plan, and the extent of the remoteness of the communities to be covered under the plan, was a very significant impediment to effective collaboration. This was compounded by the diversity across the region, and the multiple impacts on the different industries and communities. The scope of the plan was too ambitious for the level of resourcing provided for the community engagement component of planning, and created logistical difficulties for the government staff to obtain adequate input and feedback to

improve the quality of the plan. Of necessity, planners were forced to favour expediency and efficiency over comprehensive community engagement, despite the high degree of interconnectedness of the communities in the region.

Inadequate Participation of Indigenous Communities

Of particular concern at present is the lack of appropriate engagement mechanisms for Indigenous participation in water planning. This is highlighted in the Gulf WRP, where the Indigenous population is as high as 66% in some of the catchments. Although Indigenous specific engagement has been undertaken for water resource plans in Queensland, such as the establishment of Indigenous Working Groups and cultural assessment, this was notably absent in the Gulf WRP process and is not consistently or uniformly applied across the state. Processes for culturally appropriate Indigenous engagement have been subject to rigorous development in the field of cultural heritage and natural resource management, and there is a high degree of opportunity for the current best-practice in this field to inform engagement for water resource planning.

Flexibility of the Process

The process was not sufficiently flexible to accommodate the differences between the Gulf region and others. Due to the fact that the WRP process has been developed primarily to address issues of water resource planning in the southern regions of Queensland, the planning framework itself is less suited for application in Northern Australia. Some of the impacts of the plan required scope for ancillary facilitation techniques and regional planning mechanisms, such as the changes to the institutional arrangements in the Mount Isa Water Supply Scheme. There is no requirement under the legislation for this, but applied effort by Departmental staff could have resulted in institutional arrangements which were more appropriate to the region. This would have increased the levels of community support for the plan, but also served to address some of the issues of expediency that has frustrated the community in terms of the time frame for plan development.

Access to Information and Research

Lack of scientific information and data to account for the different hydrology of Northern Australia was highlighted as an impediment to good planning throughout the Gulf process. Water planning is firmly ensconced within a technical planning framework. There is a heavy reliance upon hydrological modeling and other technical assessments as the primary tools of decision-support and for consideration of policy alternatives. This affects collaboration in two ways. Firstly, in the notable absence of appropriate data and information upon which to make apposite planning decisions, the need for the processes to incorporate local, industry and technical knowledge is accentuated. Secondly, the community confidence in the process and the planning outcomes will be significantly compromised. This diminishes community support of the plan, and of water reform generally.

Communication Strategies

The highly technical nature of water resource plans additionally requires sensitivity to the communication of information to stakeholders in order to facilitate meaningful contributions. Participants routinely noted the need for 'plain English' communication

materials and more emphasis on the development of communication materials tailored to the rural audience. The timeliness of the information provision was frequently critiqued, with panel members frustrated at the lack of time available for review of the information in depth.

From Awareness to Understanding

Awareness of the planning process in the region was relatively high, given the remoteness and isolation of the region. This suggests that the use of existing communication channels by the regional planning staff was relatively effective. However, understanding of the planning process, and of the implications of the plan, remains confined to a select number of individuals in the region, and mostly those who participated in the community reference panel. There was an opportunity to enhance community understanding of the process, which would have aided in community support and ownership during the implementation phase. Given the high degree of interest in the water resources of the Gulf, and of Northern Australia, there was significant opportunity for building wider community capacity in understanding and contributing to decisions about the future of water resources in the North.

Impact Assessment

Participants routinely criticised the absence of wider impact assessment in the planning process. Although the impacts of water allocation scenarios on flow regimes was assessed as part of the planning process, the impact assessment process failed to extend to assess the impacts of the conduct of the planning process itself. This was recognised the bulk of respondents, particularly the impact of the moratorium on the region in terms of demand for water resource cultivation and industry development. Participants also noted the need for an assessment to include the wider socio-economic benefits of alternative water allocation scenarios, particularly in terms of regional economic viability.

Relationship Building

Respondents were ambivalent about the need for methods to improve relationships in the region as part of the planning process. Changes to the WRP framework in Queensland has led to an expedited role for public participation in the process, and a reduced role for the key community engagement mechanism, the Community Reference Panel. As a result, significant elements of effective collaboration and community involvement, such as the development of trust and greater understanding of the values of participants in the process, were not given sufficient opportunity to be fostered. Due to the nature of the process, there was little opportunity for participants to establish shared understandings and trust, and hence stereotypes that were held at the outset were reinforced through the process. It is also through relationship building processes that the opportunities for social learning amongst participants are enacted; for a large number of collaborative governance scholars, it is precisely the social learning component that defines collaborative, as opposed to consultative, process. There was a degree of divergence on the panel for the vision of the north in Queensland, with significant opposition between visions of environmental preservation and economic development. The water resource planning processes presented a useful opportunity for these competing visions to be mediated, but this was not pursued. In turn, residual tensions between the competing visions persist,

and these tensions will continue to permeate through a wider range of policy-making and community engagement initiatives in the region.

