

Beyond the local: assessing the external social outcomes of Indigenous environmental management

Key concepts and a case study of the Kowanyama Aboriginal Land and Natural Resource Management Office

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National Environmental
Research Program

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Aboriginal Land &
Natural Resources
Management Office



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Cover photo: KALNRMO staff organising the partnership with scientists from the TRaCK program. Left to right: Colin Lawrence, Ruth O'Connor, Viv Sinnamon, Stanley Budby, Phillip Mango, Stuart Bunn, Alan Flower, Jeff Shellberg.

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Abbreviations

ANGIC – Alliance of the Northern Gulf Indigenous Corporation

CYPLUS – Cape York Peninsula Land Use Survey

DERM – Department of Environment and Resource Management (Qld)

GBRMPA – Great Barrier Reef Marine Park Authority

ICNRM – Indigenous Cultural and Natural Resource Management

JCU – James Cook University

KASC – Kowanyama Aboriginal Shire Council

KALNRMO – Kowanyama Aboriginal Land and Natural Resources Management Office

MRG – Mitchell River Group (latterly MRWMG)

MRWMG – Mitchell River Watershed Management Group (formerly MRG)

NERP – National Environmental Research Program

NGISG – Northern Gulf Indigenous Savannah Group

NGRMG – Northern Gulf Resource Management Group

NQLC – North Queensland Land Council

NRM – Natural Resource Management

NWIFC - North West Indian Fisheries Commission

PBC – Prescribed Body Corporate (for native title purposes)

PES – Payment for Environmental Services

QPWS – Queensland Parks and Wildlife Service

RDA – Regional Development Australia

TAFE – Training and Further Education

TCF – The Christensen Fund

TRaCK – Tropical Rivers and Coastal Knowledge

UNU – United Nations University

Executive summary

The formal Indigenous cultural and natural resource management (ICNRM) sector has grown significantly in recent decades. This growth is primarily due to support from the wider natural resource management (NRM) sector and as a result, existing ICNRM monitoring and evaluation processes have prioritised environmental outcomes. Yet the emergence of ICNRM has also had implications for the human communities in which it is active, and for society as a whole. These wider non-environmental implications of ICNRM (sometimes termed co-benefits) have been regularly noted, but the number of studies that examine them is limited. In addition, those studies that do exist predominantly focus (implicitly or explicitly) on the impacts of the ICNRM sector at the local community scale. This report addresses these two research and monitoring gaps by focusing on:

1. the social, cultural, political, economic, and health and wellbeing outcomes that accrue from ICNRM
2. outcomes of this type that accrue beyond the local community scale.

It is the first time in Australian ICNRM research that the major research focus has been explicitly placed upon outcomes accruing beyond the local Indigenous community.

The report analyses the wider ICNRM literature and examines an extended case study of a mature ICNRM agency, the Kowanyama Aboriginal Land and Natural Resource Management Office (KALNRM). The analysis is qualitative and is primarily focused on improving the clarity and breadth of the conceptual classifications used to identify and define benefits/outcomes in this area of research and program evaluation.

This project explicitly complements another project conducted simultaneously with Yirralka Rangers in Arnhem Land focused on the social and other related ICNRM co-benefits accruing within a local Indigenous community (Barber 2015b).

The report identifies key categories of outcome – cultural, social, political, economic, and health and wellbeing. It also explicitly analyses how to identify outcome recipients, a crucial issue in co-benefit analyses that has not been well-examined to this point.

The review of the ICNRM literature shows that the key outcome categories identified above have been adopted in other publications, but they are not used and applied consistently. Some research about wider ICNRM effects has not used larger organising categories at all. This affects the breadth and precision of outcome identification. Correspondingly, a range of benefits beyond the local ICNRM community are identified in the literature, but references to such benefits are 1) scattered amongst accounts of local community impacts, or 2) implied in the terminology used to describe outcomes rather than clearly identified and/or organised as external impacts. Key external outcomes noted in the existing literature include economic benefits (particularly multiplier effects from local ICNRM investment), as well as a series of social, cultural and political benefits that are summarised as: partnerships and relationship building; reconciliation; recognition; and self-determination and autonomy. Further ICNRM outcomes beyond the local community that are currently undocumented but are plausible are also noted.

These conceptual and analytical foundations support the case study analysis of the KALNRM. Key features of KALNRM activity and external impact are described - strategic planning, fisheries, catchment management, international cooperation, National Park co-management and research collaboration. Key external outcomes/co-benefits demonstrated by the KALNRM case includes:

- Cultural - fostering and reinvigorating Indigenous cultures and traditions; KALNRM as an ICNRM sectoral exemplar; informal learning and knowledge sharing; and attitudinal and behavioural change

- Social – research collaborations; institutional educational outcomes; policy and research communication through conference participation; media and public communication; social networks and partnerships; meeting external organisational objectives; and reconciliation
- Political - independence, autonomy, and self-determination; natural resource negotiation and natural resource governance; and recognition
- Economic – funding sources; growth, sustainability and independence; co-investment and collaboration; economic outcomes from NRM improvements, and economic outcomes from local health and wellbeing improvements.

No data was identified that was best classified as a health and wellbeing outcome beyond Kowanyama arising from KALNRMO activities. These largely secondary health effects are difficult to detect with the qualitative methods adopted here. However, potential subcategories identified through general conceptual analysis include changes in the rates of communicable diseases and intercultural trauma; improved environmental amenity; and psychological and wellbeing outcomes associated with attitudinal and behavioural change and reconciliation.

This case study emphasises the specific historical significance and influence of the KALNRMO to Australian ICNRM – its early establishment, consistency and scale have made it an important exemplar for the sector as a whole. This project has met a range of local KALNRMO community objectives, notably formalising understanding of KALNRMO impact on external stakeholders, supporting ongoing resourcing efforts, and supporting understanding of the KALNRMO by local government, native title, and other individuals and agencies at Kowanyama. Other ICNRM agencies may derive similar benefits from undertaking this kind of assessment of external impact.

In terms of wider ICNRM outcome assessment, the KALNRMO case study validates the importance of examining the external beneficiaries of ICNRM and the usefulness of the conceptual framework for identifying and classifying ICNRM outcomes. Although not a major focus, the synthesis section also briefly discusses monitoring and evaluation indicators. A range of previously proposed indicators fit well into the classification system developed here, but the external outcomes of ICNRM remains understudied, meaning that additional indicators and measures are likely to be needed. There are challenges with using indicators and metrics of what are often secondary effects influenced by variables beyond the control of ICNRM agencies as sectoral assessment tools.

Based on the results of the work undertaken here, some key next steps for ICNRM outcome/co-benefit research and associated policy understanding include:

- testing the application of the categories and subcategories with other ICNRM case studies
- identifying and aligning appropriate indicators and measures
- developing effective summaries of the results of ICNRM outcome/co-benefit research
- examining how ICNRM co-benefit research can be integrated into sectoral monitoring and evaluation processes in ways that enhance understanding of sectoral value without:
 - substantially increasing reporting obligations
 - requiring ICNRM agencies to meet additional performance requirements about outcomes that may:
 - ~ represent secondary effects of ICNRM activities
 - ~ be influenced by co-variables that are not being monitored (e.g. diverse influences on community health) and/or
 - ~ be outside the control of ICNRM agencies.

1 Introduction

1.1 The growth of Indigenous Cultural and Natural Resource Management (ICNRM)

There has been a growing need to manage the national estate, as well as to respond effectively to Indigenous demands for recognition, control over land, management capability, and regional development pathways to address Indigenous disadvantage (Young *et al.* 1991, Baker *et al.* 2001, Smyth 2011, Altman 2012, Altman and Kerins 2012, Bauman *et al.* 2013, Hill *et al.* 2013, Altman and Jackson 2014). This has led to significant growth in public investment in ICNRM, accompanied by emerging private investment, and to great interest in how such investment should be directed, managed, and monitored (Putnis *et al.* 2007). Generating income from environmentally beneficial management actions undertaken on Indigenous lands can enable the retention and/or re-establishment of traditional land management practices (Campbell *et al.* 2007, Luckert *et al.* 2007, Putnis *et al.* 2007, Muller 2008, Winer *et al.* 2012).

This report describes the results of one component of a broader research project for the National Environmental Research Program (NERP) focused on Indigenous livelihoods derived from management of the Indigenous estate. This component of the livelihoods project focused on the wider non-environmental outcomes (also termed co-benefits) of Australian ICNRM. It complements an existing emphasis in the literature on the environmental consequences of contemporary ICNRM. The overall co-benefits project has two parts: 1) an already completed examination (Barber 2015b) of how the Yirralka Rangers ICNRM program in northeast Arnhem Land generates benefits within a particular community in the territory of the Laynhapuy IPA; and 2) the current study, which is preliminary conceptual investigation of how ICNRM generates benefits beyond the local community in which it occurs, using the KALNRM at Kowanyama as a case study. Together, the two assist in furthering the understanding and categorisation of the full suite of additional non-environmental outcomes that can potentially emerge from successful ICNRM programs.

The KALNRM was one of a few key organisations that were established early in the process of formal ICNRM development. The movement now encompasses several hundred ICNRM entities around Australia, undertaking activities as diverse as carbon emissions reduction and sequestration, vulnerable and feral species management, natural product harvesting, and cultural heritage protection. Frequently, the initial NRM focus of these initiatives has been augmented by local cultural management priorities (Davies *et al.* 2013) and by wider aspirations for community, economic, social and environmental development (Kerins, 2013). A better understanding of ICNRM outcomes has important implications for national ICNRM program policy and management.

1.2 Interest in wider ICNRM outcomes

The formal ICNRM sector derives its primary origins from the NRM sector, and as a result the main focus of existing monitoring and evaluation for ICNRM has been on the immediate environmental outcomes derived from sectoral investment. However, a series of trends in investment decision making has amplified interest in co-benefits – in the ancillary social, cultural, political, health, and economic outcomes derived from investment in environmental management. These trends include the overall growth in sectoral investment, the search for value in making that investment, and greater emphasis on and sophistication in monitoring and evaluation processes. Indigenous perspectives have also influenced understanding about the objectives and the value proposition of the sector - perhaps most clearly highlighted by the inclusion of 'cultural' in the acronym ICNRM.

1.3 Project scope

Although interest in co-benefits is growing, the legacy of the environmental focus characteristic of the NRM sector means that research analysis (and associated monitoring and evaluation) of other outcomes of Australian ICNRM remains underdeveloped. This report responds to that gap, focusing directly on the social, cultural, political, economic, and health and wellbeing outcomes that derive from an ICNRM agency, rather than on the immediate environmental outcomes. Although the term 'outcome' will be prioritised in what follows, this aspect of the research scope is indicated by the term 'co-benefit', which explicitly marks the focus of effort as ancillary benefits derived from investment in the primary benefit (in this case, environmental action).

With respect to studies of 'co-benefits' or social outcomes that do currently exist, the focus of existing research effort has been on understanding the positive outcomes derived within Indigenous communities. This focus reflects broad societal needs to:

- redress Indigenous social disadvantage
- foster employment and economic development in Indigenous communities
- improve the poor health and wellbeing status of Indigenous people
- enhance the self esteem and awareness of Indigenous people of the levels of recognition of their ancient custodial role over Australian landscapes, and
- understand the value of Indigenous participation in new payment for environmental services (PES) initiatives, particularly market-based greenhouse gas mitigation projects.

However, wider cultural, social, political, economic, and health and wellbeing outcomes from successful ICNRM programs may also accrue well beyond the local communities in which they are situated. In a recent analysis of the sector, Hill *et al.* (2013:29) note that the benefits to wider Australian community are rarely recognised, but also that work was underway to improve understanding of the full range of public and private benefits associated with ICNRM. This project forms part of that effort, by explicitly focusing on the effects of ICNRM beyond the community in which the activity is located.

1.4 Project partners and research objectives

The current project emerged as an extension of existing research partnerships between CSIRO researchers and the KALNRM (Barber *et al.* 2012, Barber *et al.* 2014, Jackson *et al.* 2014). The project scope and objectives were co-developed to address local and wider research needs. The project did not aim to generate a regional or national scale analysis of the influence of the ICNRM sector on wider Australian society. Rather, the primary research objective was to use the literature and a case study of a mature ICNRM program to:

- enable broad scale conceptual categories of outcome - social, cultural, political, economic, and health and wellbeing – to be clearly demarcated from one another
- consider how these kinds of outcomes are identified or not in the existing literature
- evaluate the potential of the outcome categories to assist in the identification and classification of empirical data about outcomes accruing beyond the immediate community in which the program was situated; and
- consider the relationship of the broader scale outcome categories to locally emergent subcategories derived from the empirical data.

As the above list of objectives indicates, the study uses literature and case study evidence but emphasises definitional and conceptual clarity. The primary focus of this definitional effort is in the respective demarcation of social, cultural, and political outcomes. Partly based on the skills of the author and partly based on the evidence located, the study does not provide quantitative assessments of economic outcomes, or detailed evidence for health and wellbeing outcomes at the case study level. However, it does review key issues in these categories and considers the question of secondary outcomes derived from primary outcomes (e.g. the economic outcomes derived from environmental or health outcomes).

From a local KALNRMO perspective, the project addressed organisational objectives to:

- better document the organisation's impact on external stakeholders;
- enhance KALNRMO's organisational profile;
- assist in securing future external investment;
- provide scoping information for a broader scale organisational history; and
- assist with long term succession planning and staff handover at KALNRMO.

In addition, due to a number of successful existing initiatives, at the time the research commenced the KALNRMO was also close to full capacity for partnering in community-based research. The project objectives and methods enabled the maintenance of an ongoing CSIRO-KALNRMO partnership without substantial resource and time commitments required from the local organisation.

The current report represents the primary project output. As reflected in the project objectives, it is addressed to three main audiences:

- researchers investigating the wider outcomes and co-benefits derived from ICNRM;
- ICNRM policy makers, investors, and monitors; and
- interested members of the Kowanyama community, particularly staff at the KALNRMO, at Kowanyama Council and members of Abm elgoring ambung (Kowanyama's Native Title Prescribed Body Corporate).

1.5 Research terminology and conceptualisation

1.5.1 Describing ICNRM effects

Research focused on the wider non-environmental effects of ICNRM has adopted different terms to describe those effects, with the two most common being the positively-defined term 'benefits' (Ganesharajah 2009, Weir *et al.* 2011, Hill *et al.* 2013, Barber 2015b) and the neutrally-defined term 'outcomes' (Davies *et al.* 2011, The Allen Consulting Group 2011, URBIS 2012). However, alternative terms that carry positive, neutral, and negative connotations can also be posited (Table 11). A full investigation of the potential consequences of using different terms is well beyond the scope of the research conducted here, but it is important to note that the nature of the terms adopted (positively, neutrally, or negatively framed) can influence how research is oriented and conducted, and therefore the results it generates.

A further approach that has not been commonly applied in this context is to reformulate analyses in terms of (ecosystem) services that are enabled or augmented by ICNRM organisations. This is in preference to defining them in terms of benefits and/or impacts. This report will not consider this approach further, but many of the conceptual clarifications made here are relevant to discussions of ecosystem services (Jackson and Palmer 2014, Bark et al. 2015).

Table 1-1 Positive, neutral, and negative nouns to describe the wider effects of ICNRM

Positive	Neutral	Negative
Benefit	Outcome	Disbenefit
Improvement	Effect	Deterioration
Advantage	Impact	Disadvantage
Good	Consequence	Bad

Within the general categories of positive, neutral, and negative effects identified in Table 1-1, there are also variations and nuances in meaning that may be significant – e.g. an ‘effect’ may imply an outcome that is locatable at a discrete point in time and/or space, whereas ‘influence’ implies an ongoing or continuous process. A similar distinction can be posited with respect to ‘benefit’ and ‘advantage’. These nuances in meaning are minor, but in identifying and assessing the role that ICNRM has played in wider Australian society, such nuances can affect the degree of research attention placed on locating discrete impacts compared with ongoing effects (that may be less discernible but equally important).

No major work has yet emphasised the negative effects of ICNRM. While there are scenarios where negative social, cultural, health or economic consequences from the establishment or implementation of ICNRM programs can be envisaged, such outcomes seem relatively unlikely on a sustained basis. A more likely scenario is that management circumstances associated with programs result in a failure to realise positive co-benefits rather than actively generating negative ones. The complementary research with Yirralka Rangers undertaken as part of this NERP project highlights this point through examining key influencing factors on whether such benefits are realised (Barber 2015b).

As the title indicates, this report adopts the term outcome, supported by usage of other neutral terms such as ‘impact’, ‘effect’ and ‘consequence’. These neutral terms are used for consistency with key elements of the recent literature (Davies *et al.* 2011, The Allen Consulting Group 2011, URBIS 2012), as well as because they leave conceptual scope for ICNRM impacts beyond the local scale that, if not entirely negative, may be ambiguous in their effects. However, ‘co-benefit’ is also used as this term has precedents in the international literature and the modifying prefix ‘co’ is important in highlighting that the focus remains on the under-investigated ancillary effects of environmental management actions. This report does not evaluate the primary environmental effects of ICNRM in detail, although it does consider them in terms of their potential influence on economic co-benefits (see section 8.5 below). No major incompatibility is envisaged by the inclusion of an ‘environmental’ outcome category to the conceptual framework provided here, it is simply that the emphasis of the current research effort was on the ancillary outcomes that are less well-documented.

1.5.2 Categorising ICNRM outcomes

The general framing of the wider effects of ICNRM as positive (benefits) or neutral (outcomes) represents one step in decisions about understanding and analysis. A second step involves further categorisation of the individual effects. In practice, the identification of outcomes (and of those affected by them) is an iterative process- pre-determined categories and classifications can aid identification, while field identification of co-benefits can also suggest emergent new forms of classification. The current study combines both approaches, positing pre-identified larger-scale conceptual categories as well as enabling the emergence of further relevant outcome sub-categories based on the analysis.

In terms of larger-scale categories, in the existing literature focused on the benefits and/or outcomes of Australian ICNRM, the categories predominantly used are: health and wellbeing; social (or socio-political); cultural; and economic (Ganesharajah 2009, Weir 2009, Davies *et al.* 2011, Barber and Jackson in review). The complementary NERP research undertaken alongside this project highlighted that, although evidence is presented that relates to the topic, these existing discussions of benefits do not prioritise or analyse co-benefits that can be categorised as 'political' (Barber 2015b, Barber and Jackson in review). These existing analyses also do not yet articulate well with related analyses of how ICNRM impacts on governance, both of resources and of Indigenous communities generally (Abrams *et al.* 2003, Thompson *et al.* 2011, Hill *et al.* 2012, Lederer 2012, Hill *et al.* 2013). As a result, the field study with Yirralka Rangers concluded that major categories of wider ICNRM co-benefits relevant to the communities from which the management activity is being undertaken include:

- health and wellbeing - encompassing biophysical, psychological, and collective aspects
- social - pertaining to patterns, institutions, and relationships in systems of human organisation
- cultural - pertaining to learned ideas, beliefs, values, knowledge, behaviours, etc. that demarcate group identities and constitute shared bases of social action
- economic - relating to material resources and conditions, and
- political - relating to systems of governance and the exercise of power and authority.

Within these main categories, subcategories of benefit were adopted that were relevant and useful in interpreting the field data from that study. That report suggests that, while the main categories can be consistently applied, flexibility in adopting and/or identifying subcategories may be necessary to suit the particular circumstances.

Such categories and subcategories necessarily intersect and overlap and, in Indigenous contexts where holism is a key principle, greater emphasis is often placed on such overlaps and on the interconnectedness of social outcomes (URBIS 2012). In some cases, benefits identified by respective studies as 'social' or 'cultural' - for example self-esteem, hope, identity, and self-worth (Sithole *et al.* 2008, Kingsley *et al.* 2009a) - can also be understood in terms of individual psychology, or indeed through such compound terms as 'psychosocial' (Morice 1976, Campbell *et al.* 2008).

The above categories are applicable to analyses adopting positively framed 'benefits' terminology, neutral terms such as 'outcome' or 'effect', or indeed negative terms such as 'disadvantage' or 'deterioration'. Changes to the categorisations (health, social, economic, etc.) do not appear to be required in moving from considering effects primarily as positive benefits to considering them as neutral outcomes. This is reflected in previous studies that have adopted either term but use at least some of these primary categorisations.

1.5.3 Categorising the recipients of ICNRM outcomes

Identifying the recipients of these wider outcomes of ICNRM involves further considerations of scale and terminology. As Hill *et al.* (2013:29) note, the primary focus of existing ICNRM analyses has been the benefits to immediate participants and/or outcome recipients at the community level. Distinctions at this scale of analysis have largely been drawn in terms of the ICNRM program and its direct participants - the family, the Indigenous landowning group, and/or the Indigenous community (Sithole *et al.* 2008, URBIS 2012). Similarly, some international studies have distinguished between social structural categories such as an individual, an organisation, or an entire community (Westphal 2003, Hibbard and Lurie 2012). Yet in other cases, key scales of benefit analysis can deprioritise this kind of 'community boundary' and instead emphasise the scales of the individual project and the nation state (Sutter 2003). Outcome recipients can also be demarcated in terms of: participation (those directly involved in ICNRM); proximity (those witnessing or nearby); awareness (those with knowledge it is occurring); and outcomes (those benefitting from ICNRM activities, whether they are aware of them or not) (Barber 2015b).

Categories of outcome recipient are also not mutually exclusive. Wider Indigenous community involvement in ICNRM activities can blur the distinction made above between participation and proximity, while individual members of Indigenous families and groups are also members of broader Indigenous communities that are in turn also components of higher order Indigenous population categories – catchments, regions, states and territories, and the nation state. The current study is defined in terms of a geographic and demographic boundary – the 'community' (in this case Kowanyama) – and is explicitly focused on outcome recipients beyond that boundary. Geographically and demographically, non-Indigenous people dominate this category, but as framed, the study also incorporates outcomes for the many Indigenous people living elsewhere.

Choosing this geographic and demographic focus for outcomes also requires acknowledgement of the fact that many key external KALNMO outcomes derive from this boundary being porous. In other words, those outcomes are often associated with people who were, at some point, residents of Kowanyama and/or participants in KALNMO projects, but who now live and work elsewhere. At an institutional level, organisations may never have been located at Kowanyama, but may have been influenced by undertaking joint activities with KALNMO on the traditional lands of Kowanyama residents. In future studies of ICNRM outcomes, the demarcation between internal and external outcomes may not need to be made as explicitly as it is here, where external outcomes are the main focus. In adopting this focus, the current study meets local information needs about external contacts and stakeholders, and responds to the knowledge gap identified by Hill *et al.* (2013), but future studies are perhaps more likely to need and adopt a 'whole of program' (i.e. internal and external) outcome assessment approach. However, this approach will benefit from the implications of the more detailed work undertaken here with a narrower and more focused scope on external outcomes.

1.6 Report structure

This report is divided into 10 parts. The current Part 1 introduces the research context and identifies some key terms and concepts relevant to the study. Part 2 outlines the methods adopted and the research location. Part 3 analyses the existing ICNRM literature for insights regarding non-local and/or non-Indigenous benefits. Parts 4-9 present the results of the research on the various cultural, social, economic, political, and health and wellbeing outcomes of KALNMO activities. Part 10 analyses the results and provides a concluding synthesis and research recommendations.

2 Research methods and case study background

2.1 Research methods

At present, there appears to have been no significant and structured investigation of the co-benefits/non-environmental outcomes of formal ICNRM on wider society beyond the community or communities from which it is conducted. As a result, the current research acts as a preliminary scoping study of a particular case that identifies key issues, activities, and processes that are relevant to subsequent considerations of these wider outcomes. In order to meet the objectives of such a scoping study, three key research activities were undertaken:

- a survey of the research literature on the co-benefits and wider non-environmental outcomes of ICNRM, particularly as they relate to effects beyond the community level
- an analysis of archival, print and online media sources about the KALNRMO
- interviews with key past and present external stakeholders of the KALNRMO

The survey of the research literature about the general effects of ICNRM on wider society was undertaken as an extension of the main literature survey on benefits and effects that is reported elsewhere (Barber 2015b, Barber and Jackson in review). Key aspects of the main literature survey, and specific references to effects and outcomes beyond local communities, are presented in Sections 3.4 and 3.5 below.

Research data specific to the KALNRMO case study was collated, summarised and analysed using qualitative analysis software (NVivo). Following the results of the literature and conceptual analysis, the analysis of the empirical data progressed by simultaneously trialling two separate methods of data organisation. One method involved organising data in terms of the major outcome categories identified above – social, cultural, economic, political, health and wellbeing and iteratively producing emergent subcategories within those main categories. As a comparison, the other method tested modes of data categorisation in terms of outcome recipients by differentiating recipients along 3 orientations – demographic, geographic, and sectoral. This approach took additional time as individual data instances had to be classified in multiple ways – first in terms of outcome categories, then in terms of multiple divisions of outcome recipients. However, it encouraged deeper consideration of the potential interpretations of each data instance and enabled comparative evaluation of how the respective frameworks were able to accommodate and illuminate consideration of ICNRM outcomes.

Consistent with the approaches adopted in the existing co-benefit and outcome literature and with the primary focus of the study, organising the data in terms of the conceptual categories of outcome was found to be more effective than organisation in terms of the different categories outcome recipient. Nevertheless, the latter exercise was useful in highlighting key recipients and in identifying additional emergent features of the data. It may also be a useful strategy in gathering initial field data from ICNRM agencies, who would be more likely to consider outcomes in terms of recipients (i.e. holistic relationships with agency partners, stakeholders, etc.) than in terms of the outcome categories emphasised here.

The results of this iterative analysis in terms of outcomes are presented in Parts 4 through 9 of the report. These sections demonstrate how the broad scale categorisations can be used to assist the identification of:

- examples and instances of KALNRMO activities
- emergent subcategories.

This identification in turn facilitates the classification of those examples as demonstrating particular kinds of ICNRM outcomes.

2.2 Case study: the Kowanyama Aboriginal Land and Natural Resource Management Office (KALNRMO)

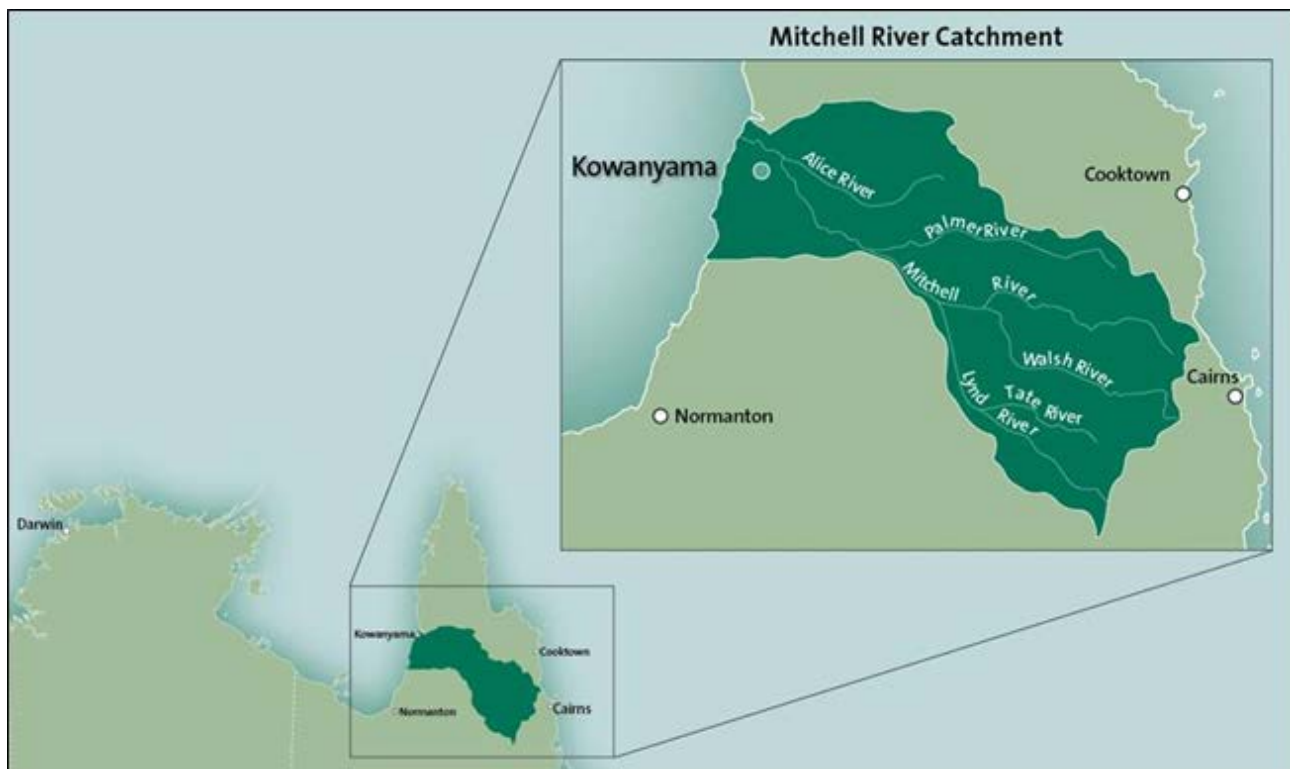


Figure 2-1 Map showing the location of Kowanyama

2.2.1 Kowanyama and the KALNRMO

Kowanyama lies on the eastern side of the Gulf of Carpentaria (Figure 2-1). It is a former mission that is now home to approximately 1100 people, the great majority of whom are Indigenous people with cultural, ancestral, and historical connections to the surrounding territory. As the name suggests, the primary focus of the KALNRMO is natural and cultural resource management on land, aquatic, and coastal areas owned by Kowanyama residents. Established in 1990, it is now 25 years old, with its origins in natural resource management and governance initiatives by Kowanyama Council dating back more than 30 years. The size of the KALNRMO has varied over time. It began with 2 staff and has experienced significant periods of growth, at times having over 15 staff. At mid-2015, it had eight staff. Oversight and guidance of KALNRMO operations is provided by a Counsel of Elders, a body comprised of senior traditional owners of Kowanyama lands that is intended to provide an explicit link between the nation-state governance structures required by and represented in the KASC and the traditional Indigenous governance structures emphasised by Kowanyama residents. KALNRMO operations are also informed by input and advice from technical experts in relevant fields.

The KALNRMO is involved in managing land under different tenure regimes (Deed of Grant in Trust, pastoral lease, National Park, etc.) with a diverse array of near neighbours, particularly other Indigenous landholders and non-Indigenous pastoral leaseholders. It is also situated at the downstream end of the Mitchell River, a major northern catchment that has been predominantly owned and/or managed by non-Indigenous interests, particularly pastoral and mining interests. As a result, KALNRMO has been involved for decades in sometimes complex local relationships with near neighbours, and with multiple levels of governance and government—local, catchment, Cape, State, and national.

The size and longevity of the KALNRMO, as well as the diverse array of external parties it is obliged to interact with, means that it has been an important ICNRM organisation, not just regionally, but nationally. Its early establishment and ongoing viability gave it an important profile in the emerging sector, noted by other early-established programs elsewhere, as well as by research and policy practitioners.

2.2.2 KALNRMO activities

KALNRMO has undertaken diverse activities throughout its extended history, far more than will be identified here. It is a community-owned and led organisation that operates with a broad environmental and social mandate in an under-resourced location. As a result, it often provides services or becomes involved in work done by government or by philanthropic organisations in more developed areas with larger populations and resource levels. In addition, natural and cultural resource management are intertwined in important ways for Indigenous land managers. Nevertheless, key activities can be categorised, and these have included:

- Natural resources management
 - inland and saltwater fisheries
 - catchment and watersheds
 - fire and carbon
 - introduced and feral species
 - biodiversity
 - biophysical and natural scientific research
- Cultural resource management
 - sacred site documentation and protection
 - local and traditional knowledge recording and storage
 - linguistics and language learning support
 - knowledge sharing and educational activities
 - anthropology and ethnoscientific research
- Human and organisational resource management
 - key organisational principles and values
 - governance structures and strategic planning
 - staff and community development
 - community consultation and partnerships
 - ~ Kowanyama council
 - ~ traditional owner groups
 - ~ wider Kowanyama community residents
 - external stakeholder consultation and relationships

This report effectively emphasises the last of these, external relationships, but outcomes relating to external stakeholders are often a direct consequence of the diverse set of natural, cultural and human resource management activities the organisation undertakes. It is through such activities that wider social outcomes relevant to external stakeholders are generated. Further information about specific KALNRMO activities and engagements appears in the sections that follow.

2.2.3 Research participants and Ethics

The selection of interviewees was the result of a series of conversations with KALNRMO staff, examination of what literature sources were available to support the study, and consideration of the primary objectives of the research. Each interviewee had long term engagements with KALNRMO, in many cases dating back to its initial formation. Based on past engagements and/or current professional position, they were also able to comment on outcomes with respect to particular issues or sectors. Nine interviewees were contacted and eight were available for interview during the research process. These individuals are listed in Table 2-1 below. Two sectors were not represented amongst the formal interviewees but were the subject of pre-existing publications that covered key aspects of sectoral perspectives on KALNRMO operations. These were the commercial fishing sector, which was the subject of a publication by Sharp (1998), and the Queensland Parks and Wildlife Service, whose interactions with Kowanyama were part of the focus a recent doctoral thesis (Larsen 2012).

The aim of the interviews was not to generate a comprehensive account of all possible external non-environmental outcomes of Kowanyama ICNRM, but rather to identify some major outcomes and test the efficacy of the conceptual framework against the type of data likely to be generated in similar processes elsewhere. A further set of potential interviewees identified during the current process and likely to be important in any future more detailed organisational history appears as Appendix A.

This project had clearance by the CSIRO ethics committee and the interviews were conducted using a free, prior and informed consent process (Appendix B).

The questions asked of the interviewees covered the following topics:

- the circumstances of the participants first encounter with the KALNRMO (context, purpose, etc.)
- length of that and subsequent engagements
- effects of interactions with Kowanyama about participants understanding of:
 - Indigenous people and cultures
 - NRM principles and processes
 - wider Australian history and society
- Personal and professional benefits emerging from engagement with KALNRMO
- Experience of the influence of KALNRMO on:
 - other individuals/organisations
 - the wider North Queensland community
 - research and policy community
 - State, national, and international organisations and institutions

The participants' responses were transcribed and collated for analysis using NVivo software. The interviewees are identified in the results as their individual position and perspective were important components of the analysis. Interviewees were provided with a draft copy of the report prior to finalisation and were able to amend, delete, or provide further comments on any material attributed to them.

Table 2-1 List of interviewees for the research– current and past positions and expertise

Name	Current position/ location	Relevant additional/ past positions	Particular expertise with respect to KALNRM outcome
Ron Archer	Alliance of the Northern Gulf Indigenous Corporation	Northern Gulf Indigenous Savannah Group (NGISG), Djungan Indigenous elder	Regional ICNRM
John Clark	North Queensland Land Council (NQLC)	Senior Ranger, KALNRM	Early KALNRM history, fisheries, ranger training
Allan Dale	Chair, Regional Development Australia for Far North Queensland and Torres Strait	James Cook University; KALNRM consultant	Australian NRM planning, Early KALNRM history,
David Hughes	Nebo, Queensland	Owner and Manager of Koolatah and Oriners Stations	Pastoral issues, early KALNRM history, catchment management
Henrietta Marrie	United Nations University	James Cook University; The Christensen Fund; lecturer in Indigenous Ranger training at Cairns TAFE; Yidinji Indigenous group	ICNRM education and training, regional Indigenous impacts, International collaborations
Jeff Shellberg	KALNRM consultant	Griffith University ; position with Makah Tribal Fisheries, USA	Natural science research, erosion and firemanagement, regional impact
Dermot Smyth	Smyth and Bahrdt Consultants	Coordinator of Indigenous Ranger training at Cairns TAFE	Regional ICNRM impact, NRM planning, ICNRM education
Veronica Strang	Durham University	Position in research institutes and universities in the UK and New Zealand	Social sciences research impact, international research impact, early KALNRM history

3 Existing research literature: ICNRM outcomes and co-benefits beyond the local Indigenous community

3.1 Introduction

Increasing investment in ICNRM has driven interest in the wider outcomes derived from that investment, which in turn has encouraged growing research in the field. Significant research efforts remain in progress, but important outcomes have emerged from past research, particularly in the field of health benefits. More extensive description and analysis of the literature in this field appears in other documents associated with the recent research effort (Barber 2015b, Barber and Jackson in review). This section will briefly note major relevant research outputs, the conceptual categorisations they adopt to describe outcomes, and what kind of co-benefits and outcomes accruing to wider society they contain.

3.2 ICNRM outcome and co-benefit literature: key contributions

A series of existing studies are important to the general issue of social and other outcomes from ICNRM. A number of these studies were themselves reviews, while others combined field data collection with analytical insights. The three recent literature reviews are:

- A research report undertaken through AIATSIS and focused on the relationship between land management and health and wellbeing (Ganesharajah 2009)
- A further AIATSIS review undertaken for DSEWPAC that summarised Ganesharajah's analysis and identified a range of additional cultural, socio-political, economic, and environmental benefits associated with ICNRM (Weir *et al.* 2011)
- A review focused on health and wellbeing outcomes arising from desert Aboriginal land management (Campbell *et al.* 2008, Davies *et al.* 2011)

These reviews adopted different methods and orientations, but health and wellbeing outcomes remained an important emphasis throughout. Weir *et al.* (2011) is designed to complement the review by Ganesharajah, but nevertheless contains a summary of health and wellbeing findings.

The emphasis on health and wellbeing in the reviews corresponds to a general emphasis in the wider field literature. The most substantial and significant dataset relating to the outcomes of ICNRM involved medical research and correlated ICNRM activities with particular biophysical and psychological health outcomes (Burgess *et al.* 2005, Burgess *et al.* 2008, Burgess *et al.* 2009). The results of this project are augmented by a range of other analyses emphasising the health and wellbeing outcomes from ICNRM for participants and local communities (Greiner *et al.* 2007, Johnston *et al.* 2007, Kingsley *et al.* 2009a, Kingsley *et al.* 2009b, Kingsley *et al.* 2013). They are also augmented by analyses of the wellbeing outcomes of general residence in remote areas of customary significance, and the activities and dietary changes that may emerge from such residence (Morice 1976, O'Dea *et al.* 1988, McDermott *et al.* 1998, Rouja *et al.* 2003). A related emphasis is the strong connection between landscape health and human health for Indigenous people (Willis *et al.* 2004, Greiner *et al.* 2005, Putnis *et al.* 2007, Kingsley *et al.* 2009b, Rigby *et al.* 2011), an emphasis that has international correlates (Wilson 2003).

Such interconnectedness has implications for other studies of ICNRM co-benefits and outcomes, notably those focused on social, cultural, political and economic domains. Such domains, particularly as they relate to human health, are an important feature of the health-oriented reviews identified above, particularly when ‘health’ is substituted with the broader and more inclusive concept of ‘wellbeing’ (Greiner *et al.* 2005, Greiner *et al.* 2007). However, in general, these features of ICNRM effects are more explicitly analysed by studies focused directly on social, cultural, political and economic outcomes.

Of the studies focused on such a classification, Weir *et al.* (2011) provide an important contribution, particularly with respect to the explicit identification of the category of socio-political benefits. In addition to this review, there are important empirical studies commissioned directly by government departments or focused on government departments as a key audience. Four key outputs will be noted here:

- An evaluation of the Indigenous Protected Areas Programme produced for the Department of Environment and Heritage (Gilligan 2006)
- A ‘community driven’ evaluation of Aboriginal land and sea management in northern Australia undertaken under the auspices of the CSIRO (Sithole *et al.* 2008)
- An assessment of the economic and employment outcomes of the Working on Country program (The Allen Consulting Group 2011)
- An assessment of the social outcomes of the Working on Country program (URBIS 2012)

In addition to reports focused on formal evaluation and outcome assessment, there are also more general sectoral analyses of the scale, diversity, barriers and successes associated with the contemporary ICNRM (Hill *et al.* 2013). Social and other co-benefit outcomes can be particularly influenced by factors such as ICNRM investors emphasising project-based outcomes rather than undertaking program-based investment (Gorman and Vemuri 2012). Emerging PES schemes are a noticeable aspect of such outcome-focused projects, and carbon abatement PES on Indigenous lands has been one focus of attention (Fitzsimons *et al.* 2012, Green and Minchin 2014).

Given the high levels of disadvantage identified within Indigenous communities, the general research and assessment focus on the co-benefits and associated outcomes of ICNRM within such communities is understandable. However, such investment is also motivated by the recognition of past colonial dispossession and associated moves for reconciliation. Both influences highlight that such investment occurs in a wider social and economic context. Yet questions of recognition and reconciliation imply not just the amelioration of statistical Indigenous disadvantage relative to wider non-Indigenous society, but also to ongoing attitudinal changes within that society. From this perspective, ICNRM investment is both a response to pressure for reconciliation and recognition and a causal factor in its ongoing growth. The following sections examine the ways in which the existing literature considers the effects of ICNRM beyond local Indigenous communities.

3.3 Categorisation of outcomes and outcome recipients in the literature

As noted previously (Barber 2015b), the outcome categories of social, cultural, economic and political outcomes are useful in discerning, understanding and demarcating the effects of ICNRM. However, they are not mutually exclusive, nor are they applied consistently across the existing literature. In addition, although there are clear exceptions (notably with respect to economic analyses), much existing literature does not make explicit distinctions between outcomes relevant to local Indigenous communities where ICNRM takes place and outcomes relevant to wider non-local and/or non-Indigenous populations. As a result, references to outcomes with this kind of demographic and geographic spread tend to be interspersed with discussions of local Indigenous community outcomes and/or organised using categories that vary in important ways from the ones identified above.

This situation makes a comprehensive review of what kind of outcomes accrue beyond local Indigenous communities more challenging. The challenges are particularly acute in relation to social, cultural, and political outcomes. Before turning to a full consideration of the outcomes themselves, it is worth noting some further conceptual and definitional issues with respect to the categorisation of both outcomes and outcome recipients.

The existing analyses of economic outcomes tend to be the most explicit in generating categories that identify outcomes beyond local Indigenous communities. In addition to accounting for local economic impacts, The Allen Consulting Group (2011) use 'State' and 'Federal' as geographic and governance levels relevant to their economic analysis. Greiner and Stanley (2013) describe a category of 'flow-on benefits' that encompasses effects at the regional and population level. The outcomes themselves will be discussed in more detail below. What is important to note here is that categories of analysis are used which explicitly focus attention on the geographically or demographically dispersed economic outcomes of ICNRM, but these categories are not consistent across the limited suite of existing analyses.

The literature focused on social, cultural, and political outcomes contains significant empirical findings about outcomes beyond local Indigenous communities, but there tends to be less explicit theoretical categorisation with respect to such outcomes in this literature. In their evaluation, Sithole *et al.* (2008: 71-84) consider a range of important outcomes or benefits – hope and esteem, knowledge transfer, health, governance, infrastructure, networking, etc., but these are not placed into any broader categories (social, economic, etc.) let alone distinguished in terms of outcomes within and beyond local Indigenous communities. Weir *et al.* (2011) do use outcome categories very similar to the ones proposed here, but do not make clear geographic and/or demographic distinctions in outcome recipients. A study of Giringun Aboriginal Corporation (Greiner *et al.* 2007) examines explicit engagement with 'third parties' (Federal, State, and local governments, Indigenous land councils, and regional NRM agencies) beyond the ICNRM agency and the local Indigenous community. The study showed how such parties recognise the benefits of having Giringun as a 'one stop shop' for regional Indigenous contact and consultation and that they often have constructive relationships with it. However, the primary focus of the study was upon the contribution of the agency to the wellbeing of Traditional Owners in North Queensland, limiting the degree to which it formulated and analysed outcomes beyond that community.

URBIS (2012) is the most recent and comprehensive study of social outcomes, and this study highlights these issues of outcome category definition and of geographic and demographic scale in outcome recipient categorisation. A key diagram (Figure 3-1) reproduced in the report in both the Executive Summary (URBIS 2012: II) and in the main body (URBIS 2012: 15) identifies outcomes and recipients.

With respect to outcomes, a number of important categories are listed, but both health and wellbeing and culture are rendered as subcategories which are subsumed within the social category, while financial outcomes are an additional social subcategory separated from the 'economic' one. This

depiction may effectively demarcate the boundaries of the 'social' outcomes covered by the report, but does not aid the broader conceptual categorisation of ICNRM outcomes.

The categories of ICNRM outcome recipients in the URBIS (2012) framework are designated as 'rangers', 'families', and 'communities'. Although focused on 'social' outcomes, the diagram does not explicitly include a category of outcome recipient labelled 'society' and subsequent usage of 'communities' in the report indicates that this term performs a dual function – at times it is used to refer to Indigenous communities alone (particularly the location where ICNRM activity is occurring) and at times it is used to refer to communities in general (effectively acting as a marker of wider regional populations and/or Australian society as a whole). This is shown in the way that part 6.3 of the report 'Social outcomes for communities' incorporates subsections strongly focused on local Indigenous community outcomes (e.g. traditional knowledge sharing, reduced conflict) and subsections that implicitly or explicitly involve and encompass non-Indigenous people (breaking down social barriers, self-determination). The final assessment framework proposed by URBIS (2012: iv) aims to 'identify social outcomes at the individual, project and community levels and capture input from a diversity of project stakeholders'.

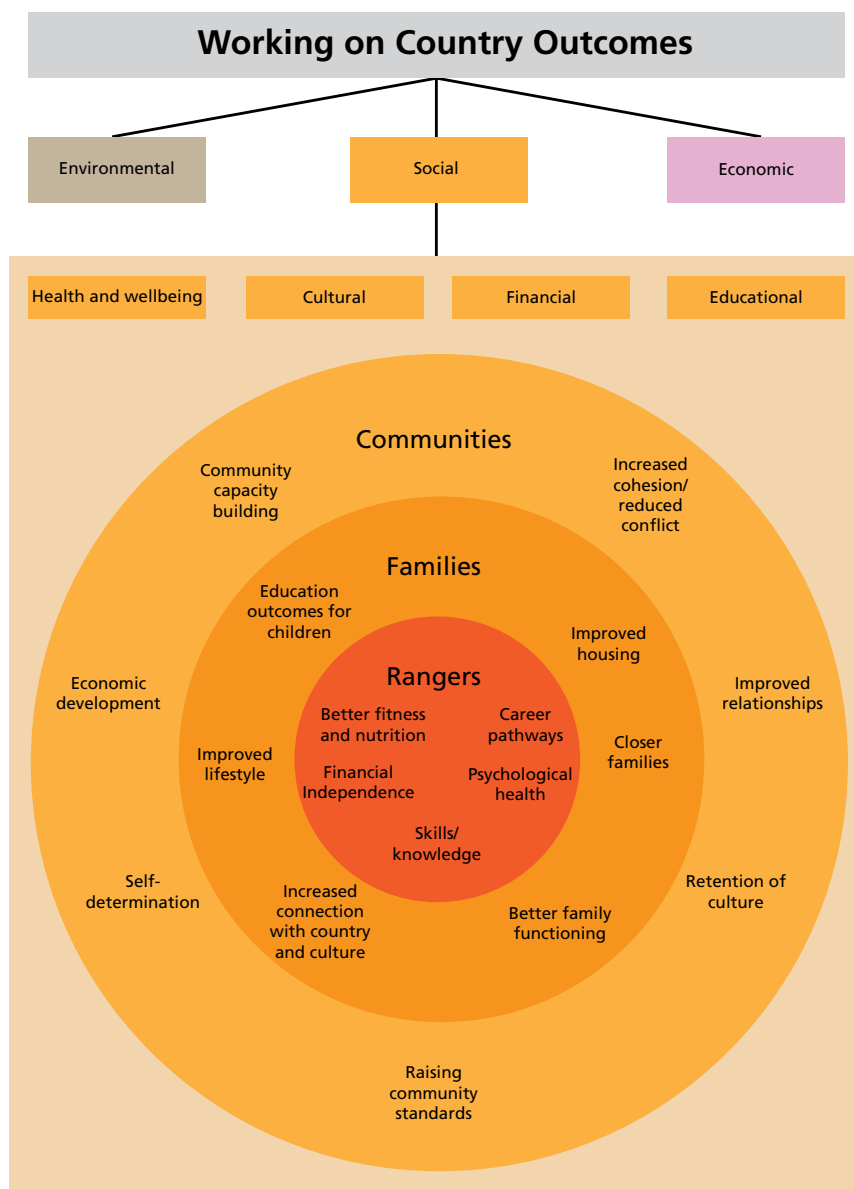


Figure 3-1 Conceptual diagram identifying outcomes and outcome recipients in URBIS (2012)

Other analyses of ICNRM benefits show related assumptions or implicit patterns of categorisation with respect to the Indigenous and non-Indigenous sectors of society. The use of the term 'community' by Sithole *et al.* (2008) carries the implicit assumption that it refers to Indigenous communities (e.g. Section 4.6 'wider community participation') but this definition remains unspecified. Similarly, discussions of cultural outcomes or cultural benefits (e.g. Weir *et al.* 2011) generally consider these only in terms of outcomes for Indigenous cultures/communities, rather than including the cultures (i.e. acquired principles, behaviours, attitudes, etc.) of non-Indigenous people as potentially influenced by ICNRM. This assumption or categorisation that 'culture' refers solely to the culture of Indigenous people is a common feature in discussions of Indigenous people, but is rarely made explicit.

Considerations of ICNRM outcomes on non-Indigenous people are more frequently considered when the focus is placed upon 'social' outcomes. However, the general lack of attention to non-Indigenous people as an explicit demographic category of outcome recipient means that the social effects on such recipients remain under-explored. This occurs even in studies (URBIS 2012: 5) that explicitly intend to identify the range and extent of social outcomes and address research questions such as 'what is the public value of the program?' (URBIS 2012: 5). This compounds issues created by the simultaneous lack of direct attention to the category of outcomes demarcated in this and related analyses (Barber 2015b) as 'political'. Some of the most significant outcomes of ICNRM relating to non-Indigenous people (e.g. recognition, self-determination) seem best accounted for by this outcome category, even as those outcomes are interdependent with closely related social and cultural processes (e.g. attitudinal change, personal and collective reconciliation).

The above points show the importance of precise analysis of the potential distribution of outcomes across different geographic (local/non-local) and demographic (Indigenous/non-Indigenous) categories of ICNRM outcome recipient as well as across different categories of ICNRM outcome (environmental, economic, social, cultural, and political). As noted above, some key economic analyses do explicitly consider wider demographic and geographic ICNRM outcomes and their recipients, but the recipient categories remain unstandardised. Other studies of ICNRM outcomes focus on effects within a particular demographic and geographic recipient category ('local Indigenous communities') without necessarily being explicit about this focus, or without identifying when and how potential recipients are framed more broadly to encompass a wider demographic group (such as Australian society).

This focus on particular recipients in turn has implications for outcome identification and categorisation:

- it limits the array of cultural outcomes identified
- it contributes to the general lack of demarcation of the category of political outcomes
- and it hampers both the identification and appropriate classification of a range of social, cultural and political outcomes that are important consequences of ICNRM.

However, these existing definitional and conceptual constraints have not prevented the empirical observation of a range of ICNRM outcomes accruing beyond local Indigenous communities, even when not explicitly identified as such. These will now be reviewed in turn.

3.4 Existing accounts of economic outcomes beyond the local Indigenous community

Recognition and reconciliation may be key social and cultural motivations for ICNRM, but economics is currently the primary mode of analysing outcomes that accrue beyond Indigenous communities. Some general reviews encompassing economic discussions (e.g. Weir *et al.* 2011) incorporate conceptual framing (hybrid economy, livelihoods, markets) that imply interactions between local Indigenous communities and the broader economy, but in general, discussions of the economic implications of ICNRM in such reviews are focused on the local Indigenous economic benefits arising from improved arts and culture, commercial wildlife, ecotourism, better pastoralism, etc. (Weir *et al.* 2011: 17). Studies focused directly on economic outcomes tend to adopt conceptual framings that more explicitly engage with non-local and/or non-Indigenous outcomes.

Greiner and Stanley (2013) adopt the terminology of ‘social co-benefits’, but their analysis is primarily economic, and the authors identify three categories of benefits, two of which accrue to the service provider (in this case Indigenous people). The third, noted above, is the ‘flow-on benefits’ to local and regional communities, governments, and society as a whole (Greiner and Stanley 2013). The discussion of this third category is brief and relies on a combination of logical induction and citation of other research, but the authors do identify:

- economic multipliers that may operate at the regional level
- indirect contributions made to the social fabric, population levels and resilience of livelihood systems in rural and remote regions, and
- the potential for reduced public expenditure on areas such as Indigenous health.

The comments about potential health savings made by Greiner and Stanley (2013) are based on calculations made about desert communities (Campbell *et al.* 2007), and a subsequent publication from that work (Campbell *et al.* 2011) reported potential net annual savings to the community of \$268,000 due to improvements in health. Previous work focused directly on health (Burgess *et al.* 2009) also led the authors to explicitly identify benefits to wider society through the mitigation of adverse outcomes and the reduction in public health outlays (<http://lwa.gov.au/node/2347>).

Greiner and Stanley (2013) do not cite the economic analysis of the Working on Country program (The Allen Consulting Group 2011). As noted above, this study is of particular interest in this context as, along with benefits to the immediate program participants and the communities in which they reside, it explicitly identified benefits accruing at the broader State and Federal (national) levels. Most notably, it concluded that:

- the true cost of the WOC program for Federal government investors was considerably less (up to 23%) than the book or budgeted cost due to savings made through flow-on benefits, (primarily savings in health and social welfare costs);
- benefits could also be estimated at the State level with
 - the majority of the direct benefits accruing to Queensland and the Northern Territory
 - multiplier effects substantially increasing the relative shares accruing to Victoria and New South Wales.

The proportion of spending by State was found to be broadly consistent with both the distribution of Indigenous landholdings and of the Indigenous population outside metropolitan areas. The multiplier effects were calculated at three levels – national, State, and remote centre, and the authors note that significant ‘leakages’ of additional benefits away from remote areas to the rest of the country occurs when multiplier effects are included. The study highlights not just the existence of economic benefits accruing beyond the local level, but that, depending on the calculation methods adopted, such benefits may comprise a significant proportion of the overall total.

The earlier review of the IPA program by Gilligan (2006) was also substantially informed by a subcontracted economic analysis (reported in an appendix to the main report). This work also identified economic outcomes that accrue beyond the local communities involved. Gilligan noted that, from a government perspective, the program had been an effective means of bringing bioregionally significant lands into the National Reserve System as a voluntary contribution by Indigenous landowners, without the land having to be purchased by the state. Although one consequence was an economic obligation on government to provide long-term ongoing funding for IPA programs, Gilligan cited a WWF submission to the review that argued that local Indigenous managers provided the necessary environmental services more cheaply than external contractors sourced from outside the region, with economically beneficial consequences for investors in those services. After identifying the benefits accruing to local provider communities, Gilligan goes on to note that ‘enhancements to the IPA budget would result in significant returns to the Australian government’ (Gilligan 2006: 4) because the program supports broader government objectives regarding social, health, educational and economic outcomes.

However, both Gilligan (2006:29) and the subcontracted economic analyst (2006: 67) argue that these IPA program consequences do not mean that the program should focus on such broader objectives. Rather, it should remain strongly focused on achieving environmental outcomes in an economically efficient manner. Yet Gilligan’s own work indicates how Indigenous perspectives incorporate broader ICNRM objectives and this suggests that, although a narrow program focus on environmental outcomes may potentially maximise immediate non-local economic returns on investment, it may elide other social, cultural, political and wellbeing outcomes that have clear economic implications for government investors. This is one key reason for focusing attention on the full suite of outcomes from ICNRM.

Finally, economic research techniques have also been used to examine attitudes to Indigenous PES amongst the wider population. Results showed a high level of support amongst Australian residents, with a general willingness to pay that, when scaled up to the population level, represented up to 50 times the amount currently expended by government (Zander and Garnett 2011). However, the same study also found that social outcomes were not valued independently of environmental outcomes, and that those most supportive of Indigenous PES (women in southern cities) were either unaware of, or had not absorbed research demonstrating how involvement in NRM contributes to Indigenous culture and wellbeing (Zander 2013). This provides a further justification for increasing understanding about the full range of outcomes (social, cultural, political, etc.) from PES and ICNRM, and the recipients of those outcomes.

3.5 Existing accounts of social, cultural, and political outcomes beyond the local Indigenous community

3.5.1 Introduction

As was previously noted, compared with the literature focused on economic outcomes, there is a lesser amount of explicit and structured consideration of ICNRM social, cultural, political and health outcomes beyond local Indigenous communities. Observations tend to be dispersed within documents and/or grouped with other outcomes relevant to local Indigenous communities. The following section reviews what is noted or accounted for in the existing literature using common terms or categories for outcomes found in these documents.

3.5.2 Partnerships

In the 2006 review by Gilligan of the IPA program, one key element of the Terms of Reference was to evaluate its contribution 'to the establishment of partnerships with private organisations, landholders and State and Territory jurisdictions.' Based on the interviews and submissions, the report findings were that, 'partnerships between the IPA Programme and State/Territory jurisdictions are at best variable, and often tenuous' (2006:33). Gilligan juxtaposed observations by an industry expert of some positive partnerships at State level with the situation in WA, where the relevant State department responsible for the National Reserve System had little involvement with the establishment or operation of the two IPAs in the State, despite them being part of the system. Gilligan describes a greater degree of success in local IPA program partnerships addressing specific issues or aspects of day-to-day operations, noting connections or collaborations with State government departments or entities in Queensland, NSW, and Tasmania, as well as the Desert Knowledge Cooperative Research Centre and Gemco mining company on Groote Eylandt.

URBIS (2012:12) note that one of the three key objectives of the IPA program is: 'to support the interests of Indigenous people and develop cooperative management arrangements with state, territory and federal government agencies to effectively manage protected areas'. The report describes how the partnership model used by the WOC program has a range of positive implications. This includes benefits to Indigenous people, organisations and communities, but also an increased profile and changed perceptions amongst non-Indigenous communities:

'The program's partnership model fosters new and improved relationships between Indigenous and non-Indigenous organisations. Interest from and partnerships with external organisations provides communities with access to new knowledge and information, raises the profile of communities, and affirms Indigenous culture and knowledge. Increased exposure to traditional skills and practices in caring for country generates respect for and positive perceptions of Indigenous people amongst the non-Indigenous community.'

(URBIS 2012: iii)

A subsequent sentence in the URBIS report (2012:iv) notes that the program is mutually beneficial, supporting 'the interests of Indigenous people in caring for country, which in turn helps the Australian Government to meet its responsibility to protect and conserve the environment.'