Fit for Purpose Engagement

Different techniques of community engagement will yield different forms of input into the planning process: for example, input from a multi-stakeholder forum will be qualitatively different from that of a community survey. At present, the information requirements for the development of an effective water resource plan are under-specified. As such, there is no shared understanding of what information is required from the community engagement process; nor are there clear pathways for the effective incorporation of that information into the planning process. There needs to be a better relationship between the information that is derived from the community engagement, especially greater articulation of what information is required, and what is the most appropriate mechanism for the delivery of that information.

This is compounded by the fact that the information used to develop water resource plans remains predominantly hydrological, and there is little understanding about how the multiple forms of information and knowledge obtained via community engagement can be reconciled with this technical information. Improved methodologies and knowledge systems to integrate multiple epistemological frames, including local, experiential, industry and Indigenous knowledge, are required. This extends to the need for tools capable of incorporating expressed community values and socio-economic information into the decision-support and prioritisation systems.

Transparency in Decision-Making

A key issue in ensuring continued community commitment to water planning is the need to provide greater clarity to the community about the relationship between the public participation and the production of the WRP. Upon the release of the draft water resource plan, participants were unclear about their how their involvement contributed to the development of the plan. As part of the social contract of participation, community members expressed a clear and unequivocal desire to identify how their investment (be it financial, personal or professional) is reflected in the policy outcomes. However, due to the thematic nature of the information collected through the CRP process, the highly technical nature of water resource plans and the discretion afforded to the Minister in the plan development, there is limited transparency for stakeholders to assess the extent of their input. Although the CRP and public participation reports do address some of the issues raised by the community, the actual decision-making process, and the methodologies employed, remains a 'black box'.

Barriers to Collaborative Water Planning		Context, Process or Structure
High Priority		
Scale and diversity of plan region	Context	
Administrative inflexibility of the process	Structure	
Limited confidence in the adequacy of technical information	Context	
Perception of pre-determined outcomes by agency	Process	
Limited deliberation & negotiation among panel members	Process	
Highly varied capacity & constraints among panel members	Context	
Lengthiness of the process	Process	
Inappropriate forum for Indigenous participation	Process & Structure	
Inability to incorporate non-technical information into assessment and decision-support mechanisms	Structure	
Limited connection between CRP input and plan outcomes	Structure	
Disjunct between agency planning requirements and community expectations and needs	Structure	
Residual and unresolved tension between community values	Process	
Medium Priority		
Timeliness of information provision	Process	
Ineffective communication of technical information/science	Process	
Lack of facilitation for issues arising from process	Process	
Limited organisation capacity for some stakeholder groups	Context	
Lack of impact assessment for process and outcomes	Structure	
Low relationship development between community and technical assessment staff	Process	
History of poor engagement practices by government	Context	
Perception of devaluing of community and local knowledge	Process & Structure	
Lack of alignment with other regional planning processes	Process	
Differences between stakeholder groups capacity and resources for effective participation	Context	
Differences in stakeholder experience with planning	Context	
Lack of commitment to process by powerful stakeholders	Structure	
Lack of organised stakeholder groups to effectively represent some interests	Context	
High level of expectation for regional/central planning staff	Structure	
Lack of communication between meetings	Process	
Low Priority		
Divergence between regional and HQ planning staff	Context	
Lack of feedback on issues raised by participants	Process	
Lack of field work and further research to support process	Process	
Lack of community ownership of the process or outcomes	Process	
Opportunity for wider community participation limited to written submissions	Structure	

Table 11: Barriers of Collaborative Water Planning

6. Conclusion

This study finds that community engagement in the Gulf water planning process was a relatively good example of *consultative* practice. In this regard, many of the features of the process – the active pursuit of wide stakeholder representation, a clear and transparent process framework, the assembly of a sectoral-based multi-stakeholder platform, independent technical assessments and community review processes, and the multiple opportunities for community input – are evidence of a planning program which actively seeks to improve the engagement process and the quality of water resource plans. This program was observed in the conduct of the Gulf water resource planning process, and in a number of facets the planners exceeded their requirements to facilitate broad public involvement and stakeholder contribution. These findings also highlight areas that are in pressing need of immediate improvement for effective consultation, particularly in facilitating meaningful Indigenous participation, the need for greater administrative flexibility and efficiency, and in the integration of non-technical knowledge and information in planning process.