In the list of outcomes in the executive summary, Sithole *et al.* (2008:x) explicitly characterise ICNRM partnerships as ‘mutually beneficial’ and state that ‘most of these have resulted in beneficial outcomes for all partners involved.’ Yet in the body of the report (2008: 66) the authors also identify empirical evidence from Indigenous people of inequity in partnerships, where the belief is that the external actor benefits to a greater degree than traditional owners. Alongside this caution, Sithole *et al.* (2008:65-72) is also useful in specifying and discussing a range of potential external partners – government, private, local host agency, research, NGO, surveillance and security – to a greater degree than other existing literature. Through corporate social responsibility (CSR) and other related programs, private sector partnerships are of growing significance to the Indigenous land management sector, diversifying the extent and nature of ongoing partnerships. Alongside the immediate market value of transactions for such activities as carbon abatement, the private sector is also obtaining advantages from their general association with Indigenous culture and their specific association with closing the gap outcomes that these initiatives entail (Doreet *al.* 2014).

These quotations about partnerships and mutual benefit in the reports about outcomes provide an example of what was noted earlier – that these existing analyses identify outcomes that affect different categories of recipient, without necessarily providing categorisations that formally demarcate outcomes and/or recipients in the way that is being undertaken here.

3.5.3 Relationship building and reconciliation

Other commentators have noted the potential implications of relationships generated through ICNRM for the external partner. Weir (2011: 13) summarises evidence and commentary (Hunt *et al.* 2009) that ICNRM can improve relationships and partnerships between Indigenous people and formal institutions and systems (educational, government, community service, employment, health, etc.). Hunt *et al.* (2009:25) comment that ‘these relationships can also foster non-Indigenous peoples understanding of caring for country, making a positive contribution to reconciliation and improved social opportunities for Indigenous people.’ In a section entitled ‘breaking down social barriers’, URBIS (2012:66) similarly describe how the WOC program and related ICNRM activities improve relationships between Indigenous and non-Indigenous people:

Activities such as workshops, exhibitions, resource creation, media participation, tours, camps, school/educational activities, and documenting and recording NRM practices increases the exposure of broader community members to Indigenous knowledge, issues and cultural practices.

(URBIS 2012:66)

Additionally, the report identifies how rangers undertaking private contracting work for private landholders, local councils, schools and national park agencies ‘raises the profile of Indigenous people, helps combat negative stereotypes, and generates respect for and positive perceptions of Indigenous people amongst the non-Indigenous community’ (URBIS 2012: 66). This increased trust from non-Indigenous landholders can be manifested in increased willingness to report cultural artefacts and heritage sites on private properties (URBIS 2012: 70). The potential for overlap in categories of outcomes is indicated by comments about relationships and partnerships at the level of organisations (including formal MOUs), which appear under the headings ‘breaking down social barriers’ (URBIS 2012: 66) and ‘self-determination’ (URBIS 2012:70). Other outcomes for non-Indigenous people are implied by observations of outcomes for Indigenous people - URBIS (2012:69) note that improved literacy skills amongst rangers enable them to better manage interactions with ‘political and policy issues, bureaucracy, government agencies, banks and employers’. Such improvements presumably have benefits for both sides of the interaction.

3.5.4 Recognition

'Recognition' is one clear outcome of ICNRM identified by multiple studies. Sithole *et al.* (2008:ix) state it as a key outcome in the executive summary, and provide a table of ICNRM outcomes as portrayed in selected media articles as evidence of recognition (2008:2). URBIS (2012: iii) have a subheading in their executive summary entitled 'recognising the contributions of Indigenous Australians' and it is clear from the context that this refers to the existence of the WOC program itself representing such recognition. There is less consideration in the report of how ongoing program operations can lead to wider social recognition. In part, this reflects the orientation of the program itself. URBIS (2012:16) provide a figure outlining the program logic for WOC containing immediate, intermediate, long term, and ultimate outcomes (the latter being for 'Indigenous people to manage the natural and cultural values of their traditional estates'). One long term outcome is 'increased awareness and appreciation by the Australian community of Indigenous peoples' role and contribution in caring for country'.

However, no immediate or intermediate level outcome appears to relate directly to this long term goal – all are focused on impacts within Indigenous communities. This makes clear that wider non-Indigenous recognition (awareness and appreciation) is a desired long term goal, and is understood to flow from government recognition (in the form of the existence and resourcing of the WOC program). However, the pathway from one form of recognition to the other is not made explicit. This kind of gap in program logic, and in the associated complementary research that such logic generates, can potentially lead to under-investigation and under-specification of the important reciprocal and iterative social and political processes involved.

3.5.5 Empowerment, autonomy, self-determination

A consequence of the combination of effective reconciliation and recognition processes is Indigenous empowerment, autonomy, and self-determination. URBIS (2012:69) consider the political implications of improved ranger literacy, knowledge, and general communication skills noted above. They cite reports from Central Land Council research participants that 'communities have greater capacity to assist in native title claims with rangers involved in sacred site identification, management and Federal Court determinations' (URBIS 2012:69). This observation then leads to the authors identifying increased self-determination as an explicit outcome (URBIS 2012:69-71). The primary focus of the discussion is the direct consequences for Indigenous people of greater self-determination, but there may also be a range of consequences for non-Indigenous people. The effects may not always be straightforward - greater assertion of Indigenous rights over resources can come at the cost of non-Indigenous peoples' control over those resources. However, improved local Indigenous capacity is likely to benefit all parties involved in complex and time-consuming negotiations over such matters as native title and URBIS (2012:69) also note that greater Indigenous community control over land use can have important implications for matters such as tourist access and use. In some contexts, increased Indigenous self-determination through ICNRM can entail a return to local control, benefit all local people (Indigenous and non-Indigenous).

Under the related heading of 'autonomy', Ganesharajah (2009:12) cites an unpublished speech by Indigenous leader and activist Murandoo Yanner at the 2008 native title conference, noting that 'when governments depend on Indigenous people to perform valuable services this has a consequential impact on the existing power inequalities.' This also suggests an impact on government perceptions of Indigenous people. Yanner comments on the way that ICNRM partnerships with non-government entities increase independence from government funding sources and therefore affect direct and indirect government influence particularly with respect to political matters. This demonstrates how relations with one non-Indigenous sector can shape the ICNRM outcomes on other sectors. Ganesharajah goes on to consider land rights and native title issues, but reflecting her primary orientation, focuses on their consequences for Indigenous health and well being rather than the influence such processes might have on wider society.

Sithole *et al.* (2008:x) identify a key ICNRM outcome as 'empowerment' and link it to recognition, stating that 'external stakeholders are increasingly recognising that land management should be driven by traditional owners and that their aspirations must be paramount.' Additionally, the authors also note that in some locations the local ranger group has become the focal point for interactions with external interest groups. Overall, the above examples show that existing considerations of the social outcomes of ICNRM include issues of self-determination, empowerment and/or autonomy as a key outcome, and that such outcomes have direct implications for wider non-local and non-Indigenous people as well as for those local Indigenous people achieving this greater autonomy and self-determination.

3.6 Potential additional social, cultural, political, economic, and health outcomes beyond the local Indigenous community

As the above section indicates, the existing literature contains a range of observations of ICNRM outcomes beyond Indigenous communities and more limited commentary about such outcomes. However, the level of systematic observation and/or commentary remain slow, and this has implications for the nature and extent of the outcomes identified. A series of potential outcomes (or more accurately, outcome subcategories) are not currently documented but are nevertheless implied by outcomes that have been observed or appear to follow logically from the combination of outcome categories and recipients identified here. Before turning to the case study of Kowanyama, some of these potential outcomes will be briefly noted. They are organised in terms of the broad categories of outcome identified earlier – cultural, social, economic, political, and health and wellbeing. The list is not intended to be comprehensive, but rather it demonstrates the kind of outcomes that may be important in any assessment, and the way that such outcomes can be provisionally classified.

3.6.1 Cultural outcomes

As noted above, one of the limitations of the existing literature on ICNRM is that it implicitly conflates 'culture' with 'Indigenous culture', constraining overt consideration of the influence of ICNRM on non-Indigenous cultural behaviours, values, and ideas that inform individual and group identities and actions. The attitudinal and behavioural changes that can arise from non-Indigenous engagement with successful ICNRM initiatives can be one of the most important aspects of the activity. Such changes are noted at times in the literature, but are not usually classified as 'cultural outcomes or effects'. This influences the degree to which such changes are made visible in formal assessment processes and the degree to which the consequences of their effects for broader cultural systems are analysed. In the definition used here, informal learning and knowledge acquisition by non-Indigenous people as part of ICNRM engagement is identified as an important cultural outcome.

3.6.2 Social outcomes

The term 'social' relates to relationships, processes, and institutions in systems of human organisation. In terms of ICNRM, social outcomes that are important beyond local Indigenous communities can include:

- formal partnerships between ICNRM organisations and external entities that enable those entities to
 - act as stakeholders in and for ICNRM organisations
 - improve their understanding of Indigenous people and issues
 - achieve their own organisational and institutional goals with respect to Indigenous collaboration
 - achieve cultural, environmental, and other management targets that enhance organisation availability
- the role that ICNRM organisations play in formal institutional education and research, including:
 - acting as an incentive for school retention
 - providing locally relevant content for school curricula
 - providing content and case studies for Training and Further Education (TAFE) training and tertiary degree courses in relevant fields
 - direct research collaboration and general influence on the research community
- influences on crime rates which in turn affect:
 - property theft and damage
 - direct physical and emotional trauma for victims
 - costs of incarceration
 - emotional trauma on perpetrators.¹

A further outcome that can be categorised as 'social' is reconciliation. This term has a particular meaning in Australian society, identifying both informal and formal processes by which non-Indigenous and Indigenous Australians can reach an accommodation about the violent colonisation of Australia and its relationship to contemporary society. It is interdependent with the cultural and attitudinal changes identified above, and with the process of formal political recognition discussed below.

3.6.3 Political outcomes

As is noted above, ICNRM outcomes that relate to recognition, autonomy, governance and the exercise of power and authority have been noted in the literature, but only rarely have these been identified as political outcomes. ICNRM organisations strive to meet their objectives and their responsibilities to their funders and the communities they represent. In doing so, they are enmeshed in ongoing negotiations about the use, management, and governance of natural and cultural resources, and about achieving recognition for the role of Indigenous people in those processes. Land Councils, local Indigenous corporations and native title Prescribed Body Corporate (PBC) organisations may occupy the formal political representative role, but there can often be significant overlap in the membership of these entities and ICNRM organisations. Successful ICNRM requires a range of political skills and generates a range of political and natural resource governance outcomes.

¹ The perpetrators are not specified in detail here. Yet it is worth noting that while successful ICNRM may have direct and indirect effects on offences committed by Indigenous people, its potential role in mitigating racism and promoting reconciliation may also mitigate some offences committed by non-Indigenous perpetrators against Indigenous people.

There has also been relatively little explicit thinking in the literature about the recipients of these political outcomes – with whom governance is negotiated and recognition is manifested. ICNRM can foster the recognition of Indigenous people by other Indigenous people, as caring for landscapes is an important way of validating customary ownership of them. But in the current context, recognition is generally understood to mean recognition by non-Indigenous people and institutions. It is perhaps the outcome that most overtly identifies that ICNRM influences society beyond its immediate community context.

In settler states such as Australia, such recognition is crucial to related political outcomes such as governance, autonomy and self-determination. In terms of governance, ICNRM organisations can enable better representation of Indigenous perspectives and interests in formal catchment management and other NRM stakeholder consultation processes, improving the quality and efficiency of resource governance. By supporting native title claim processes and the representative bodies that emerge from successful claims, ICNRM organisations further support Indigenous governance in particular, and effective resource governance more generally. This in turn enhances Indigenous self-determination and autonomy, key political outcomes that have implications for non-local and non-Indigenous people.

3.5.4 Health and wellbeing outcomes

As noted above, the health and wellbeing outcomes of ICNRM for participants have been the most studied aspect in the existing literature, and have identified the biophysical, psychological, and collective wellbeing benefits for local communities of such programs. However, these studies focus on the impacts on those undertaking ICNRM and, by implication, their immediate families and communities. The potential health and wellbeing effects for non-local and/or non-Indigenous people are not considered in such analyses, with the exception of calculations of the economic benefits of improved Indigenous health (Campbell *et al.* 2011), which imply that additional resourcing may then be available to assist others elsewhere.

Despite the current gap in the literature, it is possible to identify potential health and wellbeing outcomes that accrue to non-local and non-Indigenous people. Many of these outcomes rely on the assumption that ICNRM leads to health and wellbeing benefits for immediate participants. Provided this assumption holds, the most obvious potential non-local and/or non-Indigenous health outcome recipients are those who directly collaborate with local ICNRM practitioners in joint activities – natural resource management, co-research, etc. Presumably, these direct collaborators would also accrue at least some of the health and wellbeing outcomes accruing to local Indigenous people undertaking the activity. They may also derive additional wellbeing benefits from undertaking successful local ICNRM collaborations – from the knowledge that they have met key personal and organisational objectives.

Health and wellbeing outcomes may also accrue to non-local and non-Indigenous people beyond the category of immediate collaborators. Geographic, cultural, and community boundaries are porous, meaning that improvements in local Indigenous health and wellbeing have implications for others elsewhere. Two clear examples of this are changes in the rates of communicable health conditions, and reductions in inter-community and intercultural trauma (assault, vehicle accidents, etc.). These kinds of health and wellbeing issues have direct implications for non-local and non-Indigenous people. As noted above, improved health at the local Indigenous level also implies additional resources to spend in the health system elsewhere. Yet although these effects seem plausible, they are secondary effects derived from the primary effects of ICNRM on Indigenous health, and may therefore be difficult to detect in social settings where large numbers of other variables are also influential.

Two further potential avenues for health and wellbeing outcomes for non-Indigenous and non-local people should also be noted here. These do not rely on ICNRM directly influencing Indigenous health, but do rely on it being successful in other ways. The first is the potential health consequences of improved local environmental and cultural management. Better access, improved recreational amenity, reductions in negative environmental condition, etc. may all have indirect health and wellbeing consequences for non-Indigenous and non-local people. The second is that wider processes of reconciliation and of attitudinal and behavioural change arising from successful ICNRM may have measurable impacts on non-Indigenous and non-local social and psychological wellbeing. Again, these secondary health and wellbeing impacts may be difficult to formally separate and detect from other, more significant influences on human health. Yet they appear as plausible and logical consequences of ICNRM.

3.7 Additional outcome recipients beyond the local Indigenous community

This study primarily defines its focus in geographic terms – as outcomes and outcome recipients beyond the local Indigenous community. This focus involves analysing effects at a range of geographic scales – catchment, region, state, national, and international. It also incorporates both Indigenous and non-Indigenous people as outcome recipients. The great majority of Indigenous people live outside of any one Indigenous community (in this case Kowanyama), meaning they are an important potential outcome recipient category to consider. Yet non-Indigenous people make up the great majority of all people outside any one Indigenous community, meaning that any study defined in this way should emphasise effects on that category of potential outcome recipient. As a consequence, the Kowanyama study considers effects on both categories but emphasises impacts on non-Indigenous people. This is reflected in the list of key interviewees, which included representatives of both groups, but a proportionally larger list of non-Indigenous interviewees.

3.8 Summary and implications for case study analysis

3.8.1 Summary

Interest in the wider outcomes and co-benefits of ICNRM has led to an emerging literature on the subject. Key contributions include reviews and reports to various government departments. These have adopted a variety of implicit or explicit frameworks to identify and categorise ICNRM outcomes and, to a lesser degree, ICNRM outcome recipients.

This lesser focus on recipients is one of the reasons why outcomes relevant to non-Indigenous and/or non-local people remain poorly specified in existing accounts. The most explicit consideration of this category of recipient occurs in the literature on economic outcomes, but even in this literature, the degree of consideration and the way such recipients are classified varies between accounts.

Studies identifying a broader suite of cultural, social, and political outcomes from ICNRM are even more variable in the extent to which outcomes beyond local Indigenous communities are noted and, if noted, the way in which such outcomes are categorised. Key outcomes identified here include: partnerships; relationship building and reconciliation; recognition; empowerment, autonomy, and self-determination; and the degree to which such outcomes are considered in suggested assessment methods.

The variability in consideration of such outcomes and how they are classified invites further reflection of what kind of outcomes may be likely to be important beyond the local Indigenous community setting. One key step is to ensure that 'culture' is understood as a term that refers to all people, and to overtly consider the effects of ICNRM on non-Indigenous cultural ideas, attitudes, and behaviours. Further attention is also given to the implications for non-Indigenous people of existing identified social outcomes such as Indigenous educational retention and reduced crime. The classification of reconciliation as a social process is also noted. Key political outcomes (recognition, governance, self-determination) are identified in the existing literature, but are not always explicitly categorised as such, and their effects on non-Indigenous people are sometimes implied rather than articulated explicitly. Finally, the health and wellbeing consequences of ICNRM for Indigenous people are noted as being the most studied aspect in the existing literature, yet that literature does not usually consider the health and wellbeing implications for non-Indigenous people of those findings. This includes the direct effects of reduced intercultural trauma, the indirect effects of savings in the health system, the amenity consequences of improved management of natural landscapes, and the wellbeing outcomes associated with ICNRM support for reconciliation processes.

3.8.2 Implications for case study analysis

The above general analysis provides foundations and a preliminary framework for considering the case study of the cultural, social, political, economic, and health and wellbeing outcomes of the KALNRM beyond the Kowanyama community itself. However, identifying categories of ICNRM outcome and potential ICNRM outcome recipients also creates alternatives for organising and structuring that analysis. Three major alternatives will be noted here:

1. Outcome category focus

- a) Take each of the major categories (social, cultural, political, economic, health and wellbeing) in turn
- b) Analyse and collate evidence from across outcome recipients in terms of those categories, using iteratively refined subcategories to guide the analysis

2. Outcome recipient focus

- a) Identify potential outcome recipients (e.g. catchment management body, State government, wider national population, etc.)
- b) Analyse ICNRM organisational interactions with and influences upon that recipient and note how aspects of those interactions correspond to outcome categories

3. Evidence category focus

- a) Identify particular categories of evidence (research literature, media analysis, interview content, etc.)
- b) Analyse how ICNRM outcomes and outcome recipients are manifested within those categories

The current report effectively adopts the first approach, using the major outcome categories posited as guides to interrogating the existing literature, and then presenting findings organised in terms of those categories. Two key reasons for this are that:

1. a significant proportion of the literature uses at least some of these categories
2. the lack of focus on extra-community outcomes in the existing literature means that references to such outcomes tend to be scattered, both within and across different documents

In considering the Kowanyama case study in the following chapter, focusing on categories of outcome would provide continuity with current approaches. However, the other two approaches to outcome analysis outlined above both have advantages. Focusing on the overall set of ICNRM organisational interactions with each stakeholder/outcome recipient in turn more closely reflects everyday organisational practice in ICNRM organisations - everyday ICNRM work is organised around interactions and relationships rather than categories of outcome. The third option to organise the analysis in terms of the types of evidence generated enables an account that is more strongly oriented to the nature of the material obtained for any particular study and the methods used to obtain it.

The primary orientation of this study is outcome description and categorisation, but it is also concerned with how best to engage those categories with a particular case. As a result, the following part first provides a timeline of KALNRMO activities and describes some key areas of KALNRMO engagement with particular sectors/stakeholders to provide background context. In the subsequent parts of the report, these engagements and others are then analysed in more detail using the outcome category framework specified earlier.



Figure 3-2 KALNRMO Rangers at Shelfo Crossing, Mitchell River, Kowanyama

4 KALNRMO timeline and key activities

4.1 Introduction

As previously noted, the KALNRMO was established early in the history of the formal ICNRM movement. The longevity of the organisation and the diversity of its catchment and regional context make it particularly useful for examining the wider outcomes of its activities beyond the Kowanyama community itself. The evidence for this history of impact beyond Kowanyama is concentrated on a series of major initiatives and events and these are described below. Yet in noting such major developments, it is equally important to emphasise that much of the ongoing external impact of the KALNRMO derives from everyday encounters with diverse stakeholders, partners, visitors, and contacts, the great majority of which are undocumented. The following analysis of KALNRMO outcomes provides examples of these kinds of interactions alongside discussions of major initiatives and key events.

4.2 KALNRMO timeline of events

The timeline below identifies key events in the organisational history of the KALNRMO. It is based on the timeline that appears in the KALNRMO prospectus (2008:7), augmented and updated with recent events and with additional information from other sources generated after the prospectus was published (Kowanyama Aboriginal Shire Council 2010, KALNRMO 2011, Kowanyama Aboriginal Shire Council 2011, KALNRMO 2012b, a, c, d, Kowanyama Aboriginal Shire Council 2012, KALNRMO 2013, 2015a, b). It shows that the KALNRMO represents the formalisation of an agenda pursued by the Kowanyama Aboriginal Shire Council during the 1980s to gain greater control over the management of natural and cultural resources. Early KALNRMO activity and management effort was particularly focused on fisheries and catchment management, but there was considerable diversification as the office grew in size and capability, and as the area of land it was responsible for also grew. Contact with Native American groups was an important influence on KALNRMO activities, both in terms of early establishment and ongoing operations in the first ten years. These key features are represented in the timeline below and will be discussed in more detail in subsequent sections.

Table 4-1 Timeline of Kowanyama events and activities

Time	Event
1980s	Collection of oral histories and artefacts commenced Successful campaign against mineral exploration on Kowanyama Aboriginal Lands led to early collaboration with the conservation movement
1987	Kowanyama Aboriginal Shire Council received Deed of Grant in Trust Title Kowanyama Aboriginal Shire Council became a fully community elected authority
1988	Commenced collaboration with Native American groups of Pacific North West USA at a conference of tribes in the Library of the American Indian, Chicago during Australian Bicentenary celebrations, in order to gain support and advice on fisheries management. Northern Aboriginal Fisheries Conference held at Kowanyama Regulations to control recreational fishing and camping on Kowanyama lands implemented Helicopter surveillance of commercial fishing activity on coast and waterways established using recreational camping fees Council commenced negotiations for fisheries closures on the South Mitchell River

1989	<p>Kowanyama Aboriginal Shire Council took over administrative functions from State administration</p> <p>Ranger appointed to manage recreational fishing and camping activities and implement the 1988 regulations</p> <p>Kowanyama hosted its first Native American visitor, Jewel Praying Wolf James, Lummi Treaty Taskforce, Bellingham, Washington State who attended a joint meeting of Aboriginal Councils at Pormpuraaw</p> <p>Council bought out two fishing licenses in successful negotiations to protect fish stocks</p> <p>Implemented Animal Health Office Program– the first in Queensland (inspired by Northern Territory program)</p> <p>Ground and water coast and waterways management and surveillance commenced</p> <p>Kowanyama circulated a brief discussion paper on a proposal to establish an Aboriginal Land Management agency at Kowanyama between known supporters for their comment and advice.</p> <p>Kowanyama representatives attended a conference at James Cook University, Townsville where Eddie Mabo made an address on resource rights and native title</p>
1990	<p>KASC established the Lands Office (later the KALNRMO) with two staff accountable to KASC and Elders</p> <p>Lands Office commenced operations as an Aboriginal land management agency and secondarily as an outlet for traditional handcrafts for the museum and collectors market</p> <p>Magazine article described the material cultural heritage of Kowanyama artisans and the museum and collectors market (Guppy 1990)</p> <p>Following the 1988 Indigenous Fisheries Conference, Kowanyama Land Office drew up campaign notes to pursue recognition of powers to manage and enforce regulations on Aboriginal Trust Lands and waters.</p> <p>Kowanyama Mitchell River Conference held, attended by: senior regional managers of QLD natural resource agencies; mining, tourism, fisheries, grazing and conservation interests; Indigenous representatives from the wider Cape; and an international Indigenous representative - Chairman of Squaxin Island Tribal Council, Professor David Whitener. Letters of support received from seven State Ministers and Billy Frank Jr of the Northwest Indian Fisheries Commission of Washington State.</p> <p>Mitchell River Watershed Group established - the first community initiated catchment management group in Queensland, formed the year before integrated catchment management legislation was passed for the state.</p> <p>Kowanyama has Australia's first qualified Fisheries Inspector working for an Indigenous land management agency</p> <p>Kowanyama Senior Traditional Owners and staff of the new Land Office attend a Cape York Land Summit where the Cape York Land Council is formed as a unanimous resolution of Summit members.</p> <p>Pest and Weed Management Program commenced</p> <p>KALNRMO collaborated to produce television documentary that described Kowanyama's plans for management of country (Elliot 1990)</p>

1991	<p>Kowanyama Aboriginal Shire Council purchased Oriners pastoral lease using its own community enterprise funds</p> <p>Kowanyama fisheries and catchment management described in key early report on Aboriginal land management to the Australian National Parks and Wildlife Service (Young <i>et al.</i> 1991)</p> <p>Kowanyama featured as a case study in a report about Aboriginal access to land management funding and services (Dale 1991)</p> <p>Kowanyama included as a case study in a report on Indigenous fishing to the ESD Working Group in Canberra (Cordell 1991)</p> <p>Traditional Owners and Land Office staff joined Australian Geographic Scientific Expedition at Dorunda for 8 days</p> <p>Documentary of the proceedings of the Mitchell River Conference, <i>Running the River</i> is completed (Weaver 1991)</p> <p>KASC received letter of support from Chairman of the Northwest Indian Fisheries Commission in relation to fisheries and watershed co-management activities</p> <p>KALNRMO staff provided insights gained from the North American context to a natural and cultural heritage management workshop at Cairns TAFE (Sinnamon 1991)</p>
1992	<p>Land Degradation workshops held at Kowanyama and Rutland Plains Station</p> <p>KALNRMO staff gave presentation at the Environmental Law Association Conference (Sinnamon 1992)</p> <p>KALNRMO met with John Cordell and Bruno David of the Ethnographic Institute Berkeley, California to plan a Cultural Landscape Mapping Program for the lower delta region of Kowanyama Aboriginal Lands</p> <p>Monash medical student, Geoff Stewart, produced an educational publication, <i>People, Plants and Wangarrwirrws (Traditional Healing)</i> (Stewart 1992)</p> <p>Collaboration of KALNRMO and Traditional Owners with Veronica Strang in cultural landscape mapping of the Alice Mitchell Rivers National Park area (1992-1993). Kowanyama Land Office resources and a fellowship provided by the Royal Anthropological Institute in the UK makes the mapping possible</p> <p>Kowanyama attend meetings in Canberra and Sydney as part of a National Working Group advising the RAC Coastal Zone Inquiry Commission on Indigenous interests in the coastal zone</p>
1993	<p>School curriculum entitled 'The River' is developed for KALNRMO and Kowanyama High School which subsequently becomes a State registered curriculum subject for Kowanyama State School (KALNRMO and Kowanyama State High School 1993)</p> <p>Rangers attended TAFE Training</p> <p>Ron Whitener, University of Washington law school undergraduate and member of the Squaxin Island Tribe is hosted for a three month work and Cultural Exchange with the Kowanyama Land Office.</p> <p>Following 1992 meeting, Cordell and David begin Phase One of a Cultural Landscape Mapping Program for the lower delta region of Kowanyama Aboriginal Lands</p> <p>Alan Dale, Griffith University, is engaged to facilitate Mukarnt Planning Retreat for Traditional Owners and staff to create a formal guide for the future operation of the Land Office (Dale and KALNRMO 1994)</p> <p>A paper commissioned by the RAC Coastal Zone Inquiry is published outlining indigenous interests in Australia's coastal zone as a supplement to the Final report of the Coastal Zone Inquiry (Smyth 1993)</p>

1994	<p>KALNRMO staff presentation at Technology Transfer Conference, Murdoch University, WA (Sinnamon 1994a)</p> <p>KALNRMO staff presentation at the first National Coastal Conference in Hobart, Tasmania (Sinnamon 1994b)</p> <p>KALNRMO staff presentation at the National Fisheries Managers workshop at Bribie Island (Sinnamon 1994c)</p> <p>KALNRMO collaborative section included in Still our Country, a report to the National Rangelands Management Working Group, Alice Springs (Sinnamon and Johnson 1994)</p> <p>Results of the 1992 Land Degradation Workshops published (KALNRMO and Natural Resource Assessments 1994)</p> <p>John Clark, Senior KASC Fisheries Officer visits State of Washington in the US on a work exchange with tribal fisheries agencies during the salmon season</p> <p>KALNRMO-generated articles in fishing and camping magazines (KALNRMO 1994a, c, b)</p> <p>KALNRMO staff contribution on self-governance to Cape York Peninsula Land Use Survey (CYPLUS) process (Sinnamon 1994d)</p>
1995	<p>KALNRMO staff contribute Chapter 1 to the Cape York Peninsula Land Use Strategy (CYPLUS) volume focused on Indigenous land and sea management (Cordell and CYPLUS Land Use Program (Corporate Author) 1995)</p> <p>KALNRMO and Traditional Owners collaborate with scientists, Winter and McDonald, to study flooded remote areas of the Alice Mitchell Rivers National Park and Mosquito Lagoon at Oriners Station</p> <p>KALNRMO staff share experiences with Stradbroke Island Traditional Owner community at Quandamooka Native Title meetings</p> <p>KALNRMO staff presentation about the nature of co-management at the Hopevale Parks Management Workshop, Hopevale (KALNRMO 1995)</p> <p>Kowanyama hosts the Cape York Land Summit held annually by Cape York Land Council</p> <p>Kowanyama Land Office sponsors and facilitates an east coast speaking tour by Squaxin tribe visitor, Professor David Whitener, who attended the Cape York Land Summit and shared experiences of tribal fishing agencies of the Pacific North West of the US with: senior State fisheries officials in Brisbane and Sydney; Quandamooka people on Stradbroke Island; the Koori community of Wreck Bay; and at the Tasmanian Aboriginal centre</p>
1996	<p>Council purchased Sefton pastoral lease increasing aboriginal land area to 4120 km²</p> <p>KALNRMO presentation on co-management and self-governance in contemporary Indigenous natural resources management presented at a conference on conservation outside nature reserves at University of Queensland</p> <p>Kowanyama delegation hosted by Quandamooka Land Council as part of ongoing exchange</p> <p>Kowanyama collaborated in a wet season ethnobotany survey by helicopter which collected and identified 179 plants. A duplicate botanical collection is created at the Kowanyama Cultural and Research Centre</p> <p>KALNRMO-supported ethnobotanical plant usage list completed (Stewart et al. 1996) Uw Oygangand/Olgol dictionary completed (Hamilton 1996)</p> <p>Kowanyama publishes the reasons for its declining CYPLUS research on Kowanyama Aboriginal Lands (Kowanyama Aboriginal Shire Council 1996)</p> <p>Kowanyama featured in Saltwater People, a four part series for SBS Television (Best and Petho 1996)</p>
1997	<p>Uncommon ground, a major ethnography focused on Indigenous (Kowanyama) and pastoral relations with the Mitchell River published (Strang 1997)</p> <p>Planning document, 'Working together, networking for better Indigenous natural resource management', produced for Kowanyama and Stradbroke Island Quandamooka people as part of ongoing exchange</p>

1998	<p>Research articles published on KALNRMO rangers and archaeology (Strang 1998) and on Kowanyama fisheries management (Sharp 1998)</p> <p>KALNRMO staff present at the Coast to Coast Conference, Perth WA (Sinnamon 1998)</p>
1999	<p>Five Yearly Review of the KALNRMO strategy and outcomes 1994-1999</p> <p>Natural Resource Management Strategic Plan created</p>
2000	<p>KALNRMO produce a discussion paper, 'Towards Aboriginal Management' to inform discussions between the traditional claimants and the State about the Alice Mitchell River National Park</p> <p>World Wide Fund for Nature, Sydney, fund Kowanyama Land Office for what was to become the Kowanyama Wetlands Program</p> <p>Kowanyama representatives attend the River Symposium in Brisbane where the Mitchell River Group is nominated for the Theiss International River Prize.</p>
2001	<p>Ongoing cultural mapping expanded to encompass KALNRMO Geographic Information System</p> <p>Major cultural mapping report completed as part of Kowanyama Cultural Landscape Mapping Program (Strang 2001)</p> <p>Kowanyama included as a case study in volume on ICNRM in Australia (Baker <i>et al.</i> 2001)</p> <p>Land Tribunal report under the Aboriginal Land Act 1991 recognised limited rights of Traditional Owners for use and management of the Alice-Mitchell National Park. Subsequently Kowanyama would decide to step away from the process due to perceived inadequacy of co-management arrangements for the Park.</p> <p>Atlas of Kowanyama wetlands completed (Monaghan 2001)</p>
2002	<p>Mitchell River Catchment Group made a key case study for volume on environmental stewardship (Carr 2002)</p> <p>KALNRMO and international co-authors produce an article using Kowanyama as a case study of fisheries and ecotourism governance in community protected areas (Chernela <i>et al.</i> 2002)</p>
2003	Kowanyama Landscape Mapping Project Report produced (Monaghan April 2003)
2004	Presentation to newly elected Kowanyama Aboriginal Shire Councillors at Mission Beach orientation retreat
2005	<p>Fire Frequency Study completed</p> <p>Homeland Ranger training commenced at Mareeba Agricultural Office</p>
2006	<p>PhD thesis examining self-determination in planning and governance in the two discrete communities of Kowanyama and Mapoon is completed (Moran 1999)</p> <p>Secondment of officer from the One Arm Point National Parks Service in Western Australia to the position of Kowanyama Land Office NRM Coordinator</p> <p>Development of Recreational Fishing and Tourism Plan for Kowanyama Aboriginal Lands Development of the colour brochure, Kowanyama Aboriginal Community Fishing and Visitor Guide</p> <p>Commencement of collaboration with scientists investigating erosion and river sedimentation on the Mitchell River system</p>

2007	<p>Memorandum of Understanding completed with Queensland National Parks & Wildlife Service</p> <p>Aspirations workshop on Park management with Elders at the Lands Office facilitated by Kathryn Larsen (JCU) Animal Health Officer appointed to KALNRMO</p> <p>A collaboration with trainers and scientists results in the production of a Water Quality Monitoring Manual (Wetland and Water Quality Monitoring Plan and Standard Procedures March 2007)</p> <p>Kowanyama agrees to collaborate with TRaCK scientists in the collection of barramundi and salmon heads from visiting recreational fishers for a three year period</p> <p>KALNRMO staff provide advice and guidance to the Local Government Association of Queensland about incorporating Aboriginal Land and Sea Management into Aboriginal Council planning (Local Government Association of Queensland 2007)</p> <p>KALNRMO declines participation in the first round of applications for the Federal Working on Country Program given concerns about issues in relation to its self-governance principle</p> <p>Production of a comparative analysis of regional NRM and Mitchell River Watershed plans in the context of both Kowanyama and Federal priorities. This is designed to inform meetings with State and Federal funding agencies (Working on Country Proposal, Integration of Kowanyama Programs into Regional Plans, October 2007)</p> <p>KALNRMO met representatives of the Federal Working on Country Program and the State's Wild Rivers Program to discuss funding opportunities at Kowanyama</p>
2008	<p>KALNRMO met senior scientists of the TRaCK Program to discuss process for deciding on appropriate collaborative research projects.</p> <p>KALNRMO brochure 'Managing Aboriginal Lands and Culture' produced to highlight existing support and attract further supporters (KALNRMO 2008)</p> <p>Chapter on Kowanyama aspirations for national park management produced for research volume on Indigenous management and governance of protected areas (Larsen 2008)</p> <p>KALNRMO staff numbers reached 11 - One Manager, two Animal Health Officers, one Administration Support, one Traditional Owner</p> <p>KALNRMO supported TRaCK to make the Mitchell River one of the three northern rivers proposed for major study</p> <p>TRaCK scientists visited Kowanyama to process barramundi otoliths collected by KALNRMO, with school children encouraged to participate in processing held in a public place.</p>

2009	<p>Mitchell-Alice Rivers National Park transferred to joint management and renamed as Errk Oyakang and National Park (CYPAL)</p> <p>Successful recognition of native title over areas of Kowanyama land and sea areas Mitchell River featured in international volume about water management (Strang 2009)</p> <p>KALNRMO expanded to 14 staff through additional positions - Cultural Heritage Line Manager, Natural Resources Management Coordinator, Cultural Heritage Officer, Senior Ranger</p> <p>5 KALNRMO staff attended and presented at Savannah Symposium, Darwin</p> <p>KALNRMO trainee staff member attended an Oxfam sponsored Human Rights and Diplomacy Workshop at University of NSW and was selected to join a Youth Delegation to the United Nations in New York</p> <p>Two KALNRMO staff attended the Global Indigenous Summit on Climate Change in Anchorage Alaska</p> <p>KALNRMO and Traditional Owners featured in United Nations University documentary on climate change and sea level rise (Williams 2009)</p> <p>Kowanyama featured as a case study in a national report on Indigenous people and climate change (Sinnamon 2009)</p> <p>Draft protocols for beneficial collaborations between the Kowanyama People and researchers, Sharing the Benefits of Research, are completed</p> <p>A formal proposal to the State from the Kowanyama People proposing the declaration of the Mitchell River Delta as a restricted area under the Mineral Resources Act 1989 is executed.</p> <p>KALNRMO commences collaboration with University of Adelaide scientists studying the evolution of the Mitchell River Delta</p> <p>KALNRMO supported a wet season flood survey by TRaCK scientists of sediment flows of the Mitchell River and collaborated with Pormpuraaw Land and Sea Management Office</p>
2010	<p>Scholarship fund established for young Indigenous people taking an interest in ICNRM</p> <p>KALNRMO Trainee Administration Officer attended a 21 day Human Rights Training Program in Timor Leste with other Southeast Asian representatives and dined with Jose Ramos Horta</p> <p>Two staff attended a NAILSMA sponsored Adaptation to Climate Change Forum in Darwin Stage 1 Kowanyama art and culture research centre completed</p> <p>Technical Advisory Group for Kowanyama Wetlands Program formalised Magnificent Creek Cultural and Biological Diversity Draft Statement produced</p> <p>KALNRMO staff presented at a conference in Cairns for Service Providers (Sinnamon 2010)</p> <p>Report about the evolution of the Mitchell River delta completed from fieldwork conducted in 2009 (Nanson <i>et al.</i> 2010)</p> <p>Two Traditional Owner Rangers accompanied scientists on food web studies of the flooded delta as part of a collaboration with Darwin based Tropica Rivers and Coastal Knowledge Program</p> <p>TRaCK scientists processed otoliths from barramundi heads collected by the Land Office in a place accessible to school children (Jardine <i>et al.</i> 2011)</p>

2011	<p>Land Office News magazine launched</p> <p>KALNRMO staff produced a paper (Sinnamon and Major 2011) from NAILSMA's water project that was provided to Balkanu Corporation and presented at the Annual Conference of the American Geographers Association</p> <p>Information session held with the technical staff of the Makah Tribal Fisheries Department, Neah Bay USA</p> <p>KALNRMO staff visited Bellingham and Lummi Indian Reservations, USA, and met Jewel James who had visited Kowanyama in 1989</p> <p>KALNRMO staff attended an International Convening of Grantees and strategic communications workshop on Chesapeake Bay in the US, sponsored by the Christensen Fund (Pyramid communications 2011)</p> <p>KALNRMO staff met with senior editorial staff of the National Geographic and Native American staff within the Environmental Protection Agency in Washington DC</p> <p>Kowanyama bush medicine book, <i>Uk Oyber</i> is published (Luke et al. 2011)</p> <p>Consultant engaged to conduct a five yearly review of the Kowanyama Land Office Strategic Plan. Publication held over pending the development of the Errk Oygang and National Park Management Plan.</p> <p>Kowanyama featured as a case study in a guidebook on Indigenous philanthropies, (Greenstone Group 2011)</p> <p>KALNRMO co-authored science publications on flood plain connectivity (Jardine et al. 2011)</p>
2012	<p>Successful implementation of a Kowanyama based Forest Fire Management Program at Oriners and Sefton supported by Cape York Sustainable Futures (CYSF) and Qld Rural Fire Service and neighbouring property owners.</p> <p>KALNRMO staff attended Mary River Conference in the Northern Territory, facilitated by NAILSMA.</p> <p>Kowanyama attended Southeast Queensland Sea Country Management Forum at Minjerribah, Stradbroke Island</p> <p>Social media campaign about Cultural Centre launched</p> <p>PhD thesis about co-management of Errk-Oygang and National Park completed (Larsen 2012)</p> <p>Collaborative research and knowledge recovery project focused on KALNRMO-managed lands at Oriners Station completed (Barber et al. 2012)</p> <p>KALNRMO co-authored research articles on waterhole water quality (Pettit et al. 2012) and mercury concentration (Jardine et al. 2012) published</p>
2013	<p>Five staff of the KALNRMO attended the World Indigenous Networking Conference in Darwin</p> <p>Three staff of The Christensen Fund visited Kowanyama to meet staff and Traditional Owners, discuss grant arrangements, and undertake a helicopter tour of the Mitchell River delta and wetlands.</p> <p>Further publications about geological history of the Mitchell River delta published (Nanson et al. 2013)</p>
2014	<p>KALNRMO staff and KALNRMO-managed lands are the focus of a co-authored research article on contemporary ICNRM knowledge (Barber et al. 2014)</p> <p>Strategic plan for Errk Oygang and National Park Lands produced for internal review for Traditional Owners</p> <p>KALNRMO staff present about the history of Kowanyama's Recreational Fishing Program at Knowledge Sharing and Tourism Workshop, Cairns</p>
2015	<p>New KALNRMO Land and Sea Manager Chris Hannocks joins KALNRMO</p> <p>First payment to KASC for carbon abatement work for the Oriners Fire Management Program</p> <p>Current report on wider social, cultural, political and economic outcomes of KALNRMO activities completed (Barber 2015a)</p>

4.3 Major KALNRMO activities

4.3.1 International Connections

The first interactions between Kowanyama people and Native American communities of the Pacific Northwest of the USA began in Chicago at a winter meeting of the tribes during Australian bicentenary celebrations in 1988. These activities predate the formation of the KALNRMO, but involved future KALNRMO staff. Subsequent KALNRMO activities have been crucial to strengthening and sustaining this ongoing relationship. The presence and advice of Native American leaders and managers was important to empowering Kowanyama people to imagine pathways for taking control of ICNRM. More specifically, US advice and support fostered key early developments in fisheries and catchment management discussed below. A Native American student, Ron Whitener, was present at the Mukarnt retreat where the first strategic plan for the KALNRMO was generated (Dale and KALNRMO 1994). KALNRMO staff travelled to the USA on numerous occasions to visit and learn about Native American contexts and their relevance for Australian ICNRM. On several occasions Kowanyama's Indigenous networks facilitated visits by Australians to organisations and government agencies in the US. A recent edition of the Kowanyama Land Office Newsletter contained a posthumous tribute to Billy Frank Jr, a Native American leader and Founding Chair of the Northwest Indian Fisheries Commission who was a major influence on the approach taken by Kowanyama to issues of resource rights and resource management, and by KALNRMO personnel in particular.

As a result of this international connection, the KALNRMO has been an important conduit for international Indigenous ideas, approaches and practices to reach the Australian ICNRM sector. It has also in turn been an important means by which Australian ICNRM has gained exposure in North American Indigenous contexts. In addition to this ongoing North American relationship, the KALNRMO has regularly been involved in international research collaborations, international conferences and events, and in more recent times in funding partnerships with international NGOs. These interactions are discussed later in the report.

4.3.2 Fisheries management

As the timeline above demonstrates, fisheries management became a key focus soon after Kowanyama people secured the right to self-manage Kowanyama. This was because of concerns about the activities of both the commercial and recreational components of the sector - illegal or overfishing, trespass, rubbish dumping, impacts on culturally important sites, etc. The concerns led to Kowanyama initiating and holding the Northern Fisheries Conference in 1988, and then to the negotiation of fisheries closures on the Mitchell River and the associated purchase and destruction of two commercial fishing licenses to reduce fishing effort in the area. This early activity resulted in significant interactions with key representatives from the commercial fishing association, most notably past and current representatives of the Gulf of Carpentaria Commercial Fishermen's Association, who publicly described early interactions as 'constructive' (Ward 1988).

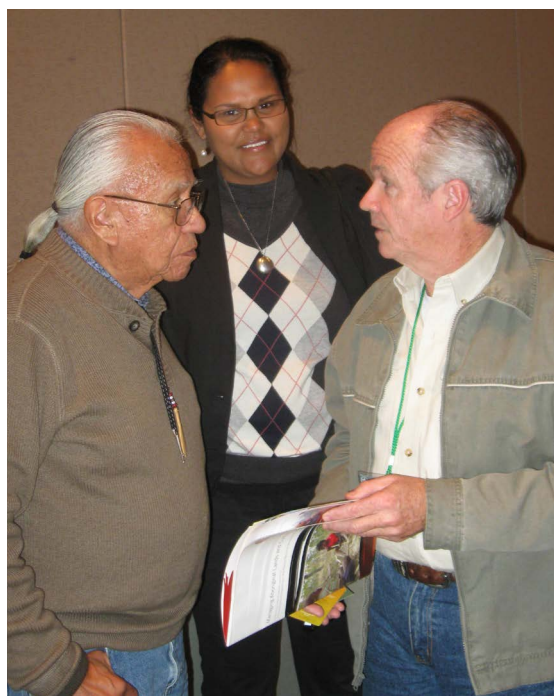


Figure 4-1 Billy Frank Jr (Deceased), Nisqually Tribal Member and the former Chair of the Northwest Indian fisheries Commission who provided the foreword to the prospectus. Seattle Trade Centre, USA 2011

Early Kowanyama Council and then KALNRMO activity also focused on regulating recreational fishing and associated camping activity. Kowanyama's training of its Senior Ranger and Fisheries Officer included an interstate collaboration with the New South Wales Fisheries Service for short periods over two years. The camping and fishing regulation effort is ongoing, providing a source of revenue through camping fees, and a key basis for interacting with a diverse array of people beyond the Kowanyama community itself.

Kowanyama submissions to the Coastal Zone Inquiry during their membership of a National Indigenous Advisory Panel to the Commission, led to a delegation visiting the United States to investigate management models in that context and their implications for Australia. Later the Secretary of the Gulf Commercial Fishermen's Organisation would also visit the Northwest Indian Fisheries Commission during an overseas vacation. In 2011 Kowanyama representatives gave an informal presentation on Land Office operations to the technical staff of the Makah Tribal Fisheries Department.

4.3.3 Catchment management

A third major Kowanyama initiative which originally dates from the formative period of the late 1980s and early 1990s involved catchment management. Aware of their position downstream of a range of other catchment users, in 1990 Kowanyama initiated and held the Mitchell River Conference. This led in turn to the formation of the Mitchell River Group, the first community-driven catchment management group of its kind in Queensland. The group enabled the bringing together of stakeholders and representatives from a range of sectors – Indigenous, pastoral, fisheries, local government, tourism, conservation groups and senior regional management of the government departments dealing with natural resources management.² The group has faced challenges, particularly in terms of the distances within the catchment, appropriate goals and objectives for the group, and differences in perspective on issues such as development (Strang 2008). Now known as the Mitchell River Watershed Management Group³ (<http://www.mitchell-river.com.au/>), its continued existence means that it remains the oldest catchment management group in Queensland. The group was nominated for the Theiss International River Prize in 1998 (KALNRMO 2012b). It is a crucial element in the NRM profile of the Mitchell River and of the region, and the KALNRMO provides an important ongoing contribution to its activities.

4.3.4 Errk Oygangand (Mitchell-Alice Rivers) national park negotiations

The KALNRMO was the key Kowanyama agency involved in negotiations between Traditional Owners and the Queensland Parks and Wildlife Service (QPWS) regarding future tenure and management arrangements for what was originally known as the Alice-Mitchell National Park. This park was created without consultation with Kowanyama residents and Traditional Owners during the 1970s. The negotiation of access and co-management arrangements with QPWS has been an important ongoing priority for the KALNRMO. Joint management of Queensland's national parks was possible with the passing of the Aboriginal Land Act in 1991, and Kowanyama had attained a successful finding by Tribunal Hearings, but subsequently had stepped away dissatisfied with the original terms of lease back to the State and what were perceived to be inadequate co-management arrangements with the State (V. Sinnamon, pers. comm.). A briefing paper was prepared in 2000 (Sinnamon 2000) to provide foundations for further discussion and following the passage of the Cape York Peninsula Heritage Act (2007), an MOU was signed with QPWS. As the 2007 act allowed for Traditional Owners to take conditional ownership of National Parks and specifically offered pathways for joint or co-management arrangements, Kowanyama Traditional Owners considered it a more fruitful avenue for negotiations (Larsen 2008).

² Participants included: Karumba commercial gillnet and prawn fishermen; Queensland Commercial Fishermen's Organisation Environment Officer (Brisbane); DPI Fisheries (Townsville); Queensland Fisheries Management Authority (Brisbane); NSW Soil Conservation Service; and Professor David Whitener from the Squaxin Nation in the USA.

³ The MRWMG name reflects Kowanyama's historical association with Washington State Tribes, who were at the time engaged in negotiations about Watershed Management and the State's Timber, Fish and Wildlife Agreement (V. Sinnamon, pers.comm.)



The park was formally renamed as Errk Oygangand and transferred to joint management in 2009, becoming the first existing park to come under joint management since the passing of the 2007 Act. The involvement of Balkanu Aboriginal Corporation and a university doctoral student (Larsen 2012) assisted KALNRMO and Traditional Owners during the process. A key indicator of the success of the process for Kowanyama was the successful interment of a senior man on his country at Emu Lagoon on Errk Oygangand upon his passing in the years after 2009. The negotiations and transferral set an important precedent for other current and future national parks on the Cape and elsewhere in Queensland. KALNRMO staff and northern National Parks staff were invited by Quandamooka colleagues to attend a meeting on Stradbroke Island to discuss management options for co-management of newly declared National Parks on Stradbroke Island (V. Sinnamon pers. comm.).

4.3.5 Research and education

Over 25 years, the KALNRMO has played a key role in both research and education for the wider ICNRM and NRM movements. Kowanyama Aboriginal Shire Council and KALNRMO activities made it a key research case study and exemplar in the formative years of the ICNRM sector. KALNRMO's longevity and high activity levels have seen it maintain a high profile in research analyses of the ICNRM movement, including this project.

In addition to research about ICNRM, the active development of KALNRMO research priorities and agendas by the organisation have encouraged research on Kowanyama lands focused on a range of relevant social and natural science topics. The local prioritisation process has meant that KALNRMO, supported by the KASC and wider Kowanyama community has at times rejected research proposals and collaborations that did not seem aligned with local needs and interests. Research activities that have been supported have subsequently influenced the national and international research community through publications and other research outputs, but have also had direct impacts on the individual researchers conducting the work. Such impacts have been supported and augmented by KALNRMO presentations at numerous research and policy conferences and other events. KALNRMO has developed a draft paper proposing protocols to guide future research collaborations (KALNRMO 2009).

With respect to education, many researchers also teach at universities, and so KALNRMO influence on research and researchers can also have direct impacts on the tertiary student education in a range of fields. KALNRMO staff and elders have been involved in a university student summer school and KALNRMO also played an important role in the conceptualisation and execution of early Indigenous ranger training programs at Cairns TAFE. KALNRMO staff were involved in TAFE course planning and delivery, and Kowanyama activities represented a major case study of ICNRM in the course content. Finally, KALNRMO has had ongoing relationships with school teachers and staff at the Kowanyama State High School. This has included the development of formal curriculum modules about such issues as river care, support for school excursions, fostering understanding of customary knowledge and of ICNRM principles, and guidance for teaching staff.

4.3.6 Strategic planning

The above achievements and impacts have relied on strategic planning processes that identified key principles, objectives and outcomes for the KALNRMO. The Mukarnt planning retreat in 1993 drew on research and planning expertise as well as international input to generate initial direction (Dale and KALNRMO 1994) that led to the 13 principles that have guided KALNRMO activities since that time (KALNRMO 1992, 1996, 1999). Strategic plans are reviewed on a five yearly basis, either through an internal processor by commissioned planners (KALNRMO 1999).

This has enabled the organisation to maintain focus on key objectives and outcomes over subsequent decades. Early planning experience also laid important foundations for subsequent review processes, and for generating sub-plans for key activities and natural and cultural assets. Importantly for the current study, these plans have guided KALNRMO interactions with stakeholders and partners beyond the community, and provided an important example for other ICNRM organisations to follow. Kowanyama and the KALNRMO directly and indirectly informed country-based planning processes that are now widely used and adopted within the broader ICNRM movement (Smyth 2012). KALNRMO also provided guidance to a State-based local government association process to assist Aboriginal Councils in integrating Aboriginal Land and Sea management into Council planning (Local Government Association of Queensland 2007).

4.4 Categorising KALNRMO outcomes

The above timeline and brief description of key KALNRMO activities could be augmented in a range of ways, as a wide array of additional activities and contributions have taken place over the previous two decades and more. However, the information above does provide a basic temporal and subject framework for considering how the KALNRMO has contributed social, cultural, political, economic and health outcomes beyond Kowanyama. These outcomes will be described and analysed in parts 5-9 which follow, and this process will provide further details about the major areas of contribution outlined above. The evidence and examples are classified and presented in terms of the outcome categories and subcategories identified in Section 3. This simultaneously demonstrates the specific outcomes that KALNRMO activity has generated, and tests the outcome classification system against a relevant case study, demonstrating how it can be used to identify and classify wider outcomes elsewhere.

As discussed in Section 3, a particular example can address multiple outcome categories simultaneously and the complex nature of human societies means that the outcome categories themselves intersect and overlap. This suggests that the categories can be presented and analysed in any order. However, one key feature of the success of ICNRM is the consistency of its primary objectives with customary Indigenous cultural objectives and protocols, and this was demonstrated to be an important part of intra-Indigenous community outcomes in a related study (Barber 2015b). This in turn suggests that prioritising the consideration of cultural outcomes beyond Kowanyama may be a useful first step. These outcomes will be followed in turn by consideration of social, political, economic, and health and wellbeing outcomes.

5 Cultural outcomes of the KALNRMO beyond Kowanyama

5.1 Introduction

External cultural outcomes from KALNRMO activities relate to the effects on the values, attitudes, principles and behaviours of people beyond Kowanyama. The analysis undertaken here identified four emergent subcategories: fostering and reinvigorating Indigenous culture and traditions; acting as a role model and exemplar for the Australian ICNRM sector; providing opportunities for informal learning; and generating behavioural and attitudinal changes in wider society through those processes.

Reviewing cultural outcomes also highlights the first of a series of definitional and demarcation challenges in operationalising any conceptual framework. These challenges arise because of the interconnectedness and overlap between different aspects of human life and human society. Yet the discussion in previous parts of the report highlights the need for clarity and consistency in application. In this instance, the proposed outcome classification framework differentiates between the informal everyday interactions that lead to behavioural and attitudinal change – identified here as cultural outcomes – and the outcomes associated with participation in formal institutions of training and education. The latter are discussed below as an aspect of social outcomes. The two aspects of learning are clearly interlinked – cultural and attitudinal outcomes are frequently attained in social institutional contexts – but for the purposes of outcome identification and classification, the activities and their consequences will be considered separately here.

5.2 Fostering and reinvigorating Indigenous cultures and traditions

The primary objectives of formal ICNRM are consistent with key customary Indigenous cultural objectives and protocols. This is a key aspect of the popularity of the sector within local communities. Yet it also means that sectoral and organisational activities that deliver outcomes to those objectives are of considerable importance, and provide key foundations for the achievement of other cultural outcomes of ICNRM. The KALNRMO demonstrates this point, as major foundational principles (e.g. the significance of land), organisational structures (e.g. the 'Counsel of Elders'); and important activities (e.g. cultural knowledge recording and the establishment of the new Cultural Centre) directly relate to fostering and (re)invigorating Indigenous cultural knowledge and traditions. These initiatives strengthen local practices, something elders, long-term Manager Viv Sinnamon and other KALNRMO Indigenous ranger staff have continued to publicly acknowledge:

Contemporary Indigenous land management strategies have begun to develop at Kowanyama. This includes the maintenance of fish increase ceremonies, the consolidation of the traditional ecological knowledge base in the school curriculum, through to the establishment of a sophisticated geographic information system Mapping of both cultural landscape and natural resources inventories will form the basis for future management of Aboriginal lands and waters.

Viv Sinnamon (Sinnamon 1995:10)

IK [Indigenous Knowledge] means who we are, where we come from and what our background is. This Cultural Centre, if it gets built, will bring culture back alive in Kowanyama. We need a place to show our artefacts and the works that these old people do.

Phillip Mango (RAIN Bush TV 2009)

KALNRMO's activities focused on local Indigenous culture generate cultural outcomes and impacts on people beyond Kowanyama. A notable recent example of this was an initiative at the regional dance festival at Laura, approximately 400 km from Kowanyama, where KALNRMO rangers and staff built a traditional wet season humpy from bush materials. This enabled many younger Indigenous people from the region to see a humpy for the first time and won a festival award (Land Office News issue 1: 21). The wider cultural outcomes of KALNRMO activities focused on fostering and reinvigorating cultural traditions were also noted by regional Indigenous leaders and by cultural researchers who participated in this study:

Kowanyama are combining the traditional knowledge, the bush knowledge, and the scientific knowledge. They are trying to pass it on, but also bringing in the new knowledge, GPS and computers. Those young fellers are learning and the old fellers are trying to save their knowledge for the young fellers. They share their knowledge with us too.

Ron Archer (ANGIC)

I drew heavily on KALNRMO's invaluable archive of ethnographic and historical material. This, I know, has been a tremendous resource for many researchers, in a range of disciplinary areas. It also underpinned a complementary project that I carried out with the community alongside my own doctoral research: the cultural mapping of the (then) Alice-Mitchell National Park and other areas of the traditional country of the three language groups in Kowanyama.

Veronica Strang (Durham University)

The organisational structures grounded in customary principles and the activities focused on supporting cultural traditions that flow from them are a key basis for additional wider cultural outcomes generated by the KALNRMO.

5.3 KALNRMO as role model and exemplar for the ICNRM sector

The cultural credibility of the KALNRMO, its early establishment, and its ongoing consistent performance have all made it an important exemplar for the wider ICNRM sector. This status as a role model is widely acknowledged, and some evidence for this is noted below. The status also provides foundations for informal learning and attitudinal changes, cultural outcomes that will be discussed in subsequent sections of Part 5.

The activities of the Kowanyama Council and of the KALNRMO were particularly important in the early formalisation of ICNRM in the late 1980s and early 1990s. They demonstrated the potential of the sector, but also how community leadership could shape the way that activities in the sector could be negotiated:

Kowanyama was crucial in demonstrating that it was possible for an Aboriginal group to lead, develop and coordinate rather than be passive or victims in processes. The only way to really work with government was to get organised at the local level and get the coordination happening at that level. Kowanyama was the first to demonstrate that over time.