Critically, though, this analysis also reveals that the process is by no means an example of *collaborative* planning. When assessed against evaluative criteria modeled on collaborative planning, including decision-making processes, social learning, planning outcomes and catalytic change, a wide range of highly problematic issues in the nature and conduct of the process emerge. The structure of the public participation in the planning process has been streamlined, and as a result, significant elements that foster effective collaboration and community involvement, such as the development of trust and greater understanding of the values of participants in the process, are under-developed. It is through these very processes of deliberation, critical reflection, the reconciliation of competing goals and the establishment of effective relationships, all of which have been occluded from the current process, that the conditions for social learning are engendered.

Given the emergent interest in the water resources of the tropical north of Australia as a result of climate change, the Gulf WRP provided a significant opportunity to build wider community capacity in understanding and contributing to decisions about the future of region's water resources. Had the process been designed to be collaborative, and not merely consultative, there would have been scope for enhancing the adaptive capacity of the wider community to plan and manage the region's water resources in a way that adaptively responds to uncertainty, risk and competing pressures of environmental preservation and sustainable development. Scope for meaningful and genuine collaboration between government, stakeholders and the wider community was not provided for in the WRP process, and consequently the residual risks and tensions persist, and these will continue to permeate through a wider range of policy-making initiatives in the region.

Some of the enablers of good consultative practice have the same function in good collaborative practice. This presents an important platform for improved practice which can be implemented in the review cycle of the water resource plans. However, these findings confirm the need and utility for the advancement of community engagement methodologies in water planning to create pathways for water reform which reflects the needs and aspirations of the affected community, and contributes

to regional viability, vitality and sustainability. Improvements in this area will likewise contribute to the capacity of the region to respond adaptively to the risks and uncertainties of the future of its water.

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Appendix B: Interview Details and Protocol

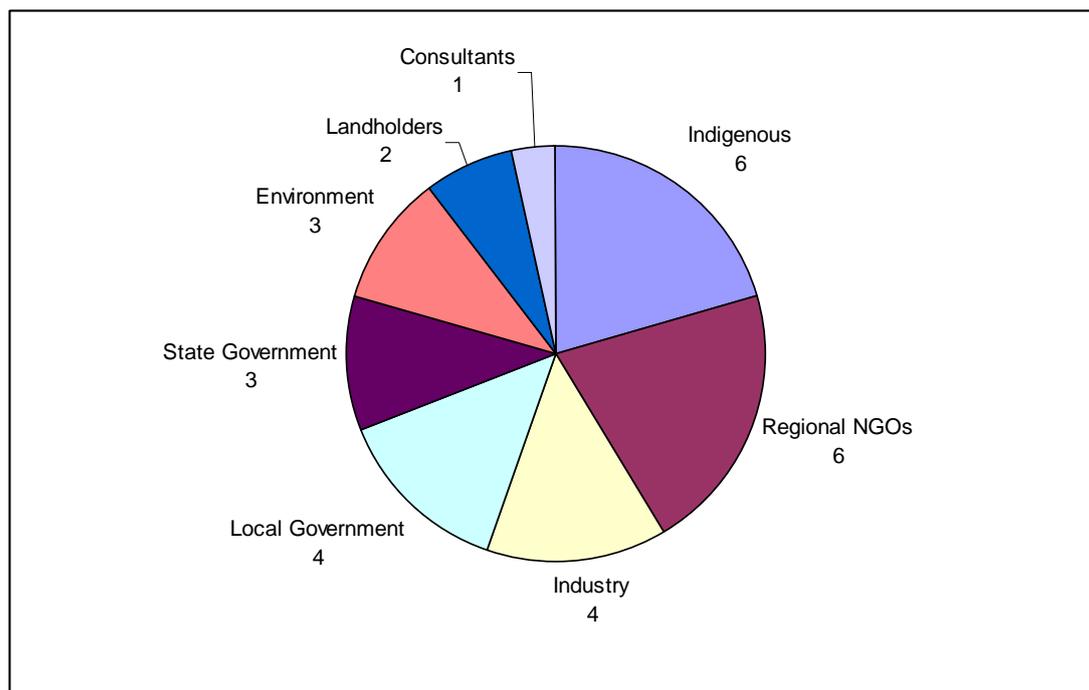


Figure 7: Interview Respondents by sector

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 decisions were actually made; accountability – whether there were mutually agreed processes developed so that those both directly involved in decision-making process 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 C: Amendments to the Collaborative Monitoring and Evaluation Framework (CMEF)

<i>Dimension</i>	<i>Indicator</i>	<i>Used</i>	<i>Justification</i>	<i>Amended approach</i>
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	

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		