Dermot Smyth (Smyth and Bahrdt Consultants)

They've done a lot in the sense that they were independent. They were out there on the edge, not influenced. And they were only one mob, all there together, so if there was a problem they could get the elders together and sort it out. They could do it their way.... I don't see it as an organisation, but as a community effort. It is a community based centre, not just a centre based in the community. It was born and bred there. And people find that out when they deal with it.

Ron Archer (ANGIC)

I saw Kowanyama as a model community, they were strategically focused, they had a strategic plan in place to better manage their country... they identified their roles and the kind of expertise they needed to assist them.

Henrietta Marrie (UNU)

Though its various initiatives KALNRM rapidly established itself as an exemplar and leading proponent of Aboriginal approaches to natural and cultural resource management. As such it has given the community a clear voice in North Queensland, and enabled this voice to be heard in regional debates on environmental management.

Veronica Strang (Durham University)

This general sense of regional and sectoral leadership was underpinned by contacts and initiatives (such as fisheries enforcement powers) that caught the attention of other communities:

In 1993, Dhimurru [Aboriginal Corporation] came across [from Nhulunbuy] and we told them what we were doing. We cooked fish and did research. We showed them a few eye openers - they were new at that stage, and they saw what we were doing. They took that model and changed it for them, moved it around.

John Clark (North Queensland Land Council)

They were aware of many boats fishing off their shores or in their rivers, taking big catch and their rangers were not in a position to legally stop them or confiscate their nets. Kowanyama became very influential in highlighting the need for their rangers to have enforcement powers. They weren't talking about conservation, management and looking after country - they were doing it. They were actually putting it into practice. That to me was a real change in empowering the rangers themselves and elsewhere. Making these landholders and landkeepers [elsewhere] realise that 'hey, they can have the power to do it, and that it is possible to do it.'

Henrietta Marrie (UNU)

Kowanyama was particularly influential in the formation of Cape regional agencies such as Balkanu:

The idea of what might loosely be called Indigenous Land and Sea Management institutional agencies was starting to emerge right across the Cape. It was probably another 7 or 8 years before that started to get formalised through the Balkanu strategy, but the Balkanu strategy was very largely informed by the Kowanyama model, so as that started to unfold, it probably was the Kowanyama model that was really starting to drive it, and it was really highly influential in there.

Allan Dale (RDA and JCU)

KALNRMO leadership with respect to other Indigenous agencies and communities was complemented by early citations as a role model by the research and government policy communities. KALNRMO was identified in research and policy publications as 'a leader in natural resource management' (Baker *et al.* 2001), as 'an example, nationally and internationally' (Jacobson 1995), as a 'widely heralded' organisation that 'provided a case study to examine the conditions of successful practice and innovation in governance' (Moran 2010). Carr (2002: 124) described how Kowanyama and its land office were not 'unilaterally perceived as an isolated and economically disadvantaged peripheral group dependent upon the Cairns tourist core, but as a self-reliant and relatively autonomous community who are highly successful in the eyes of both State and Federal governments.' This profile at regional, state, and national level was complemented by a high profile at an international level:

KALNRMO enabled Kowanyama to be one of the first Aboriginal communities in Australia to engage with Indigenous groups overseas, taking a proactive role in inviting representatives from these to visit Cape York, and to share their knowledge and experience. As such, it initiated a process of international connection which – with others following suit – now links many Australian Indigenous communities to key international networks of Indigenous peoples around the world.

Veronica Strang (Durham University)

On the international stage, KALNRMO and Kowanyama are well-known in terms of progressive NRM programs and self-governance in Aboriginal communities. The exact level of influence KALNRMO would have from these interactions is hard to quantify, but would be substantial.

Jeff Shellberg (Griffith University)

KALNRMO was a key early example, role model, and benchmark that was influential at local, regional, state, national and international scales. The combination of credibility, profile, and activity created multiple opportunities for the organisation to facilitate processes of informal learning and of subsequent behavioural and attitudinal change. These will be considered in 5.4 and 5.5 below.

5.4 Informal learning, knowledge sharing and exchange

KALNRMO initiatives were focused on local natural and cultural resource objectives, but pursuing these objectives enabled (and often required) the creation of contexts suitable for informal learning and knowledge sharing. The most high profile of these was the Mitchell River catchment group, but many other KALNRMO-initiated groups and workshops provided significant learning opportunities. Regular participation by KALNRMO representatives in cultural awareness workshops and training programs, particularly for government departments, is a small but important aspect of ongoing activities. These identifiable and often documented initiatives are complemented by the many thousands of smaller communications and interactions with partners, stakeholders, and visitors that have occurred over the previous decades. These range from single conversations with temporary visitors about the basis for camping and fishing fees and the uses to which those funds are put (Sinnamon 1995) to the increased understanding acquired by regular external partners through extended interactions over time:

I have learned much about their connection to the natural and spiritual world that they know as one interconnected system. I have also learned how difficult it is to balance the traditional and modern influences on culture and land management. This traditional world view has changed my understanding of how the natural and cultural landscapes need to be managed as one system, regardless of any specific task at hand.

Jeff Shellberg (Griffith University)

Importantly, these interactions are about sharing knowledge as much as imparting it - early KALNRMO exposure to turtle knowledge and turtle management by Dhimurru Rangers established historical foundations for what is now an emerging KALNRMO management focus (KALNRMO 2015: 6). Ron Archer noted the emphasis on knowledge sharing in the KALNRMO approach:

They don't tell you what to do. They talk about what you are doing and about how they are doing it.

Ron Archer (ANGIC)

Natural science researchers noted a similar process:

At first I was in Kowanyama to learn from the local people about their land and culture, which they opened up to me. As I learned, I also shared my knowledge with them.

Jeff Shellberg (Griffith University)



Figure 5-1 Researcher Jeff Shellberg is formally welcomed to KALNRMO-managed country at Oriners Station by senior Olkola Traditional Owner and Kowanyama Aboriginal Shire Councillor Michael Yam

Opportunities for learning arise from meetings, workshops, and other organised but informal gatherings held as part of KALNRMO activities. KALNRMO skills in such processes can generate knowledge sharing and additional perspective in people who may feel they already know much about the local context:

'I've worked with a lot of Kowanyama people in my life. I never realised they had so much to offer.'

*A non-Indigenous Gulf Savannah Guide, talking about a seminar with Elders and rangers
(KALNRMO and Kowanyama State High School 1993)*

Viv Sinnamon recalled that one commercial fisherman speaking at a meeting with Kowanyama representatives commented that 'see these guys - they are our eyes and ears for environmental issues in this part of the Gulf', further emphasising the knowledge they had to share. As noted above, the highest profile and most regular Kowanyama-initiated group of this kind is the Mitchell River catchment group. Veronica Strang describes in detail the early processes of this group, identifying the opportunity it provided for informal learning:

The early meetings of the Mitchell River catchment group were fairly informal and were composed almost wholly of local "grassroots" land and resource users. Many of the elders in Kowanyama attended and spoke passionately about the degradation of sacred sites, the loss of key resources from overfishing, and the important social and historical aspects of their engagement with the river. In workshops reflecting the egalitarian values of Aboriginal forms of political interaction, all of the groups involved were equally encouraged to articulate their particular visions of what constituted a healthy environment. The meetings therefore enabled not only an educational exchange of practical information about fish stocks, erosion, and invasive weeds but also - for the first time - an explicit discourse about the various beliefs and values of each of the groups.

(Strang 2008:52)

Part of the knowledge sharing process involved selecting significant locations:

Hosting events, Kowanyama organised meetings at important local sites so that the members of the catchment group could gain insights into the holistic meanings of places. In this way cattle farmers were able to understand that Indigenous concerns about a particular water hole were related not just to the ecological effects of bulldozing and deepening it but also to ideas about ancestral belonging in that place and its importance as the basis for the identity of particular people.

(Strang 2008:52)

A further aspect of the informal learning arose through the Indigenous initiative for and leadership of the group:

Crucially, by initiating the process, the Aboriginal community was able to retain considerable control over representations of their viewpoint and—to some extent - the interpretation of their cultural knowledge. In the initial dialogue between the European and Indigenous inhabitants of the catchment area, the Aboriginal community therefore became more au fait with the language of "conservation," and the non-Indigenous groups had their more Cartesian vision of the environmental challenged by a model of human-environmental engagement in which social and ecological processes are cosmologically meshed.

(Strang 2008:52)

In her extended analysis of the Mitchell River group, Carr noted how catchment group members observed learning taking place at personal, within-group, community wide and societal scales and provided commentary from a group participant about the process:

'I've learned heaps. I've been amazed and flattered by the Aboriginal people and the way they've treated me with honour I've never experienced from any other group of people. I've learned how graziers interact and why miners have wronged them in the past. I've learned the codes of conduct between Aborigines, miners and graziers and that body language is as important as language. I've learned to chair a diverse group and am still learning how to run these meetings.

Brian, Mitchell River group member (Carr 2002:79)

Former Mitchell River pastoralist David Hughes described how it took his participation in the catchment management group to fully understand the significant issues Kowanyama faced with fisheries management and the impact it had had on them. It was also crucial in providing a foundation to underpin group perspectives:

It was good. And what it did do is gave us information. You know, because there are always a hell of a lot of experts around a barbecue and a bar, but it gave us facts and figures that we could actually make some informed decisions because we had the information. Understanding. Most of the stuff we knew, we knew pretty close to what was happening, but we didn't have the information itself.

David Hughes (Former Mitchell River pastoralist)

The catchment management group partly arose from guidance received through Kowanyama's international network with Native Americans (see Fig. 5-2 on following page).

JUN 18 '91 14:35 TO: 90116170605124

FROM: NW INDIAN FISHERIES T-132 P.01



Northwest Indian Fisheries Commission

6730 Martin Way E., Olympia, WA 98506 Phone (206) 438-1180 FAX #753-8658/FTS #434-9476

The Northwest Indian Fisheries Commission applauds and endorses the move by the Kowanyama Aboriginal Community Council toward the adoption of co-management of land and natural resources in Australia. The Indian tribes of the Pacific Northwest United States have learned, through extensive experience, that this is the best approach to good resource management. We further applaud and endorse the move by the Kowanyama Aboriginal Council toward greater public acceptance as such acceptance also leads to good resource management.

(e) Signature: *Bill Frank, Jr.*
 (f) Date: *6/18/91*
 (g) Name: *Bill Frank, Jr.*
Chairman, Northwest Indian Fisheries Co
 (h) Address: *6730 Martin Way E.*
Olympia, WA 98506 USA
 (i) Telephone Number: *(206) 438-1180*

Figure 5-2 NWIFC letter of support from Billy Frank Junior (deceased) regarding co-management of the Mitchell River

Carr (2002:51-52) notes that this influence was particularly noticeable in the inclusion of government catchment members in the group and the emphasis on cooperative management (co-management). This was a crucial context for learning and knowledge sharing. Viv Sinnamon recently noted that 'the tribes of the State of Washington were the inspiration for the establishment of the KALNRMO in 1990' (KALNRMO 2015a: 6) and went on to describe how the initial contact led to multiple knowledge exchanges with KALNRMO and with other representatives of Australian marine resource interests:

They included cross-Pacific work exchanges and visits by Lummi tribal member Jewell James in 1989, David Whitener (Dec) 1990/1995, Ron Whitener as a Squaxin Island Tribal law student, David Fyfe, Shellfish Biologist for the NWIFC who assisted in works with Kowanyama's Quandamooka friends at Stradbroke Island, a visit by Commissioner representatives from the Federal RAC Coastal Zone Inquiry to the Northwest Indian Fisheries Commission and member tribe's management agencies and a visit by Bill Kehoe (Deceased), the Secretary of the Karumba QLD Commercial Fisherman's Organisation to Washington tribal fisheries management agencies.

Viv Sinnamon (KALNRMO 2015a:6-7)



Figure 5-3 Jewell Praying Wolf James of the Lummi Nation, Washington State, USA, and Yir Yoront elder Sam Colin (deceased) at Kowanyama, 1989

There was a Native American representative at the crucial 1993 Mukarnt planning retreat (Dale and KALNRMO 1994) that developed the foundational principles of KALNRMO operations, and KALNRMO sponsored an East Australian coastal tour for another Native American leader who attended the 1995 Cape York Land Summit held at Kowanyama (KALNRMO 2015a: 6). This tour included the sharing of Washington tribes' experiences in fisheries co-management with senior State fisheries agency staff in Sydney and Brisbane, and visits to meet the Quandamooka people of Stradbroke Island, Wreck Bay Community in New South Wales, and Tasmanian Aboriginal organisations in Hobart and Launceston. KALNRMO staff also travelled in the opposite direction, with ranger and fisheries officer John Clark visiting during salmon season as a guest of Washington tribes and their fisheries agencies. These opportunities for informal learning and exchange on the international scale had multiple effects and outcomes within the Mitchell catchment and in Washington State:

One was the actual influence it had on Kowanyama itself. Their primary relationships were really between Seattle and the [Kowanyama] mob and this just plays out with the principles - that principle of connectivity. So the connectivity they had with Seattle and the connectivity that they had with a lot of the rest of the world was really quite influential in them building a sense that, 'well, we've got it right, we have agency, we can drive some of this.' And the high level, quite substantial fisheries agreements that were being reached in Seattle gave them a lot of hope: 'why aren't we being influential in these issues?' So there was a lot of exchange.

Allan Dale (RDA and JCU)

Allan Dale went on to note that exchange with America was also significant in amplifying the Kowanyama sense that the issues were about economic development of land and sea resources as well as conservation management. Through the KALNRMO, the Native American exchange also had impacts on a range of KALNRMO external partners and stakeholders. The combined effects of the whole range of informal learning fostered by the KALNRMO will be considered further in the final section on cultural outcomes, attitudinal and behavioural change.

5.5 Attitudinal and behavioural change

The learning and knowledge sharing amongst partners and stakeholders undertaken and facilitated by the KALNRMO enabled the organisation to effect attitudinal and behavioural change. Achieving attitudinal and behavioural change is not usually the sole objective of a KALNRMO activity, but it is frequently an important byproduct and there is an explicit understanding that an ongoing process of shifting entrenched attitudes is required:

Indigenous communities are often confronted with the romantic notions of others concerning contemporary Indigenous lifestyles, and their “involvement” in management. All too often there is an attempt to keep them to involvement in the “traditional” issues while others get on with what is often considered “whitefella’s” business by the “whitefellas.”

(Sinnamon 1997)

As indicated above, early initiatives by Kowanyama Aboriginal Shire Council and later the KALNRMO were particularly important in generating attitudinal changes amongst immediate neighbours in the Mitchell catchment. This included overcoming initial resistance to Indigenous management amongst commercial fishermen in the Gulf to reach a point where negotiation and strategic partnership were possible (Sinnamon 1995). It also incorporated facilitating the acceptance by key pastoralists in the area that KALNRMO staff (both Indigenous and non-Indigenous) were focused on the best interests of the Mitchell catchment as a whole. Reflecting on his engagements with Viv Sinnamon that were facilitated by KALNRMO activities, David Hughes noted the change:

I think we were able to sit down and have a couple of really good conversations, just him and I, and I think after that I realised what he was about, and I could see that he was someone who could do the country good more so than harm.

David Hughes (former Mitchell catchment pastoralist)

At times, behavioural and attitudinal change has come from KALNRMO asserting the importance of its own schedules and priorities. This was a feature of early interactions with government as former senior KALNRMO ranger John Clark commented:

The government would come and say now they wanted to talk with us. We would look at our timetable and tell them: ‘We are busy then.’ Then we would tell them when to come. They weren’t expecting that.

John Clark (NQLC)

Viv Sinnamon recalled that during engagements with KALNRMO, QFMA staff member Mark Elmer commented that “when Kowanyama speaks out about something, we may not always agree, but we know there is an issue and we need to listen”. While such lessons have largely been absorbed by regular partners and stakeholders, the need for ongoing education and attitudinal change continues as the scale of ICNRM expands. Viv Sinnamon described the consequences of KALNRMO objectives for a recently declared area which will be co-managed with government partners:

Management plans will be developed by Kowanyama resourced by DERM [Department of Environment and Resource Management] using our chosen consultant/s. This is a change from the norm and improves our leverage. As I say we have radically changed the paradigm to a more Indigenous driven process. Our challenge is to keep capacity to deliver and to change some of the harder case minds in DERM to a new way of doing business.

Viv Sinnamon (personal email to author: 24/01/2012)

The most detailed statements by individuals about alterations in their own perspective and about observations of alterations in the perspective of others came from the researchers who participated in the study. Veronica Strang notes both aspects in the following comment:

I came to Kowanyama with a particular view of natural and cultural resource management. I can say, without any exaggeration, that my understanding of natural and cultural resource management has been completely transformed by exposure to Aboriginal ways of approaching these activities, as enacted and explicated by KALNRMO. This latter point is important: while the Land Office's practical activities in managing and protecting the community's physical resources have been vital, its educational role in articulating and communicating Aboriginal relationships with country has been possibly far more important and far-reaching. Over the last 30 years, I have observed the Land Office's work with other land and water users in the catchment area succeed in shifting many people's understandings from 'what have Aboriginal people got to do with resource management?' to 'how can we learn from them?'

Veronica Strang (Durham University)

Jeff Shellberg's research activity with the KALNRMO through the Tropical Rivers and Coastal Knowledge (TRaCK) consortium also enabled him to witness first hand these transformations in perspective:

Through the TRaCK program, I witnessed several dozen researchers come to Kowanyama, and each of them was guided by KALNRMO on local protocols. They people also spent much time with Kowanyama people, facilitated through KALNRMO, and the interactions were often very strong and moving. I have talked to many of these people more recently that have moved onto other jobs and projects. All of them have spoken highly about their experiences with KALNRMO and Kowanyama, and how their science ideas and world views have been changed by the people and landscape. Some also have had spiritual connections. Most commonly people talk about the strong self-governance push for NRM that exists in Kowanyama, and how they feel KALNRMO is a leader in Aboriginal land management from the bottom up, rather than the top down.

Jeff Shellberg (Griffith University)

A research article (Sharp 1998) on the fishing issue at Kowanyama contained comments from Bill Kehoe, then Secretary of the Gulf Fisherman's Association describing the impact that ongoing engagement with Kowanyama and the KALNRMO had on his own perspective:

Kehoe notes the changes wrought in himself over two decades. 'Then I believed, we're fishermen, our interests have to come first.' My attitudes have changed since then.

I sympathise with [Aboriginal] communities and what they are at and their land... "What changed him? "Going into communities and talking to people; the elders..." (pers. comm. June 1997). In forming a partnership, they were fulfilling indispensable conditions for Aboriginal people's cooperation respect and equality. As elder Thomas Bruce recalls: "we worked evenly together from then on" (pers comm. June 1997).

(Sharp 1998)

These kinds of attitudinal changes, and the altered behaviours that emerge from them, are crucial cultural outcomes derived from the existence of the KALNRMO and the ICNRM activities it undertakes.

5.6 Summary: cultural outcomes of KALNRMO activities

The cultural outcomes of Kowanyama ICNRM identified here reflect a standard definition of culture as pertaining to acquired values, beliefs, principles and learned behaviours. They also reflect the importance assigned to culture by Indigenous people themselves – the first cultural outcomes noted derive from KALNRMO support for and alignment with Indigenous cultural principles.

This alignment is one key foundation for the effectiveness and longevity of KALNRMO cultural influences and outcomes. A second key foundation is the status that the organisation has acquired as a role model in the ICNRM movement through its early establishment, successful early initiatives and ongoing activity. The widespread acknowledgement of this status is itself a cultural outcome, and has played an important enabling role for the wider sector. A third key foundation for KALNRMO cultural outcomes is the role the organisation has played in enabling informal learning and knowledge sharing. This ranges from single interactions with transient visitors to repeated engagements with research and other partners.

These foundations in turn enable a fourth major cultural outcome, attitudinal and behavioural change. KALNRMO is primarily a natural and cultural resource management organisation, and so external behaviour change is rarely a primary objective. Yet such change is crucial in adhering to principles and achieving objectives that often are primary for the KALNRMO – care for the country, its traditional owners, and the resources it provides. Changes in values, attitudes and behaviours with respect to ICNRM are cultural outcomes that are necessary and important by products of successful activity. The next section will consider a complementary set of outcomes, social outcomes.

6 Social outcomes of the KALNRMO beyond Kowanyama

6.1 Introduction

Society and culture are closely related concepts, and as a result, social and cultural outcomes of ICNRM are closely interrelated. As defined here, social outcomes are those relating to formal institutional contexts, structures, and requirements, as well as to wider processes through which patterns and systems in society as a whole are influenced by ICNRM activities and practices. KALNRMO activities with respect to formal educational and research institutions are a key feature of social outcomes beyond Kowanyama, but evidence for a range of other outcomes are also noted. These include formal partnerships with external organisations and agencies that enable those organisations to meet key organisational goals. It also includes the way in which KALNRMO activities that generate attitudinal changes in individuals and foster broader social processes, particularly reconciliation. Additional outcomes relevant to social institutions, systems, and processes are considered under the heading of political outcomes in the next section of the report.



Figure 6-1 Kokoberin elder Gumhole Henry with explorer Dick Smith and scientists during the 1990 expedition to Dorunda in which seven Traditional Owner family representatives and two KALNRMO staff attended.

6.2 Research outcomes from KALNRMO activities

Comments from researchers about informal learning and attitudinal change in Part 5 emphasise the importance of Kowanyama and the KALNRMO to the research community. Research collaborations occurred from the earliest period of the establishment of the KALNRMO, most notably the involvement of key staff in an 8 day scientific expedition in 1990 sponsored by Dick Smith and other philanthropists and featured in a subsequent edition of *Australian Geographic* (Park 1991). The 2008 KALNRMO document identified 7 PhDs that had been written about, or emerged from, significant work with the Kowanyama community and at least two more (Shellberg 2011, Larsen 2012) have been completed since that time. Five of those projects (Strang 1994, Moran 1999, Monaghan 2005, Shellberg 2011, Larsen 2012) involved substantial contact with, and support from, the KALNRMO and Veronica Strang noted that this was a deliberate strategy pursued by the organisation:

KALNRMO and its supporting elders were highly prescient in seeing the need to engage directly with the research and policy community, and began to do so long before this became the norm in Indigenous communities. They developed a wide range of engagements with diverse research areas, working not just with anthropologists and archaeologists, but also with plant scientists, ecologists, hydrologists etc. They also opened up useful dialogues with conservation organisations and with government agencies.

Veronica Strang (Durham University)

Strang went on to note how the KALNRMO was never a passive subject of research, but rather an active participant and major collaborative partner in the projects it selected to support. This has entailed adopting a critical perspective about the relevance of research proposals, with proposals that did not meet local needs being challenged to produce modifications and sometimes rejected outright. The most high profile example of this was the Kowanyama response to the CYPLUS process, a Cape-wide initiative that was deprioritised in favour of a more intensive focus on local planning, save for one collaboration focused on an understudied flooded forest area. In contrast, direct early engagement with leaders of the TRaCK consortium ensured a range of locally meaningful outcomes were derived from that initiative (Jackson *et al.* 2011b, Stoeckl *et al.* 2011). This included the direct engagement of KALNRMO staff by the CSIRO to conduct bush tucker harvest surveys to collect data of use to KALNRMO. This is likely to be the first time the national research agency contracted an Indigenous community to collect data over such a large timeframe (3 years) (Jackson *et al.* 2011a).

From his perspective as a natural science practitioner, Jeff Shellberg echoed Strang's observations of the proactive approach adopted by the KALNRMO and noted its effect on both the practice and content of the research generated and on the management implications of that research:

KALNRMO demands that research be done in a more collaborative and participatory fashion with local educational outcomes, where the control of the knowledge and dissemination of information was held at least in part by the local community and KALNRMO. Many Kowanyama people and KALNRMO staff have become active researchers in their own right and this has allowed people to create a deeper understanding of themselves and their surroundings, and share this with their community. Research has become a two-way street of knowledge sharing and intellectual property rights. The appreciation and embrace of traditional knowledge (ecological, cultural, physical) has become more deeply embedded in the actions and publications of outside researchers. This is a major step forward to managing complex cultural and environmental systems.

Jeff Shellberg (Griffith University)



Figure 6-2 Kowanyama elder Colin Lawrence and Kath Larsen from James Cook University at Widow Lagoon during her research on negotiated co-management arrangements for the Errk Oygangand National Park

The substantial historical and ethnographic archive held by the KALNRMO has also provided important context for research projects focused on diverse topics as well as being a significant focus for historical research in its own right. Research practitioners made further comments about the personal and professional consequences of their engagements with KALNRMO:

Kowanyama got its governance together, and then that really taught me about the role of the bigger governance system. And so my entire research agenda in life has been about the wider governance system – how do you invest in the system to deliver much better outcomes from an environmental, social, or whatever point of view. So I guess I am pretty much eternally grateful. The Gulf taught me the most about those principles and how the system could work. If you are investing in the health of the system and getting deliberative about how it goes forward, you can make massive, massive changes.

Allan Dale (RDA and JCU)

My work with KALNRMO has enlightened me on the deep history of Australian Aboriginal people and the more recent history of violence, struggles, and cultural survival following European settlement. Professionally, I have gained a large amount of local knowledge from KALNRMO, as well as the landscapes the Kowanyama community has allowed me to access with them.

Jeff Shellberg (Griffith University)

Professionally, I feel that we have collaborated in producing much good work, which – as well as assisting the community in its various aims – has of course been vital to my own career development. Every successful anthropological career depends on strong ethnographic foundations. But that is just the pragmatics: what has been most important to me professionally is the intellectual creativity that this collaborative engagement has enabled. Working with KALNRMO and the community in Kowanyama has allowed me – and continues to allow me - to engage with forms of knowledge that are intellectually enlightening and enlivening.

Veronica Strang (Durham University)

Veronica Strang went on to describe how the professional and personal support provided to her by the KALNRMO had significantly enabled her contributions to international debates about: human-environmental relations; land and natural resource management; property and ownership; colonialism; and post-colonial relations in settler societies. This includes significant work with International Ecohydrology Programme of UNESCO over the past decade, research collaborations with colleagues in a diverse array of countries (Australia, New Zealand, United Kingdom, Canada, Denmark, Norway, Sweden, Estonia, the USA, Argentina, Brazil, China, Germany, Kyrgystan, Uzbekistan) and major international books (Strang 1997, 2009). Crucially, it demonstrates that a key aspect of the KALNRMO is influence on individuals, at times in the early stages of subsequent careers. The impact of the organisation derives not just on what those people learned at the time, but on where those individuals are now, and the institutions and organisations they contribute to.

Guided by their own strategic planning documents and by community and organisational needs, KALNRMO research collaborations are ongoing, and have recently included initiatives such as surveys of wild food sources (Jackson *et al.* 2014), erosion and ecohydrology (Shellberg 2011), fire management (KALNRMO 2013), ecological knowledge recovery (Barber *et al.* 2012, Barber *et al.* 2014) and wetlands management (KALNRMO 2010). In addition to direct research collaborations, KALNRMO initiatives such as the MRG have also become the focus of important research efforts which have had their own research and policy effects (Carr 2002).

6.3 Outcomes for institutional education from KALNRMO activities

KALNRMO have played an important role for educators and educational institutions. Three key contexts for formal educational outcomes from KALNRMO activities have been teaching staff and students at Kowanyama High School, Indigenous ranger training at Cairns TAFE, and the importance of KALNRMO as a case study for the wider tertiary education sector. These will be considered in turn.



Figure 6-3 Willie Banjo, Ranger and Animal Health Officer at KALNRMO, educating schoolchildren about crocodiles.

6.3.1 KALNRMO and Kowanyama State High School

The partnership between the KALNRMO and Kowanyama State High School commenced in the early years of the office and is ongoing. The principles, objectives and practical action arising from that early partnership is clearly reflected in the high school curriculum proposal focused on the Mitchell River that was collaboratively generated early in the history of the KALNRMO (KALNRMO and Kowanyama State High School 1993). Its stated aim was 'to develop and consolidate literacy skills across the curriculum and to increase awareness of the need for the sustainable use of land and natural resources using traditional Aboriginal knowledge as the basic resource.' The subsequent rationale identified that teaching school teachers was a key objective:

The course provides for formal recognition of Indigenous culture by the school, and enables skills to be developed in realistic contexts. Teachers will be learners in this course and thereby gain an appreciation of Aboriginal people, their culture and aspirations.

(KALNRMO and Kowanyama State High School 1993)

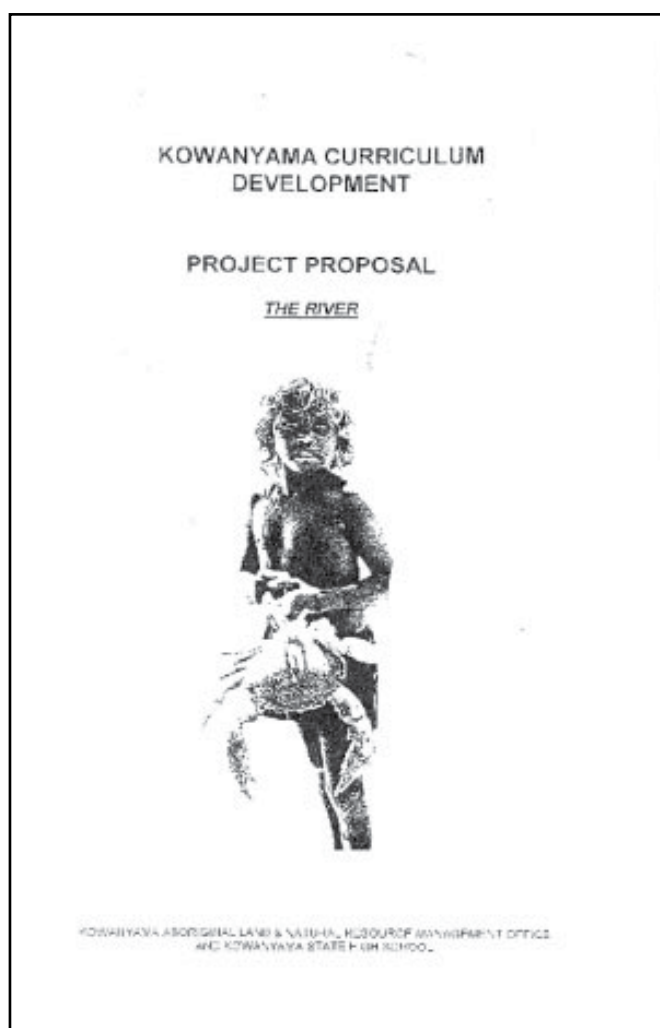


Figure 6-4 Front page of joint KALNRMO-Kowanyama High School curriculum project

The document goes on to note such educational objectives as the potential for better attendance rates and higher student interest levels from the program and for increased mutual respect between teachers and students. It explicitly identifies local social objectives, including the improvement of school-community relations and to 'encourage and enhance community links with other Indigenous groups in Australia and other countries' (KALNRMO and Kowanyama State High School 1993: 7-9). The curriculum proposal was prepared by a former Kowanyama teacher in consultation with Kowanyama Elders and the KALNRMO, and involved registration with the Queensland Board of Secondary Studies. It was undoubtedly the first collaborative proposal of its kind in the State and quite possibly the nation as a whole.

Although the form of the interactions has changed over time, KALNRMO retains an ongoing relationship with school education, with initiatives such as a Scholarship Fund for school leavers interested in ICNRM (Kowanyama Aboriginal Shire Council 2010), support for traditional technology classes and other cultural activities such as dance (Kowanyama Aboriginal Shire Council 2011), and, most recently, cultural induction workshops for teachers (KALNRMO 2015a). These provide excellent examples of how KALNRMO activities focused on local community scale objectives (educating the next generation of ICNRM practitioners) involve overtly influencing wider social institutions such as the state education system and the teachers employed by it. Such outcomes can be long-lasting for individuals and may be felt at a range of locations throughout the system as teachers move on (and up) to other positions in the system.

6.3.2 KALNRMO and Indigenous ranger training

Training for Indigenous land managers and rangers was a key focus for Kowanyama Council prior to the establishment of the KALNRMO, and this focus was maintained and enhanced once the office was established. Two early initiatives will be highlighted here – Kowanyama supporting training in fisheries inspection and enforcement powers, and KALNRMO supporting general ICNRM training, primarily through Cairns TAFE. John Clark was the primary KALNRMO staff member trained in fisheries enforcement, and this training involved two training periods with NSW fisheries officers as well as coursework and time with Cairns TAFE. This was the first instance of a qualified Fisheries Inspector being based in an Aboriginal organisation, and attracted attention from both the fisheries and ICNRM sectors at the time. It was also one basis for international knowledge sharing as John Clark himself recalls:

In 1994 I went to America. I got appointed as first Aboriginal Fisheries officer, first inspector. An Indian [Native American] guy came to Kowanyama and we talked about footprinting. Putting rough sheds on the beach to let people know someone is there. We sat down with those guys, told them how we do things, they told us how they do things.

John Clark (NQLC)

A larger ongoing KALNRMO investment occurred with respect to the Indigenous land management and ranger training course established by Cairns TAFE. The Ranger operations at Kowanyama were established prior to the development of the full Ranger Training Program at the Cairns TAFE and early training modules were held at Kowanyama in the late 1980s (D. Smyth pers. comm). KALNRMO staff, particularly Viv Sinnamon and John Clark, were involved in the development and consultations surrounding the course, and Dale (1991) reported that at that time one of the Ranger Training Co-ordinators operated out of KALNRMO. Presentations about the TAFE program at major NRM conferences explicitly acknowledged that it 'has largely arisen out of this [Kowanyama] model and therefore occurred in the context of community based, community owned land management processes to achieve conservation of cultural and natural heritage' (Hill 1992: 263). Indigenous KALNRMO staff were part of the initial course intake (Dale 1991) that encompassed communities from all across the Cape:

There were 99 rangers that were actually enrolled to do this course. And the 99 rangers came from all the DOGIT communities. So you had Mornington Island, you had Doomadgee, Kowanyama, Lockhart, Bamaga, Weipa, Yarrabah, Palm Island, Hopevale, Aurukun. It was really great to see a large group very committed, doing a certificate in ranger training.

Henrietta Marrie (UNU)

The high initial profile of Kowanyama was maintained as the program developed:

Rangers came here [to Kowanyama] from all over the Gulf to do some trapping, site recording etc. Gary Clark and Gary Drewen were the people from TAFE working on the training. We would give people an inside view of what we were doing.

John Clark (NQLC)

Veronica Strang, building on both KALNRMO-initiated cultural mapping activities and the teaching of KALNRMO staff about anthropology and archaeology, also produced content for the TAFE course on those subjects. Dermot Smyth, who coordinated what then became the Caring for Country program at the TAFE from 1993-2006, recalled that:

Viv and the Kowanyama people were regular guest speakers. [Kowanyama elder] Colin Lawrence was a particular favourite. The unis had money then to fly them down and pay them properly, and the feedback from the students was exceptional. Many commented that it was a shame they had to wait until third year to hear about this stuff and get direct contact with people out on their country. It changed people's lives.

Dermot Smyth (Smyth and Bahrdt consultants)

This formal training based on KALNRMO and Kowanyama content and delivered through an important regional educational institution was to have lasting social influences beyond Kowanyama on other Indigenous people in the Cape and elsewhere. It was originally focused on Community Rangers on DOGIT land who were CDEP funded, but laid foundations for some to eventually obtain employment as rangers under the subsequent Wild Rivers legislation, and in some instances to positions with QPWS. In 1999, Davies *et al.* (1999:63) noted that by 1995, planning for a national curriculum was underway and that similar courses had subsequently been developed elsewhere (for example Batchelor College in the NT and an equivalent TAFE in South Australia).

6.3.3. KALNRMO in wider tertiary education

The profile and success of the KALNRMO was important not just for specific ICNRM courses focused on Indigenous ranger training, but also for relevant courses in the tertiary education sector as a whole. Awareness of the KALNRMO amongst researchers and in the research literature was discussed above, but what is useful to note here in the context of a discussion about educational outcomes is that many researchers are also teachers of tertiary degree courses. The KALNRMO provided a means to demonstrate the potential of Australian ICNRM in courses such as geography, anthropology, Indigenous studies, ecological and conservation sciences, law, fisheries, etc. This could involve KALNRMO staff guest lecturing in a similar manner to the ranger TAFE course above, but more often involved discussion of KALNRMO activities and achievements by researchers with direct experience of KALNRMO and/or knowledge of its role in Australian ICNRM.

One international example is provided by the teaching of Veronica Strang. In the discussion of cultural outcomes above, she described the impact of Kowanyama and of KALNRMO activities on her own perspectives regarding natural and cultural resource management. Her subsequent teaching over more than two decades has spanned diverse undergraduate and postgraduate courses in anthropology, human-environmental relationships, race and racism, Australian studies, fieldwork methods, and social theory. The teaching has been conducted at universities in New Zealand, Wales, England and Australia, with guest lectures in a number of other countries. Although identifying the effect of one particular instance in which KALNRMO was referred to in any teaching context is very difficult to determine, the combined long term effect of exposing generations of undergraduate students in a diverse set of courses to a successful Australian ICNRM agency is likely to be substantial. This is particularly so within Australia itself.



Figure 6-5 KALNRMO staff members Teddy Bernard and Anzac Frank with Phil Rist from Girringun Aboriginal Corporation at a conference sponsored by the Yorta Yorta people of Echuca, Victoria

6.4 Policy and research communication outcomes: conferences

KALNRMO participation in, and organisation of, formal conferences has been an important activity throughout its existence. Conferences are particularly influential with respect to the research and policy communities and Dale (1991:56) noted early in the history of the KALNRMO that conferences had already been effective for both education and the development of 'bargaining networks'. The social networks enabled by such activities as conference attendance will be discussed in the next section. Here the emphasis on conference activity and its immediate social outcomes.

The potential for social impact is effectively demonstrated by conferences Kowanyama hosted prior to the formal establishment of the KALNRMO. Both the 1988 Northern Fisheries Conference and the 1990 Mitchell River Conference resulted in important changes to natural resources policy and management in the region and created lasting relationships and networks at scales ranging from the local catchment to the international scale. KALNRMO presence at conferences not only provides opportunities for its staff, awareness of their presence has positive influences on other regional Indigenous attendees.

I was there, at the last Landcare conference in Sydney. There were Kowanyama people there, with a display, two young fellers there. And I saw one of them also went overseas to a big UN conference. They are pretty well known overseas, that Kowanyama mob.

Ron Archer (ANGIC)

We [The Christensen Fund] gave them some funding to attend a conference in Alaska and that was just fantastic, you had a couple of the senior people and I was so proud of them. They went over there and they all talked about their country. To see these men from Kowanyama walk and hold themselves with such strength and pride. I was so excited for them to come out to a foreign country and speak in such a very strong voice, of what they were doing in their country and community and why they are doing it, and the need to understand the impact that they are already feeling through climate change, speaking to a group of international people, with foreign languages, in a different country. That was really powerful, that was really something. I was so proud of all of them who had come over. They got the flag signed and took it back to Kowanyama; this was a great moment, even for me.

Henrietta Marrie (UNU)

References located in this research to conferences attended by KALNRMO delegates over previous decades included: Landcare (Sydney); United Nations Indigenous Peoples (Alaska); Asia-Pacific Governance (East Timor); Association of American Geographers (Seattle); River Symposiums (multiple locations); Environmental Law Conference (Great Keppell Island); Aboriginal Involvement in National Parks and Protected Areas Conference (Albury); National Coastal Management Conference (Hobart); Local Government Association (Cairns); International Climate Change Adaptation Conference (Gold Coast); Cape York Ranger Conference (Cooktown); Savannah Symposium (Darwin); Aboriginal Land Management and Economic Development Conference (Darwin); Aboriginal Community Government NRM (Cairns); National Coastal Conference and the Marine and Protected Areas Conference (Perth).

This is just a small subsample of KALNRMO conference participation over the past 25 years. Although it will not be considered in detail here, an additional conference impact occurs through the conference participation of KALNRMO research and policy partners. This is a key aspect of wider KALNRMO profile in these sectors, and is effectively an extension of direct KALNRMO impacts on researchers, and its role as a case study in contexts such as tertiary teaching. The combined ongoing effect of conference participation by KALNRMO delegates and by KALNRMO research and policy partners represents an important social outcome of the organisation's activities.



Figure 6-6 KALNRMO staff members, Anzac Frank and Phillip Mango with Steve Robinson formerly of the NWIFC at the International Indigenous Climate Change Forum. Anchorage, Alaska, USA 2011

6.5 Media and public communication

Conferences and formal education contexts are effective at communicating with the research, policy, and education sectors, but KALNRMO have also been strategically active in generating and using media intended for wider public consumption. This was a strong initial focus, as Allan Dale noted in 1991:

The Office has used a variety of media to promote its objectives to create a broader understanding of Aboriginal calls for control over land and maritime resource management. It frequently makes press releases to northern papers and it has now had articles published about it in several forums. The use of media also provides an important tool in bargaining processes. The Office advertises particular aspects of its management policies in the Cairns Post to ensure that tourists using the DOGIT lands are aware of Council decisions prior to their arrival in Kowanyama. The Office has also now made several Television, radio and video appearances and it is working on a broadcast standard documentary on its involvement in resource management.

(Dale 1991:59)

In these early years following the establishment of the fisheries and recreational tourist management programs, there was an explicit focus on raising the profile of Kowanyama and the KALNRMO within these sectors. This led to articles about the area and the office in camping and fishing magazines encouraging visitors and explaining the context and the terms for any visit (KALNRMO 1992, 1994a). The office has also used radio, newspaper and other media to advertise the closure of seasons, community policy etc. In the 1990s, a documentary on recreational fishing and management of Mitchell River country was assisted through the sponsorship of helicopter time during surveillance flights (Sinnamon 1997).

More recently, the scale of KALNRMO and of its social network have led to new media initiatives. The most visible is the newsletter, Kowanyama Land Office News, which has had 9 issues since it was launched in mid-2011. The idea for the newsletter was inspired by further contact with Native American contexts, and the Northwest Indian Fisheries Commission also provided early technical support. KALNRMO has also initiated social media campaigns focused on particular issues. The newsletter is in addition to the summaries of KALNRMO activities provided in Kowanyama Aboriginal Shire Council annual reports available online (Kowanyama Aboriginal Shire Council 2010, 2011, 2012).

In addition to its own media and public communication initiatives, KALNRMO has also been the subject of mainstream media coverage (Koopman 1990, AAP 2009, Peter 2010, 2011, Andersen 2013). This has generally focused on key issues (fisheries management and enforcement, the return of the national park, pests and other land management issues) relevant to the remit of the office.

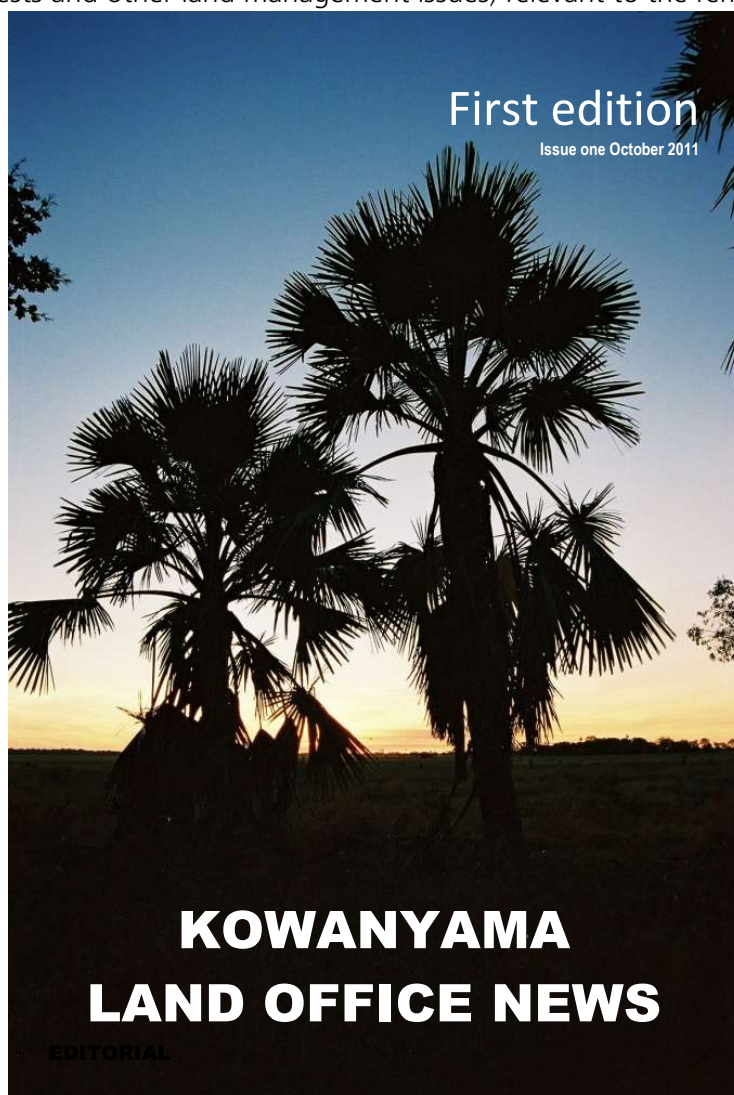


Figure 6-7 Cover of the first issue of the Kowanyama Land Office News Magazine, 2011

6.6 Social networks and partnerships

KALNRMO conference and media communication activity is one facet of ongoing efforts to build social networks and, through those networks, create formal partnerships. Following the strategy of the Kowanyama Aboriginal Shire Council and Kowanyama elders, building networks of relationships with key people and organisations beyond Kowanyama was an explicit agenda for the KALNRMO from its inception. Commenting on the formation of the MRG, Strang noted that:

There was a larger agenda, of course, concerned with building social relationships, highlighting the knowledges and skills within the Indigenous community, and positioning it as a decision-making group in the management of the catchment area. The major goal was to assert Indigenous agency and establish the Aboriginal community as an equal co-manager of the catchment area.

(Strang 2008)

Dale (1991:49) identified how Kowanyama had sought to 'develop strong bonds' between itself and conservation and fishing organisations in areas of mutual interest such as upstream mining development. Gaining knowledge of key actors and building networks of relationships over time enabled support for organisational objectives, as Viv Sinnamon made clear in a 2008 presentation:

The Office has a wide knowledge of which department and industry group to approach with respect to gaining support, or to resolve conflicts, in land and natural resource use. Many of the parties involved in the Office's bargaining and negotiation networks do not necessarily provide financial support or any services, but they are simply 'involved' with the community in supportive or bargaining roles. Essentially, the Office has employed the support of a wide range of organisations to secure a stronger bargaining position and to contribute to information sharing. Some agencies with no direct stake in the Mitchell River delta have also provided service and program support to the Council (e.g., the NSW Soil Conservation Service and American Indian Groups).

(Sinnamon 2008)

The result of Kowanyama's approach was an explicitly conceptualised set of social networks that encompassed local catchment neighbours, regional organisations, and state and federal agencies (Figure 6-8). KALNRMO initiatives such as the MRG further extended social network possibilities for the organisation (Figure 6-9).

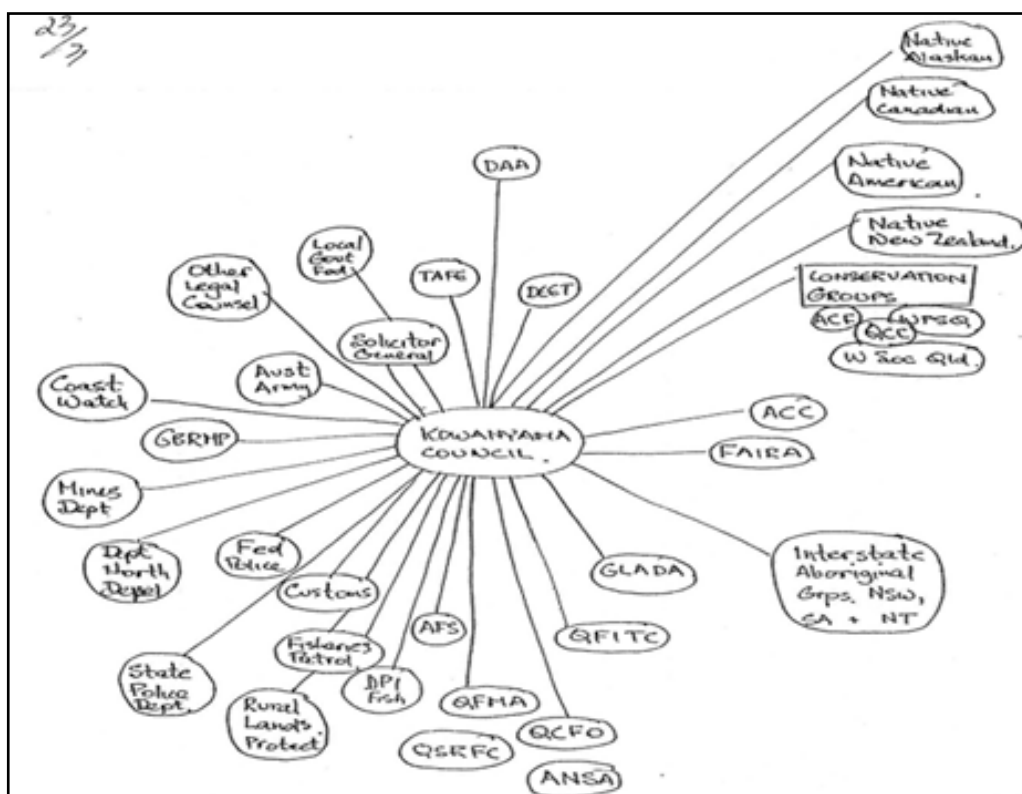


Figure 6-8 Network of relationships with Kowanyama Council, drawn by Viv Sinnamon (undated diagram from the personal archive of Dermot Smyth)

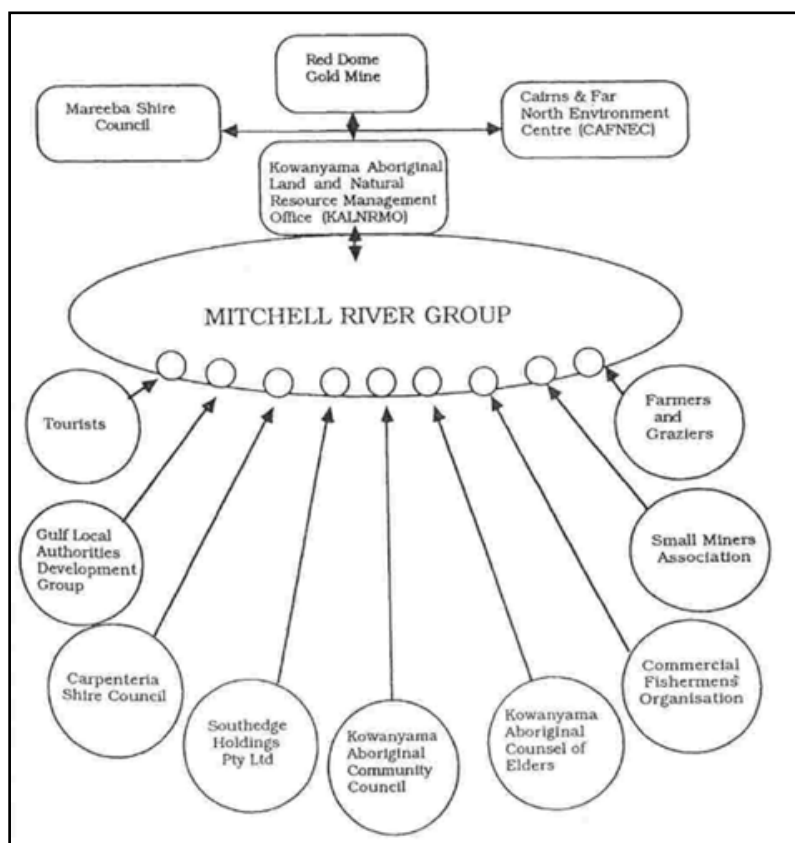


Figure 6-9 Mitchell River Group community network (Carr 2002:175).

The list of supporters provided in the 2008 KALNRMO prospectus is extensive, encompassing both government and non-government actors and organisations (KALNRMO 2008).

Table 6-1 Government and non-government supporters (KALNRMO 2008)

Government	Non-government
Australian Government Envirofund	Annan and Endeavour Catchment Group
Australian Quarantine and Inspection Services	Balkanu Cape York Development Corporation
Cape York Community Engagement Group	Cape York Land Council
Department of Education and the Arts	Mitchell River Watershed Management Group
Environment, Water Heritage and the Arts	Northwest Indian Fisheries Commission, State of Washington, USA
National Heritage Trust	Royal Flying Doctor Service
National Parks and Wildlife Service	The Christensen Fund
Natural Resources and Water	Tropical Rivers and Coastal Knowledge (TRACK)
Queensland Department of Primary Industries and Fisheries	Wetlands International
Queensland Government Environmental Protection Agency	
Queensland Health – Animal Management and Welfare	
Queensland Museum	
Queensland Parks and Wildlife Service	
Tourism Queensland	

Building appropriate social networks encouraged the creation of formal partnerships. Previous sections identified partnerships with Kowanyama School and with research organisations (including CSIRO), but the term is also appropriate for a range of other local and regional relationships. 'Partnership' was the term used by Bill Kehoe from the Gulf Commercial Fishermen's Association to characterise relations with Kowanyama and the KALNRMO (Kehoe 1990 in Sharp 1998). Further action with respect to fisheries management led to joint enforcement exercises with the Queensland Boat and Fishing Patrol (Sinnamon 1995). A further manifestation of local partnership was the formation of the Gulf Savannah Guides, as John Clark recalls:

Viv thought it would be good to get our position promoted. We were the founding members of [Gulf] Savannah Guides - Viv, myself and John Courtenay. John needed some help setting it up, so the Savannah guides come together.

John Clark (NQLC)

John Clark remained on the Board of Directors for the Guides, with specific responsibilities for cultural issues. The KALNRMO connection with the Gulf Local Authorities Development Association was instrumental in obtaining Honorary Fauna Protector status for John Clark as well.

More recently, the gradual improvement of KALNRMO relationships and social networks with key regional QNPWS offices and staff has enabled important partnerships to be negotiated. Larsen's 2012 doctoral thesis entitled 'Walking and Talking: towards community-based co-management of the Errk Oykan and National Park, Cape York Peninsula' provides an extended analysis of the KALNRMO approach to QNPWS, as well as highlighting a range of institutional and organisational challenges posed by QNPWS that needed to be overcome to create the conditions for a successful partnership.

In particular, Larsen highlights the consistent assertion by KALNRMO of the importance of local Indigenous ownership of land tenure and community based management control (2012:154). These principles stood in contrast to the prevailing attitudes within QPWS, as articulated by a staff member interviewed by Larsen:

Certainly in Parks we have a very strong culture, as you'd be very aware about, that our rangers are the only ones who can do the job. There's a very strong sense of that, has been for a long time; that as people get skills, they get very possessive about their patch and they have a sense that no one else can do their job as well as they can. And releasing that responsibility to other parties who perhaps aren't quite within the box, locked into the bureaucratic box with our codes of conduct and all our other, to provide a standard model which is easily understood and safe; is where the biggest challenge is.

QPWS staff member in Larsen 2012: 238

Larsen (2012) describes how QPWS management of the Alice-Mitchell National Park was resource-constrained, with the closest QPWS staff 400 km away in Chillagoe and the park itself designated as a 'wilderness' area (2012: 158) that could be managed with relatively 'basic' knowledge of the local conditions (2012:173). The establishment of effective relationships and social networks between KALNRMO and key QPWS staff such as Buzz Symonds, Eric Wason and Tony Cockburn was important in overcoming the challenges generated by this situation. KALNRMO was critical to reassessments of the value of the area and to underscoring that local Indigenous capacity could help address the institutional and resourcing challenges that QPWS staff identified at the time as key issues in furthering a co-management agenda (Larsen 2012: 241). The success of the KALNRMO approach to QPWS is demonstrated by the agreement to hand over the park to Indigenous control and joint management in 2009. Subsequently, the draft management plan for the park was developed by KALNRMO, believed by the organisation to be the first time an Indigenous community agency and traditional owners have played that role, either in Queensland or possibly Australia. The park planning was funded through the Caring for Our Country program of the Federal government, meaning that it represents a partnership between local, State, and Federal levels (KALNRMO 2013).

The experience of negotiating with QPWS also assisted in the success of the Forest Fire Management Program implemented by KALNRMO for the Kowanyama-owned Oriners and Sefton Stations in 2013. This program involved cooperation between KALNRMO, the Rural Fire Service, the Cape York Sustainable Futures Office, the QPWS, several adjacent stations, and the Traditional Owners for the area (KALNRMO 2013). Other regular networking opportunities, collaborations and partnerships have occurred with Aboriginal agencies such as Balkanu and the North Australian Indigenous Land and Sea Management Alliance (NAISMA).

Taking an international perspective, 'partnership' is also an appropriate term to characterise the extensive ongoing interactions between KALNRMO and the Native American communities of Washington State during the first decade of the KALNRMO. More recently, a long-term partnership with international philanthropy agency The Christensen Fund (TCF) was facilitated by part of KALNRMO's pre-existing social network, Henrietta Marrie:

We [TCF] wanted to invest our money into great projects that would make a difference. After speaking with Viv about KALNRMO and their projects and their commitment and the strength of the group, it was clear such an investment into their project would be very rewarding. Also they have been operating for some years, and operating on a shoestring budget. I saw the rangers and the community commitment to good management of their country, their resilience, passion in all of them, to safeguard their culture and have a healthy environment. I was already aware of the kind of management structure they had in place, what they were trying to do, their vision, the bigger picture they had and moving forward. So I recommended them to our board as a community we should be funding, and they supported that.

Henrietta Marrie (UNU)

This partnership in turn provided important networking opportunities, including KALNRMO giving a presentation to the Tribal Fisheries Department of the high-profile Makah tribe in Neah Bay in the USA, and KALNRMO participation in a three day retreat in Chesapeake, USA with delegates from Papua New Guinea, Australia, Ethiopia, the Philippines, Kenya, Peru, Mexico and Tajikistan (KALNRMO 2011) to produce the Chesapeake Bay Statement (KALNRMO 2012b). Finally, it is important to note that the most successful local, regional, and international, partnerships have led to long term relationships and friendships:

For me personally, the most important thing is that collaborative research with the Land Office has led to friendships that have now lasted for many decades. The kindness and generosity of the Rangers and other Land Office staff, and the elders who work with them, has been unstinting, and has enabled an important sense of connection with the community in Kowanyama, as expressed through my adoption (many years ago now) into a Kunjen clan group.

Veronica Strang (Durham University)



Figure 6-10 KALNRMO staff organising the partnership with scientists from the TRaCK program. Left to right: Colin Lawrence, Ruth O'Connor, Viv Sinnamon, Stanley Budby, Phillip Mango, Stuart Bunn, Alan Flower, Jeff Shellberg

6.7 Meeting external institutional and organisational objectives

A clear implication of the successful partnerships negotiated by the KALNRMO is that it provides external individuals and organisations with the opportunity to meet key organisational objectives. This is an important social outcome beyond Kowanyama of the ICNRM activity of the KALNRMO. It arose from an explicit original intention to partner externally:

They were involved, they were working with other departments, this is so important if you want your voices heard. So the rangers took a different approach, they started to work with local governments outside the community, with other decision makers and other government departments, regarding land management. So they were more interactive, they took a different and strong role and a different stand from everybody [else].

Henrietta Marrie (UNU)

Identifying that the KALNRMO activities meet external organisational needs does not mean that it is focused on external organisational objectives. One analysis of KALNRMO as a case study in ICNRM noted that:

When government agencies and researchers approach Kowanyama seeking the community's involvement in their projects or activities - which happens frequently because of Kowanyama's record of achievement - KALNRMO is able to assess these proposals rigorously in terms of their benefits and costs to the community. Often the response will be 'sorry, but we are busy working on our own priorities and getting involved with your project will only distract us'.

(Baker et al. 2001)

Nevertheless, KALNRMO's strong awareness of its own priorities meant that, when mutual agreement could be reached, partner organisations could have a reasonable expectation that outcomes will be met:

It has been possible to successfully initiate co-operative arrangements with some State authorities in a way which both complements Kowanyama's quest for self governance as well as broader conservation objectives of Nation, State and Indigenous governance. This has been possible through the willingness of key individuals to share some basic principles and objectives of management with each other and to recognise and respect each other's role as managers.

(Sinnamon 1997)

A recent manifestation of this was the partnership with TCF, where mutual objectives were clearly identifiable:

It was really about the strength of the people, the fact that they had the community behind them, and they themselves were committed to it. This fitted in with a lot of Christensen's objectives. The Christensen Fund also had a bottom-up approach strengthening local groups on the ground. The funding would make a difference, it would give Kowanyama the tools and the resources they need to better manage their country, equip them with the tools they needed. That is what Christensen Fund did.

Henrietta Marrie (UNU)

Sinamon (1997) noted that the KALNRMO commitment to ‘negotiation with external resource users rather than playing oppositional politics’ was based on the need for their support, and that this would only come with ‘the establishment of professional credibility and mutual respect.’ These kinds of credible partnerships also provided foundations for external partners to also meet the organisational requirements of other external partners. Henrietta Marrie recalled how the TCFs partnership with KALNRMO informed and added credibility to a separate TCF project with the mining company Rio Tinto:

I gave their name to other organisations who may want to speak with them about their project. For example, we, along with Rio Tinto, worked towards developing Indigenous philanthropy guidelines and Rio Tinto wanted to highlight some communities who The Christensen Fund had been working with. This was a great opportunity to have Kowanyama highlight its work in the Indigenous philanthropy guidelines, so I decided to put Kowanyama’s name forward.⁴

Henrietta Marrie (UNU)

The ability to effectively develop social networks and then negotiate strategic partnerships enables KALNRMO to meet its own objectives. However, in doing so, it also enables partner organisations to meet important objectives themselves, both with respect to the project negotiated with KALNRMO, but also at times wider organisational objectives and/or objectives focused on other partners. This is an important social outcome of KALNRMO activity, and is likely to be repeated in other ICNRM contexts across the sector.

6.8 Reconciliation

A final social outcome arises from the consequences of many of the previous cultural and social outcomes described previously. Reconciliation between Indigenous and non-Indigenous Australians is an ongoing process, one that needs to occur at multiple levels from the individual to society as a whole for reconciliation to be realised. In the KALNRMO school curriculum project, elder Colin Lawrence identified the need for education about both cultures and the aspiration for a reconciled whole:

So it’s a good thing we got this course going in the school because the young people, they going to learn about both societies: our way of life and the white man life. Maybe later on we will mix them, white and black, you know, all together. Living together like in one world, which we really want the younger generation to do.

Colin Lawrence (KALNRMO and Kowanyama State High School 1993)

Veronica Strang talked explicitly about the sensitive contribution that KALNRMO has made to understanding of local colonial history, and the positive implications that such a contribution can have for all sides:

Working with Indigenous communities always provides an important reflexive mirror for the history of settler societies, and KALNRMO’s role in Kowanyama has been particularly strong in supporting the development of a more open account of the realities of colonial history for Australia’s Indigenous people. With the Land Office’s help in encouraging research in the community, issues silenced for many decades have emerged, producing a clear and illuminating narrative of Australian history from an Aboriginal perspective. And, as noted above, engaging with alternate perspectives is always illuminating.

Veronica Strang (Durham University)

⁴ The Christensen Fund, Rio Tinto Australia, and Greenstone Group (2011). A worthwhile exchange: a guide to Indigenous philanthropy. The Christensen Fund, Rio Tinto Australia, and Greenstone Group. Australia.

Sharp's 1998 account of Kowanyama fisheries negotiations was cited above in Part 5.5 for its evidence of attitudinal change from a key fishing representative. Although she does not explicitly use the term, the wider context for this change implies a process of relationship building and reconciliation:

Beginning in anger, the relationship came to be cherished by both 'sides'. We have tremendous relationships with Kowanyama and we are seen as their friends (Kehoe 1990). These were built up by concrete steps in a spiralling development of trust (Elmer, pers. comm. 1996). Correspondence between the two groups points to this growth. Inviting representatives from Kowanyama to an informal meeting with the Karumba executive, the secretary wrote: 'we are keen to continue the good relationship which we have with Kowanyama'.

(Sharp 1998)

KALNRMO public communication to groups that may have been antagonistic to Indigenous interests and Indigenous regulation of access to natural resources also contained messages about reconciliation and mutual responsibility as shown in an article in a recreational camping magazine:

As a visitor to Kowanyama Aboriginal Lands you can play an important part in helping Kowanyama keep this part of Australia a beautiful place for future generations, remembering that it is home to its Aboriginal people.

(KALNRMO 1994c)

Reconciliation in the Australian context is a complex ongoing social process, involving a willingness to engage across cultural and historical boundaries, an understanding of colonial violence and its impacts upon both Indigenous and non-Indigenous people, and an acceptance of changed and changing relationships because of that engagement. Successful ICNRM agencies such as the KALNRMO are implicated in processes of reconciliation and, at times, overt drivers of them. As such, reconciliation is another important social outcome of their activities.

6.9 Summary of social outcomes of the KALNRMO beyond Kowanyama

As defined here, social outcomes are those that influence institutions, organisations, and the broadscale recurring patterns and networks of relationships between these entities. The social influence of the KALNRMO is both deeper and broader than what has been explicitly identified here, but the preceding discussion identifies some key facets. A crucial set of social outcomes relate to its role in influencing research, both through direct collaboration and as a case study of successful ICNRM used by other researchers who are not direct collaborators. This outcome in turn connects to the profile of KALNRMO in tertiary institutional settings, where researchers are often active as educators. More directly, it played a key role in the initiation, content and delivery of ICNRM training at Cairns TAFE, a program that not only educated rangers from across North Queensland, but also influenced ICNRM training programs elsewhere. At the local level, KALNRMO has generated social outcomes for institutional education through its ongoing partnership with the Kowanyama State High School.

Further influence on the research and policy community in particular, and on broader society in general, has also occurred through formal KALNRMO participation in conferences. In addition to researchers and policy makers, conference activity is a means of communicating with other ICNRM practitioners, as well as potential institutional investors. Further communication is derived from KALNRMO media activity, which incorporates occasional items in mainstream news media, social media activity, and the KALNRMO newsletter.

Media and conference communication is a key means of building social networks and through those, forging direct partnerships between the KALNRM and external organisations. These social networks and associated partnerships are an important social outcome in their own right, but also enable external organisations to meet key goals and objectives relating to natural and cultural resource management and to Indigenous collaboration. A key example of this is KALNRM engagements with QPWS over the ownership and management of what is now the Errk Oyikangand National Park. These processes in turn foster the wider social and institutional process of reconciliation, a key aspiration within Australian society as a whole and an important step for Indigenous organisations and the communities they represent. Social processes like reconciliation then enable key political outcomes from ICNRM, most notably, recognition and respect for Indigenous people and their interests. Political outcomes are considered in the next part of the report.



Figure 6-11 Kowanyama elder Paddy Yam (deceased) and KALNRM rangers Philip Yam and Louie Native at Horseshoe Lagoon, Oriniers Station

7 Political outcomes of the KALNRMO beyond Kowanyama

7.1 Introduction

The analysis in Part 3 and complementary work with Yirralka Rangers (Barber 2015b) both highlighted that political outcomes are one important aspect of ICNRM programs, but that these outcomes remain poorly defined and conceptualised in the existing literature. Such outcomes relate to issues of governance, negotiation, autonomy, recognition, etc. that can be included as part of other categorisations, but are most accurately classified as political. It should be re-emphasised here that clearly identifying political outcomes from ICNRM activities does not mean that the agencies undertaking those activities are overtly political organisations. Rather, it highlights that successful agencies are embedded in community and regional life, and that fulfilling agency objectives relating to natural and cultural resource management from such a position involves: gaining a measure of independence; negotiating appropriate access and governance arrangements for such resources; and achieving a level of recognition for those activities. The KALNRMO provides important examples of such ICNRM outcomes.

7.2 Independence, autonomy and self determination

KALNRMO emerged from the values, principles and actions espoused by the KASC through the 1980s that focused on the community's right to govern its own affairs and its ability to manage land and natural resources. The initial principles by which KALNRMO was guided were crystallised at the 1993 Mukarnt Planning Retreat and subsequently elaborated through various documents to comprise a total of 13 (KALNRMO 2008):

1. Recognition of traditional interests
2. Self governance
3. Management for future generations
4. Evolving nature of process
5. Connectedness
6. Community participation
7. Common ground
8. Unity of purpose
9. Recognition and respect
10. Commitment to negotiation
11. Provision of expertise
12. Social and economic factors
13. Maintenance of culture

These principles inform both strategic planning and daily operations. The underlying principles of independence and self-governance are particularly important, leading to regular public restatements of them by KALNRM staff (KALNRM 2011:3) and Kowanyama elected officials:

'Our Aboriginal Council is guided by the Counsel of Elders and what Traditional Owners want for the management of Kowanyama Lands and we will fight for that. This is Kowanyama, not Cairns, Brisbane or anywhere else. This is Aboriginal land and that land will be managed by Aboriginal people

Thomas Hudson, Mayor of Kowanyama (KALNRM 2011: 4-5)

There is particular pride at Kowanyama that the community 'asserted those rights quietly without waiting for Government or lawyers to say they can or should' (KALNRM 2011:3). For the KALNRM, the ongoing practical consequences of principles of self-governance and independence are that careful attention is paid to what projects and partnerships it undertakes. At times this has entailed forgoing resourcing opportunities to maintain independence:

The Office continues to work in close association with other groups with an interest in the Mitchell River delta, but it guards its autonomy closely

(Dale 1991)

The Office is cautious of ambitious externally driven programs. It prefers to implement its own community initiated projects which are currently drawing heavily upon Kowanyama's limited resources, but assist in maintaining Kowanyama's own established priorities and management agendas

(Sinnamon 1997)

Continued striving for independence also leads to searching for income sources independent of government, and TCF has been particularly important in recent years in this respect. A further consequence of a strong focus on local management and self-government means that, despite a history of substantial impact on the political level, KALNRM are not viewed by external partners as primarily focused on or active in current political debates:

They stay out of the political arena, but they still do battle from there [at Kowanyama]. They know their own country, and their power comes from there.

Ron Archer (ANGIC)

They have not played as much in that policy reform space, whereas Giringun [Aboriginal Corporation] has, and it is just a reflection of differences between institutions. But the principles that work for Giringun are the same ones that work for Kowanyama. (Remoteness) is why they are much more focussed on their independence from government. I have never had any regrets about that sort of isolationism, because they don't see the boundaries, and they have not been able to build the capacity to get onto government reform, it is not their particular area of expertise.

Allan Dale (RDA and JCU)

Yet, Veronica Strang was also able to comment during the interview for this study that KALNRMO also has a clear history of 'engaging with state, national and international organisations and institutions, and this has been vitally important in representing the community's views and interests in the wider political arena.' KALNRMO employees were also aware of the political context and overtones implied in local management actions such as fisheries enforcement:

I knew we needed to study politics and change - how to conduct yourself when you stop someone. Introduce myself, name, recording the conversation, have a uniform on and go as a [group of] 2 or a 3 if you are going to front someone.

John Clark (NQLC)

Reflecting on John's role, Viv Sinnamon commented on the practicalities of legitimating KALNRMO's assertion of natural resource rights, and the wider context in which it needed to be understood:

John Clark's identification card was produced at Kowanyama just as a State agent's might be, with photograph passport quality covered by Kowanyama Aboriginal Shire Council's official seal. Kowanyama was playing the game. KALNRMO was aware that it was asserting rights to manage Aboriginal Lands and waters before and beyond the advent of Native Title Rights. It was not waiting for courts and lawyers to identify those rights.

Viv Sinnamon (KALNRMO)

Initiatives and activities essential for effective natural and cultural resource management may not be overtly characterised as political, but can nevertheless have political outcomes. Other activities, such as negotiations about the governance of natural resources, necessarily contain more explicit political elements and generate more explicitly identified political outcomes.



Figure 7-1 KALNRMO staff member Philip Yam talks with Tom Shepherd from Artemis Station at a workshop on Oriners Station focused on fire management and golden shouldered parrot habitat

7.3 Natural resource negotiation and natural resource governance

KALNRMO's ability to initiate, conduct, and resolve negotiations about the governance and management of natural resources has been a crucial aspect of their external influence and impact. From the outset, KALNRMO was envisaged as a mediator between Indigenous and non-Indigenous contexts:

[KALNRMO] has been set up by the community to communicate its interests with mainstream Australia in an institution which combines elements of what are perceived as traditional and mainstream protocols for land management. The Office provides a bridge for Kowanyama people to communicate their interests to mainstream Australia and at the same time preserve their own identities and social systems.

(Monaghan 2005: 288)

KALNRMO influence is built on foundations of self-governance and planning, a willingness to bargain and negotiate with external parties and agencies, and on novel and collaborative approaches to co-management. These aspects of KALNRMO natural resource governance are made explicit in early documents about the organisation (Dale 1991:49) and are manifested in initiatives and activities in the decades that followed. 'Governance' was an important focus of the 2008 prospectus publication which noted that support for KALNRMO governance is sourced from the Kowanyama Council, State and Federal government programs, NGOs, scientific research and education, and cultural heritage networks and other Indigenous groups (KALNRMO 2008:18-19). Key individuals, particularly Viv Sinnamon, have been crucial to the ability of the organisation to negotiate and broker governance arrangements based on the principles and strategic directions provided by Kowanyama Council and the Counsel of Elders:

Viv understood the Western system and how the process works, he understood how to negotiate. Unfortunately many other ranger services throughout Queensland never really had such experts working with them.

Henrietta Marrie (UNU)

KALNRMO influence with respect to natural resource negotiation and governance will be considered herein relation to: planning and preparing for governance; influencing governance at the policy level; acquiring and securing natural resource governance rights; and negotiating shared governance through co-management arrangements.

7.3.1 Preparing for governance - strategic planning

The long term capacity of KALNRMO to achieve successful natural resource governance outcomes is built upon a clear strategic vision articulated in strategic planning processes. The importance of planning, and the principles driving it, are evident in early documents about the organisation:

Planning at Kowanyama is essentially community-based, and it strictly adheres to three key principles (i) the optimisation of local community (ii) the conduct of all local planning with a high degree of professional and technical competence; and (iii) the use of competent bargaining and negotiation techniques in dealing with external agencies in (see Dorsey 1986).

(Dale 1991)

Importantly, KALNRMO natural resources planning and strategy were always envisaged to encompass natural resources outside of current Kowanyama tenure boundaries. This had clear implications for the need for wider external engagement:

The basis of Kowanyama's involvement with external management agencies is guided by the principle of self governance as defined in its own management agencies strategic directions document. That involvement includes lands and waters outside the immediate jurisdiction of the Indigenous community. There is a clear understanding of the need to be involved in regional management strategies consistent with community aspirations. This was seen as one way of ensuring sustainability of Kowanyama's own land and natural resources.

(Sinnamon 1995)

The Mitchell catchment group was a key early example of this approach. That group remains committed to strategic planning (Soteriou 2012) and public communication of those plans (MRWVG 2006) to assist the effective management of the Mitchell catchment. However, KALNRMO has remained aware that management plan effectiveness relies on ownership of the plan and the continued capacity for plan development and implementation (Sinnamon 1997). Implementation requires sufficient resources and effective powers, which in turn involve influencing governance arrangements.

7.3.2 Influencing governance arrangements – briefings, submissions and inquiries

As noted above, KALNRMO have not generally focused on direct lobbying for wider political and policy change. However, their strong focus on securing the appropriate tools and powers for local management has necessarily entailed a certain amount of engagement with policy makers and with formal processes intended to influence policy - contributions to reviews, inquiries, and external strategy development. Kowanyama were active in the Coastal Zone Inquiry, leading to inquiry investigations into Native American fisheries governance and to initial KALNRMO contact with Indigenous leaders from elsewhere in Australia such as Michael Mansell and Les Malezer (V. Sinnamon, KALNRMO, pers. comm). Once KALNRMO was created, the organisation rapidly began making contributions to external strategy and policy processes focused on economic planning, wildlife preservation, community services, and land issues and land tenure (Dale 1991) as well as highlighting issues such as insufficient inter-departmental communication regarding government fisheries conservation and mining development initiatives (Sinnamon 1992).

The dynamic nature of such policy and planning processes means that briefings, submissions, and policy discussions are an ongoing aspect of KALNRMO operations. The increased number of regional representative entities on the Cape (Land Councils, the Northern Gulf Natural Resource Management Group, ANGIC, Balkanu Corporation etc.) has lessened the requirement for contributions from individual local organisations such as the KALNRMO. Yet the organisations focused on regional representation and coordination also require contributions and guidance from the stakeholders they represent, meaning that ongoing Kowanyama and KALNRMO input to such processes is occurring without these contributions necessarily appearing as independent KALNRMO submissions.

7.3.3 Acquiring and securing governance

The potential impact of KALNRM perspectives on large scale strategies, plans and inquiries is important, but may not always lead to direct outcomes at the local level. For this reason, Kowanyama Council and KALNRM have also sought to directly assert, acquire or otherwise secure governance control over key natural resource assets. There are 4 major examples of this strategy:

1. the assertion of management rights over recreational camping and fishing through the implementation and enforcement of the permit system on Kowanyama lands
2. the protection of communal fish stocks through the acquisition (using community funds) of commercial fisheries licenses and associated area closures
3. the acquisition (using community funds) of two pastoral leases, Oriners and Sefton, from non-Indigenous pastoral families to substantially increase the area of land under direct Kowanyama control
4. securing rights in additional land through pursuing statutory processes such as native title.

Securing rights over recreational camping and fishing required KALNRM staff training, as well as the willingness of key KALNRM and Council actors to assert and enforce Kowanyama property and governance rights in the face of direct hostility and opposition. Written warning letters were sent to offenders requesting them to vacate the area and in the early years of this activity, there was resistance from government staff who believed that fees should not be charged and that river closures should not apply to them - some threatened to make submissions to the State opposing the negotiated river closures (V. Sinnamon, pers. comm.).

John Clark recalls direct confrontations:

We would pull up the rec fishers. They weren't expecting us to do it. They would threaten to pull out a gun and blow my head off. I told them I was just doing my job. I was just stopping all the fish from going away.

John Clark (NQLC)

KALNRM activity of this kind is focused on asserting their own governance and territorial rights, but directly involves influencing and educating the wider Australian public about those rights.

With respect to commercial fisheries, an alternative strategy for securing rights was adopted. The Kowanyama Council recognised that securing exclusive rights to estuarine resources would be politically difficult and so focused first on the need to achieve 'recognition as a resource user' and gain bargaining power (Dale 1991:46). This involved Kowanyama making strategic investments in surveillance to build an evidence base of existing problems and infringements, thereby gaining credibility with the commercial fishing industry. That credibility in turn enabled them to work with industry representatives on a solution that involved Kowanyama's acquisition of commercial fishing licenses on the open market to justify the commercial closure of key areas of the coastal rivers important to local people. This move was controversial – seen by some Indigenous critics as buying back a river that had never been sold in the first place, and by some non-Indigenous people as a closure that lacked legitimacy (V. Sinnamon, pers. comm.) However, Allan Dale observed that this process of gaining natural resource governance control was influential in a range of ways and 'watched pretty closely right around the country.'

A second direct acquisition of governance control over natural resources involved the pastoral leases of Oriners and Sefton. These were of relatively marginal value in pastoral terms, but of considerable cultural, ecological, and historical significance. Long term working relationships between senior Kowanyama people and the pastoral owners, the Hughes family, opened the possibility for the sale using KASC funds, and KALNRMO organisational support was crucial in realising the value of the opportunity and brokering the sale. The result was a doubling of the size of the land area under direct Kowanyama and KALNRMO management control, and a significant increase in the number of immediate pastoral neighbours that KALNRMO now engages with. In boundary terms, the acquisition was also strategically important for the ongoing pursuit of Kowanyama interests in the adjacent Alice-Mitchell National Park, as it effectively meant that Kowanyama controlled the land along the entire northern boundary of the National Park. The commercial sale using independent community enterprise funds was the first of its kind on Cape York, a source of local pride, and a further step in relationships between the Hughes family and Kowanyama. Importantly, it was also a precursor of (largely state-sponsored) land tenure transitions that have occurred in larger numbers over the past two decades (Holmes 2010).



Figure 7-2 KALNRMO Ranger Philip Yam investigates motorcycle travellers on Oriners Station, Mitchell River 2012

Purchasing pastoral leases to gain control over boundaries adjacent to the National Park was one means of increasing governance influence over them. However, a further means of securing governance control over natural resources is the ongoing process of pursuing statutory pathways such as native title (Larsen 2008). For the KALNRMO, a key moment for this process was the transfer of ownership to Indigenous custodians of the park itself, in 2009 (AAP 2009). This secured a large new area for local governance and shared management control, and effectively connected the original Kowanyama DOGIT land with the pastoral leases acquired in the 1990s.

This expanded the range and flexibility of KALNRM management possibilities, particularly for issues such as fire and feral species management. The successful resolution of the park tenure issue relied on:

- KALNRM cultural mapping and data storage capability
- The established credibility of the KALNRM with respect to natural resource governance and management, and
- Strategic KALNRM relationship building with State government environmental and national park staff to facilitate new management and business arrangements.

The intersection of natural resource governance and tenure is shown by the fact that Errk Oyikangand was the first national park declared under the Cape York Peninsula Aboriginal Land (CYPAL) Act and the first national park in which management control was assigned to an Indigenous agency. KALNRM maintains an important ongoing informational and facilitative role supporting the new native title PBC Abm elgoring ambung (KALNRM 2015a).

7.3.4 Negotiating shared governance - co-management

One of the conditions for securing tenure over Errk Oyikangand was negotiating co-management arrangements with QPWS staff. KALNRM coordinating staff (Sinnamon 1997) had previously noted that Kowanyama was 'resisting the current tendency of government agencies to impose models of "Protected Area Management" upon the management of established Aboriginal Trust Lands'. Enabled by the new possibilities created by the 2007 Cape York Peninsula Heritage Act, this strong self-governance orientation was evident in negotiations over Errk Oyikangand. Even while celebrating the co-management agreement, Kowanyama elders and leaders emphasised that there was no prospect of co-management occurring on previously defined Indigenous lands (KALNRM 2011:4-5). They were able to negotiate an agreement that resulted in day to day management of the national park being conducted by a land management agency belonging to Traditional Owners, a national first.

For Kowanyama people and unlike QPWS staff, Errk Oyikangand was not 'isolated or remote, but their homeland and part of a broader Aboriginal landscape (Larsen 2008). Key features to realise effective management and enhance that connection included:

- the designation of a combined Steering Group of State and Traditional Owner representatives
- the designation of KALNRM as the agency of choice for management, and
- State resources for additional staffing for KALNRM, a vehicle, and resources for planning and operational costs.

Soon after the agreement, KALNRM and Traditional Owners began engaging directly with pastoral neighbours adjacent to the park about key management issues such as fire and fencing, reflected its expanded natural resource governance role under the co-management regime.



Figure 7-3 KALNRMO staff, Queensland Parks and Wildlife Service staff, and the management of Koolatah and Dunbar pastoral stations meet to discuss mustering arrangements in the Errk Oykangand National Park. Koolatah Crossing, Mitchell River, Queensland

7.3.5 Shaping wider NRM governance

The clear focus of Kowanyama people on self-governance and self-management, the early establishment of KALNRMO, and its management successes all had important influences on wider NRM governance. Some of the effects on research have already been noted, but there is a clear awareness of the way that Kowanyama principles, structures, and activities have shaped wider arrangements in Australian NRM:

One of the more noticeable factors about the Mitchell River group was members' pride in and attachment to the idea of bottom-up environmental stewardship of the watershed. This is largely due to the group's roots and to the concept of watershed management espoused by conference participants at Kowanyama in 1990. While many of these were government officers, integrated catchment management was not yet government policy in Queensland.

(Carr 2002: 191)

Access to native title rights and securing land tenure are actively changing in north Queensland. The strong early push by KALNMRO and others for Indigenous run and controlled land and NRM programs may still have fruits to bear. Times are still changing.

Jeff Shellberg (Griffith University)

From his perspective as a senior Australian NRM planning theorist and practitioner with early career exposure to Kowanyama, Allan Dale noted the importance of the KALNRMO in informing his and other regional perspectives on NRM governance. The first of these was a regional influence across Cape York cited above in 5.3. However, Allan Dale also noted that the success of the KALNRMO was to have broader implications at state and national levels:

But in some ways the Kowanyama model was driving some of the catchment management models in Queensland, which later influenced the thinking, if you like, around regional NRM, and in some ways actually really substantially influenced, or set some foundations for influencing, the national governance model for natural resource management. This model still stands to this day, but has gone through changes and strengths and weaknesses and all that. In part, a lot of principles that we thought about at Kowanyama went into some work that happened, through CSIRO, in the central highlands, that was really about self-empowered regions - how do you get the governance system for a region to work really effectively and what are the principles for that? And because of that work we did in CHRRUPP (Central Highlands Regional Resource Use Planning Project) many of those ideas were really seriously adopted by DPIE at that stage, in the Federal government. That work helped create a foundation for the Blue Book, which is the policy foundation for the regional NRM agenda.

Allan Dale (RDA)

Allan Dale went on to note his understanding of the key aspects that underlay the Kowanyama and KALNRMO approach: local agency; Traditional Owner ownership; strategic direction; commitment; effective executive support; the openness to bringing in external technical capability; and the willingness to negotiate on matters such as fisheries and catchment management. He then identified how the influence of the KALNRMO model had underpinned and enabled his own personal participation in Australian NRM:

So from my point of view [KALNRMO] took me into the CHRRUPP which took me into the national influence that led me into the state policy arena and setting the regional arrangements here in Queensland. I was the General Manager of Strategic Policy in DNRM and I ran Terrain for 7 or 8 years and a lot of those [Kowanyama] principles play out through there. We were hugely successful in that we helped drive getting up Reef Rescue because of our own agency and the partnerships and alliances. Reef Rescue was a \$200 million dollar program, now it is going to be a \$400 million dollar program. We also as a region contributed to securing the Carbon Farming framework in Australia and that framework will hopefully deliver significant landscape benefits. So those [Kowanyama] principles, for me, absolutely underpin all those other foundations. So all I can say is thank goodness for it.

Allan Dale (RDA and JCU)

It is clear that Kowanyama and particularly the KALNRMO have influenced past and current natural resource governance arrangements, and through those influences, will continue to influence future arrangements. Much of this influence may not be apparent except to people who have been aware of how one model or activity has led to or shaped another. Making at least some of this influence more apparent is important to understanding the wider political outcomes of ICNRM at Kowanyama. However, the final political outcome is more readily apparent, recognition.



Figure 7-4 KALNRMO representative Teddy Bernard, presents a Kowanyama boomerang made by Yir Thangedl Elder, Warwick David to Navi Pilay, United Nations High Commissioner for Human Rights. New York 2009

7.4 Recognition

The term 'recognition' can be understood in a range of ways and take a range of forms. As an ICNRM political outcome, two key aspects of recognition are important to note:

1. recognition necessarily involves an outcome beyond the community, as unlike self-governance/self-determination, the word requires an external party to do the recognising.
2. it mutually supports key outcomes and processes outlined previously. For example, reconciliation or negotiation requires the recognition that there is someone that it is necessary to reconcile or negotiate with, and successful reconciliation or negotiation can then in turn lead to new and higher forms of recognition.

With respect to the second point, Kowanyama and KALNRM have been particularly successful in moving through staged levels of reconciliation and/or recognition over time. Taking fisheries as an example, they were first able to be noticed as a potential stakeholder, then able to demonstrate their credibility as a resource user, then to make the case for recognition as resource governors and managers. Each of these steps involved convincing those beyond Kowanyama that the particular status was justified – in other words, that this status should be recognised. Striving for forms of recognition has been an early and continuing KALNRM objective, as Kowanyama representatives at an early conference on Indigenous land management made clear:

We urge you to consider that the declaration of national parks is not the only way to care for the world. We urge you to support our call for recognition as Aboriginal land management agencies in our own right.

(Daphney and Royee 1992)

We can no longer disregard our own national inquiries and other international recommendations that nations must recognise the place of Indigenous peoples in natural resources management (United Nations 1992:26, 227).

(Sinnamon 1997)

The desire for appropriate recognition was manifested at a personal level amongst KALNRM staff as well as at an organisational level:

When I spoke to National Parks, to Buzz Symonds, I said 'I want to be a ranger, but I want your position. I got more qualifications than your rangers now.'

John Clark (NQLC)

Moving from KALNRM and KALNRM staff aspirations to outcomes, it is also possible to identify a range of comments made about KALNRM and Kowanyama as forms of recognition, even when the term itself is not used explicitly. This aids understanding how to identify forms of recognition as a political outcome when applying the ICNRM framework used here in other contexts. One form of recognition is comments about the status or influence of an organisation:

KALNRM has had a huge influence on the regional community of North Queensland and Cape York, especially other Aboriginal communities with NRM programs. In the late 1980s, they initiated the push towards Aboriginal self-governance and Aboriginal run natural and cultural resource management in the region.

Jeff Shellberg (Griffith University)

Many government departments, particularly environmental departments, are very much aware of Kowanyama and what KALNRM is doing. Even GBRMPA [Great Barrier Reef Marine Park Authority] was very much aware of Kowanyama.⁵ Whether it was through Viv or whether it was through both the rangers and Viv, they constantly wrote to those departments. If important conferences were being held either in Australia or overseas, the rangers and Viv would attend and present a paper, they were very vocal at these events.

Henrietta Marrie (UNU)

Another form of recognition is acknowledgement of personal transformations in perspective associated with attitudinal change and reconciliation:

Kowanyama people generated respect by taking responsibility: by feeding themselves and re-creating food sources, by being the eyes and ears of the environment, by their genuineness in caring for their country. In this way, they re-educated some of the fishermen, like Bill Kehoe, into becoming 'more than just a fisherman' a man who knows that for an Aboriginal person to waste fish is to traduce the rights of those who came before as well as those of their children.

(Sharp 1998)

Personal recommendation of the agency is also a form of recognition:

I always recommend them [KALNRM] all the time because they have been consistent and committed to land management. I would use them as a very strong group of managers for country and commitment to their country.

Henrietta Marrie (UNU)

Recognition as a political outcome can also entail inclusion in places and in conceptualisations where previously there was omission or exclusion:

The value of one of the major outcomes of the earlier Northern Fisheries Conference did not appear in its final resolutions but related to the public recognition of the Indigenous fishery by Queensland's fisheries authorities. This occurred with the presentation of a redrawing of the Queensland Fish Management Authority's own diagram of fisheries management in Queensland.

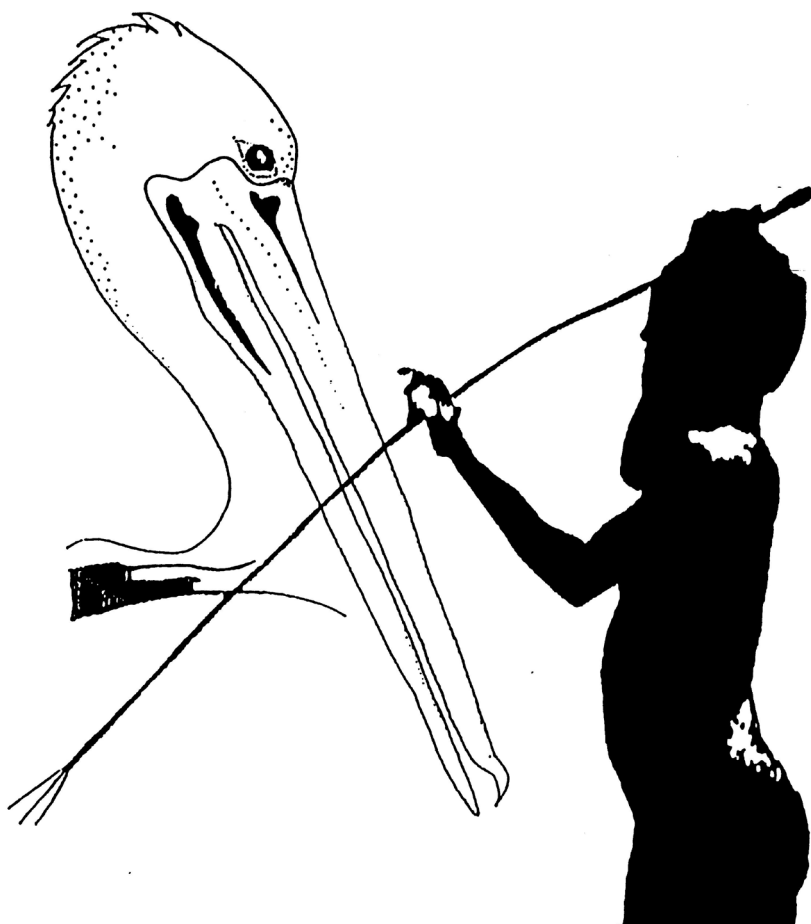
(Sinnamon 1995)

Later in the same article, Viv Sinnamon noted that Indigenous representation had been sought for a recent National Fisheries Managers Workshop and that a number of papers dealt with the topic. This inclusion was, at the time, a significant step forward.

⁵ GBRMPA hired its first Indigenous staff member, Ross Williams, soon after GBRMPA staff attended the Mitchell River Conference at Kowanyama (V. Sinnamon, pers.comm.).

NORTHERN FISHERIES RESOURCES CONFERENCE

AN ABORIGINAL PERSPECTIVE



The Queensland Fisherman October 1988

Conference at Kowanyama

A CONFERENCE to discuss Aboriginal concern on the management of land and resources under the control of Aboriginal councils, including their involvement in the development of fisheries management, was hosted recently by the Gull Aboriginal Community of Kowanyama, and involved almost all Gull, Cape York and East Coast communities.

Representatives of the Queensland Boating and Fisheries Patrol, Queensland Fish Management Authority, Fisheries Management Branch of DPI and the QCFO attended the conference. Several

of the communities expressed an interest in establishing community fishing operations and were unaware that one licence per community had been set aside in 1978 for this purpose.

The concessional arrangements attaching to the use of community fishing licences for the provision of fish for the consumption of the community were explained to the conference. Several of the interested communities left the conference with the intention of examining the viability of setting up community fishing operations in their own communities. A follow-up meeting is to be held at Bamaga in November 1988.

Other matters discussed included policing of the activities of persons entering the community areas, and the drafting of local government by-laws to assist with land and resource management.

Figure 7-5 Media coverage of the Northern Aboriginal Fisheries Conference, 1988

Agreement making can represent an even stronger form of recognition. The return of the Errk Oykangand National Park to Traditional Owner hands was described by Australian Conservation Foundation Executive Director Don Henry as 'recognition that conservation must not only benefit Indigenous people, but must also be achieved in an equitable and just manner' (AAP 2009) and State government representatives described it as representing the government's commitment to partnerships with Cape York communities to deliver land and social justice. Agreements for other kinds of resources can be identified in a similar way:

Kowanyama's signing of a five year funding agreement with the Working on Country Program in Canberra in 2013 was recognised as the Australian Government's recognition of the value of more community, Indigenous based management.

(KALNRMO 2015:28)

These kinds of comments and actions represent important forms of public recognition of Indigenous rights and interests. They are key political outcomes of ICNRM.

7.5 Summary of the political outcomes of the KALNRMO beyond Kowanyama

The political outcomes of ICNRM are those that relate to autonomy and independence, representation, negotiation, governance, and recognition. Guided by the 13 principles derived from KALNRMO strategic planning processes, the activities of the agency have had a range of political outcomes over its lifetime. These include:

- selecting and negotiating partnerships in ways that ensure ongoing independence for the organisation
- progressively gaining credibility as resource users, stakeholders, and governors
- asserting local control over natural resources such as fishing and land access
- securing rights and interests in natural resources through processes of:
 - negotiation
 - acquisition
 - co-management
- directly and indirectly contributing to wider regional and national NRM processes through adherence to key principles, consistent delivery based on those principles, and influence on key projects and practitioners
- insisting on and achieving diverse forms of recognition, including such forms as:
 - acknowledgements of influence
 - personal recommendations
 - institutional inclusion in concepts, plans, and key forums
 - formal agreements
 - securing resources.

Political outcomes are interdependent with cultural and social outcomes discussed previously, and with other outcomes discussed in the parts to follow. Although interdependent, key political impacts are discernible and represent an important additional set of outcomes derived from successful ICNRM. They are also implicated in wider social and political developments across the Cape, notably the Cape York Heads of Agreement process that made the subsequent Cape York Peninsula Heritage Act possible. These outcomes need to be explicitly identified and accounted for in any comprehensive assessment framework.

8 Economic outcomes of the KALNRMO beyond Kowanyama

8.1 Introduction

The following chapter provides a qualitative discussion of the economic outcomes of the KALNRMO, and uses that discussion to consider some important conceptual issues that are relevant to further analyses of economic outcomes in the ICNRM sector. In particular, the discussion considers how analyses of economic outcomes may articulate with other types of outcomes identified here – the issue of secondary effects. The study does not provide a quantitative analysis of the KALNRMO economic outcomes, as this task was beyond the scope of the original project and the expertise of its author.

The existing ICNRM literature focuses on local Indigenous economic benefits arising from the direct income from ICNRM inputs and the additional support ICNRM can provide to related income streams (arts and culture, ecotourism, commercial wildlife opportunities, better pastoralism, etc.). However, popular economic concepts and framings – markets, hybrid economies, livelihoods – also imply interactions between local communities and broader regional and national economies. This means that some studies have included more specific references to non-local and/or non-Indigenous economic outcomes from ICNRM.

In identifying what constitutes an ICNRM economic outcome, the scale of analysis is critical. Securing ICNRM funding from a centralised state or national source represents an economic benefit at the local and regional level, but is effectively neutral at the national level assuming the same resources would otherwise have been spent on equivalent ICNRM at a different location. In contrast, resourcing from international sources represents a beneficial outcome at the local, regional, and national levels. Effectively, such funding can be considered as an Australian export generated by Indigenous people and lands, organised and directed through the ICNRM agencies. The awareness of this point is explicit at Kowanyama:

'...support from non-government organisations such as The Christensen Fund, Worldwide Fund for Nature, Community Aid Abroad effectively value add to benefits to the region and nation'.

(Sinnamon in KALNRMO 2015a: 28).

In addition to direct monetary transfers, local ICNRM organisations may generate further non-local economic outcomes through a series of secondary effects such as:

- acting as an economically efficient deliverer of local environmental services
- facilitating the introduction and application of new knowledges and practices
- enabling collaborative co-investment
- improving the management and use of natural and cultural resources and/or
- generating indirect economic outcomes through positive health effects, reduced conflict, reconciliation, better education etc.

This report highlights qualitative examples of economic outcomes from the KALNRMO case and places them in terms of emergent subcategories and suggested pathways for further analysis. The major areas noted here are:

- funding sources
- the relationship of those sources to growth, diversification, sustainability, and independence
- economic outcomes associated with collaboration and co-investment
- economic outcomes associated with improvements in NRM and
- economic outcomes associated with health improvements

The last two categories particularly highlight the issue of identifying secondary economic outcomes from primary effects – in this case identifying the external economic outcomes generated by either improved health, or by the environmental outcomes that have been otherwise excluded from the present analysis due to the focus on co-benefits/non-environmental outcomes associated with environmental management action.

The independent resourcing of the KALNRMO over a sustained period has created opportunities for strategic collaboration and co-investment by external parties. These collaborations in turn may have a range of economic outcomes beyond the KALNRMO for external collaborators and for regions, states, the nation as a whole, and international jurisdictions.

8.2 Funding sources

Funding is an ongoing challenge for ICNRM organisations, as it is for the wider NRM sector. KALNRMO has adopted a range of strategies and sources for securing funding needs, and these have addressed key considerations such as growth, sustainability, and independence. Reflecting strong local community endorsement of its work, a crucial source of ongoing core KALNRMO funding has been the KASC itself. As well as funding for administration and daily operations, the Council also provided the funding that expanded the power, geographic remit and responsibilities of the KALNRMO through the buyback of the fisheries licenses in the 1980s and the purchase of the Oriners and Sefton pastoral leases in the 1990s. Such expansions further augmented additional direct revenue-raising by the KALNRMO through recreational camping and fishing fees. Revenue raised by KALNRMO itself has been crucial to supporting international advocacy and exchange networking, as securing government funding for these critical out reach activities is generally difficult.

Although Council funding is crucial, diversification of funding sources has been an important aspiration from the earliest days of the KALNRMO. Writing during the formative period of the office, Dale (1991: 56-7) noted the importance of the core Kowanyama Aboriginal Shire Council funding before listing other organisations providing financial support at that time – the Aboriginal and Torres Strait Islander Commission (ATSIC), Community Aid Abroad (CAA), the Department of Employment, Education and Training (DEET), the Australian National Parks and Wildlife Service (APWS), the Department of Environment and Heritage (DEH), Heritage Commission, National Soil Conservation program, Bureau of Rural Resources, and the Dick Smith Expedition. Evident from the current study is the significance of KALNRMO to research activity. A number of the interviewees are senior members of the research community, who are now or have in the past received significant research grants for collaboration with KALNRMO, with benefits for both sides of the collaboration.

The consistency of the KALNRMO approach to funding diversification is reflected in diverse list of supporters and partners provided 15 years later and reproduced in Table 6-1. A number of these partners represent key sources of non-Council funding. In some cases, this includes funding for staff positions in addition to operational activities. The majority of sources are government-funded entities (e.g. Working on Country program, Wild Rivers, government departments focused on environment, climate, health, communities, etc.), but recently, significant support has also come from private sector organisations such as TCF and the Cape York Institute. Long-standing fire management protocols across much of KALNRMO managed territory limits the additional income potential that may come from emerging carbon markets, but activity as part of the fire management program for Oriniers and Sefton Stations has already yielded its first payment (KALNRMO 2015b:8). The ability of the KALNRMO to attract international funding is a particularly noteworthy feature of its ongoing economic operation. Averaged across recent years, KALNRMO has consistently attracted an annual investment into the Kowanyama economy of over \$1 million (V. Sinnamon pers. comm).

8.3 Growth, sustainability and independence

The outcome of a solid core of KASC funding combined with diversified additional funding streams has been considerable growth over the life of the KALNRMO. It grew consistently from two staff in 1990 to seven in 2008 (KALNRMO 2008) to numbers as high as 16-17 in peak periods (Kowanyama Aboriginal Shire Council 2010). These positions include office management and ranger positions, as well as positions encompassing areas such as Traditional Owner coordination, NRM coordination, homeland services and animal health.

The periods of growth and contraction have highlighted the relationship between organisational growth and sustainability. KALNRMO have identified 'the need for the retention of a robust and diverse resource support base and an active staff training and development program that values social capital' in what was described as a dynamic political and funding environment for Aboriginal governance (Kowanyama Aboriginal Shire Council 2010). The generation of a prospectus (KALNRMO 2008) and other communication tools to reach potential new partners and funders were important aspects of this ongoing effort and will require continuing attention to maintain their currency and relevance.

A key component of KALNRMO efforts with respect to funding partnerships is the maintenance of a degree of organisational independence. This approach is recognised externally:

They look for funding in different places. They got some healthy looking dollars from Christensen. They watch the government funding but they are careful. They want to keep their independence. They don't want to be a service organisation.

Ron Archer (ANGIC)

Strang (2008) noted the effect that raising funding and managing the accompanying bureaucracy had on the group dynamics of the MRG, empowering particular voices and influencing the projects undertaken. Although KALNRMO has been supportive of the additional resourcing and associated formalisation of the MRG, maintaining KALNRMOs own organisational independence has been a crucial operational principle. This principle has affected the kinds of partners and projects that the KALNRMO has accepted over its existence.

8.4 Economic outcomes from co-investment and collaboration

KALNRMO decisions to collaborate have a range of potential economic implications. As noted above, ongoing research collaborations can lead to direct capital inflows from both national and international sources. Veronica Strang's formative research at Kowanyama was supported by funding from Oxford University, and subsequent work has involved capital inflows into Kowanyama and the wider region from the Royal Anthropological Institute, the Australia Research Council, and funding from New Zealand sources. Other KALNRMO research collaborations have involved similarly diverse national funding sources such as the Australian Research Council, TRaCK, NERP, etc. as well as international sources.

The recent TCF partnership has been highly significant and fire/carbon management has international potential, but current KALNRMO external collaborations specifically focused on management actions have tended to rely on KASC, State and Federal funding sources rather than on international ones. Where such collaborations represent a co-investment, they may have a range of economic implications relative to non-collaborative action undertaken separately. As noted in the introduction, these implications may include such things as improved efficiency in management action, economies of scale, and the application of additional knowledges and technologies.

8.5 Economic outcomes from improvements to NRM

The current report focuses on non-environmental outcomes, but these outcomes are potentially affected by direct improvements in environmental parameters associated with KALNRMO activity. Successful external collaborations do not just provide individual and organisational benefits to the parties involved, they also suggest that natural resource management is being improved overall. These NRM improvements, whether undertaken independently by the KALNRMO or in collaboration, can in turn have wider economic outcomes. The estimation and derivation of economic outcomes from environmental actions and services is an emerging and complex field, and will not be explored in detail here. However, some key examples of KALNRMO actions, characteristics and capabilities that entail improvements in NRM and therefore imply related economic outcomes are noted below:

1. Strategic planning – Clear articulation of KALNRMO objectives enables effective communication and collaboration with potential partners, and directs resources towards environmentally productive activities. Formal KALNRMO planning has now extended to encompass a plan for the co-managed Errk Oykgand National Park.
2. Information gathering, storage and retrieval – the community land information system established by the KALNRMO to store natural and cultural information has facilitated land management planning and decision-making including fisheries, tourism, pests and weeds, and Native Title negotiation (Monaghan 2005). The system is currently undergoing a review and restructure to ensure a more streamlined and efficient data recovery system that takes advantage of new digital technology.
3. Local management by local owners – QPWS and the natural resources it is responsible for are beneficiaries of KALNRMO's physical location in the area and the greater personal and existential commitment to that area by KALNRMO staff.
4. Fire management – fire management regimes instituted by KALNRMO staff are an important aspect of local NRM, with strategic burning limiting the impact of destructive fires. Former long-term pastoralist David Hughes noted an improvement in burning practices across Kowanyama lands relative to the previous decade following the institution of the KALNRMO in 1990. More recently, the fire program instituted at Oriners and Sefton involves multiple collaborators and a combination of burning techniques to achieve local goals and those consistent with the developing Cape York Fire Management Plan. Remotely located neighbours can work together for mutual benefit.

5. Fisheries management – Early KALNRMO successes in commercial fisheries stock protection have been complemented by ongoing management of key fish habitats, ensuring the monitoring and compliance of recreational fishing, and providing support for fisheries research. The latter has included investigation of the local genetics of key species (Chernela *et al.* 2002) as well as life cycles and river movements (Kowanyama Aboriginal Shire Council 2010).
6. Feral, pest and weed management – KALNRMO has a formal Pest and Weed Management Plan that encompasses a range of projects and activities focused on this area of NRM. Chemical and mechanical treatment of species such as hymenachne, Chinese apple, grader grass, and other weeds is ongoing. Recently, the impact of pigs on local freshwater turtle species has been a particular concern (Andersen 2013).
7. Water and wetland management – the group has influenced catchment management since its establishment, and ongoing KALNRMO involvement in the group has facilitated the more recent participation of Indigenous representatives upstream as well as regular events and support for planning processes (KALNRMO 2012b, c, Soteriou 2012). Catchment-scale activity has been complemented by ongoing KALNRMO water management action at the local level. These include measures such as:
 - water quality monitoring
 - the eradication of aquatic pests
 - fencing of key water sites
 - support for water flow and flooding research
 - the assessment of the Indigenous aquatic harvest
 - the understanding and mitigation of erosion processes
 - the reintroduction of locally extinct species, and
 - the assessment and management of significant animal populations in wetland areas such as migratory birds.

The formation of a Wetlands Technical Advisory Group comprised of external research experts has been another important recent development (KALNRMO 2010). Complementing these actions has been ongoing participation in broader processes focused on Indigenous water interests and management, particularly those generated by and through NAILSMA (KALNRMO 2012b:9 and KALNRMO 2012c:9-10). These activities have ongoing impacts on water, wetland and riparian management at multiple levels.

The list from 1-7 above is not a comprehensive account of KALNRMO activity, but it does highlight the impact that the organisation has had on NRM planning, information, and action. The economic implications of this activity cannot be easily quantified, but are potentially significant. This economic effect associated with improved NRM is particularly important when the influence of the KALNRMO on models of NRM as practiced elsewhere is considered. In section 7.3.5 above, Allan Dale (RDA and JCU) described how the Kowanyama model, as expressed through KALNRMO, had informed catchment management and regional governance principles explored in later research projects; projects that ultimately influenced Federal policy foundations in regional NRM. He went on to note how this chain of influence helped underpin major Commonwealth and State budgetary commitments to natural resource management.

Perhaps the most profound environmental (and subsequent economic) contribution of the KALNRMO may have been through its indirect, and largely invisible, early influence on NRM managers, structures, processes, and funding arrangements as these were being established across the nation.

Emphasising the role of the KALNRMO in NRM as it is conventionally understood (and noting potential economic implications that flow from its activities) is not without risk. Strang analysed the transformation of the conduct and focus of the MRG over time, commenting on how Indigenous people, perspectives, and interests came to be subsumed by conventional NRM framings:

...maps of people and places have been replaced by maps of bioregions, vegetation, and soil types. New categories have been introduced: parts of the catchment previously defined by their association with particular Aboriginal groups or cattle stations have become "marine plains," "inland forest country," or "areas with a high risk of salinity." Funds have been channelled to deal with highly specific "ecological" problems.

(Strang 2008)

Yet the preceding sections have demonstrated how the KALNRMO has maintained a strong, influential, and overtly Indigenous identity. The need to maintain this perspective has at times resulted in the refusal of project and partnership opportunities that did not appear sufficiently complementary. Nevertheless, successful NRM outcomes have been achieved by the organisation acting independently and in partnerships with a diverse range of people and institutions beyond Kowanyama. Consideration of the economic outcomes of KALNRMO beyond Kowanyama may usefully consider that such environmental outcomes have in turn generated a diverse range of secondary economic outcomes that may be amenable to further investigation.

8.6 Economic outcomes from improvements to health and wellbeing at Kowanyama

One further set of economic outcomes associated with the KALNRMO should be noted before concluding. Previous research has identified the financial implications of improvements to Indigenous community health and wellbeing arising from ICNRM (Campbell et al. 2011) – effectively the secondary economic effects of health and wellbeing outcomes. Measuring health and associated economic variables was not in the scope of the current project, but evidence was located for KALNRMO involvement in initiatives addressing local Indigenous community health and wellbeing issues. Some examples include:

- KALNRMO staff consultation and training regarding health and lifestyle issues with health professionals from the Royal Flying Doctor Service and Qld Health Department (Kowanyama Aboriginal Shire Council 2010)
- KALNRMO logistical support for and participation in AwinUdnum, a series of large scale (50-60 people) healthy lifestyle workshops for Kowanyama people held on traditional lands around Kowanyama (Kowanyama Aboriginal Shire Council 2011)
- As part of its Animal Health Program, KALNRMO collaboration to control the effects of domestic and community dog populations – establishing a pound, facilitating veterinary services visits to conduct animal health checks and neutering programs, etc. (V Sinnamon, pers. comm.)

The potential for health and wellbeing impacts of KALNRMO activities beyond Kowanyama will be considered in the section below. What is important to note here is that the organisation is associated with actions to improve health and wellbeing within the Kowanyama community, and these improvements have economic and financial implications for local and regional health, justice, and other social and administrative services. This may be a fruitful area for the analysis of secondary economic outcomes.

8.7 Summary of economic outcomes beyond Kowanyama

Resourcing levels have varied based on projects and wider circumstances, but KALNRMO has been sustainably funded for two and a half decades, forming a crucial part of the local Kowanyama economy. These resources KALNRMO attracts, and the activities they enable, also have direct and indirect economic implications beyond Kowanyama. Potential economic outcomes that are particularly relevant beyond this local community scale include:

- Outcomes derived from KALNRMO's record of leveraging and brokering State, national, and international funding. The scale at which securing funding represents a significant economic outcome varies based on the nature and location of the funding source – State funds represent a positive outcome at the local and regional scale, national funds represent a State-level outcome, and international funds represent a positive economic outcome at the national-scale.
- Outcomes derived from synergies and efficiencies generated for external partners by co-investment and collaboration with KALNRMO.
- Outcomes derived from NRM improvements from KALNRMO activities. The foundations for these improvements are KALNRMO characteristics and capabilities such as longevity, geographic location, strategic planning, and information gathering and storage. Key areas of management action and NRM improvement noted here include fire, water, fisheries, and introduced pests and weeds.
- Outcomes derived from health and wellbeing improvements to the local Indigenous community from KALNRMO activities. This kind of economic outcome has been identified in the broader literature (Campbell 2011) but the distribution of the indirect effects of that primary outcome (the degree to which they accrue locally or at broader scales) has not been considered in detail.



Figure 8-1 Brolga, Kowanyama

9 Health and wellbeing outcomes of the KALNRMO beyond Kowanyama

The economic benefit associated with improved Indigenous health appears to be the only instance in the literature where broader non-local and or non-Indigenous effects of health outcomes from ICNRM are directly implied. Yet 3.6.4 above noted the potential for other kinds of non-local and/or non-Indigenous health and wellbeing outcomes arising from ICNRM: influences on communicable health conditions and intercultural trauma; benefits arising from successful direct collaboration with ICNRM agencies; and outcomes relating to improved environmental and cultural amenity. These are all relevant to the KALNRMO, particularly as the organisation is positioned in a large community with:

- significant regional mobility amongst the Indigenous population
- significant numbers of non-Indigenous people living in the town
- a formal system and facilities for managing recreational tourism and fishing on Kowanyama lands.

These conditions suggest that KALNRMO actions may have a range of health and wellbeing effects that accrue beyond the local Kowanyama Indigenous community.

As noted above, the current study located evidence related to KALNRMO activities that were focused on improving local Indigenous health and wellbeing. It also identified KALNRMO principles, activities, and processes that had generated significant behavioural and attitudinal changes in individuals and groups beyond Kowanyama, changes which were viewed highly positively by the people involved. It further identified circumstances where early exposure to KALNRMO had influenced the professional lives of successful and influential researchers.

However, the analysis and categorisation of this evidence has resulted in it being most appropriately classified under other categories of outcome – social, cultural, political, or economic. Further examination of the data located for this study did not yield information that was most appropriately classified as a health and wellbeing outcome from ICNRM accruing to non-local and/or non-Indigenous recipients. Section 3.6.4 about health and wellbeing effects as they are documented in the wider literature noted the potential challenges of separating the influence of such secondary health and wellbeing effects from surrounding variables, even when these effects are made the primary focus of the work. From this perspective, it is not surprising that no direct evidence was located as part of the current study.

However, the conditions in which the KALNRMO operates and the implications from evidence presented in other sections indicate that it is plausible that KALNRMO activities generate non-Indigenous and non-local health and wellbeing outcomes.

10 Synthesis, discussion and recommendations

10.1 ICNRM cultural, social, political, economic and health outcomes beyond the local Indigenous community

Analysis of the general ICNRM literature demonstrates that the current report is the first focused consideration of how the activities of formal ICNRM programs can influence the wider world beyond the local community context in which they are sited. Previous studies have incorporated some analysis of this question, usually by identifying outcomes that affect non-local and/or non-Indigenous people or which imply such an effect. However, those studies have not explicitly addressed this 'external' category of outcome and its full implications for the analysis of non-environmental ICNRM outcomes as a whole. This report addresses that gap.

Analysis of the general ICNRM literature also shows that key categories of outcome (social, cultural, economic, health and wellbeing) are identified and used by a number of important studies, but the terms often remain undefined and usage and application therefore varies. Other important accounts of outcomes do not employ such broader scale categorisations in their analysis at all. The category of 'political' outcomes is also under-used and under-conceptualised in the literature on ICNRM outcomes and co-benefits, despite the substantial political skills required to generate successful ICNRM and the range of outcomes it generates that are best classified in this way.

Existing economic analyses contain the most explicit consideration of ICNRM effects beyond the local community, but key categories and terms in existing studies differ. Health and wellbeing outcomes have been the most studied category of ICNRM outcomes and there is important data showing the links between ICNRM and Indigenous health improvements. However, consideration of the wider effects of this data is limited to discussion of financial benefits which accrue primarily to government health budgets. The degree to which Indigenous health improvements may lead to non-local and non-Indigenous health and wellbeing changes has not been noted, nor has the potential health and wellbeing outcomes associated with improved environmental management and amenity, and associated with the role of ICNRM in fostering key social processes such as reconciliation.

Given strong ongoing policy and investor interest in the co-benefits/non-environmental outcomes of ICNRM, the observations above reflect the need for greater conceptual and definitional clarity and standardisation in ICNRM outcome categorisation. They also reflect a need to understand how specific instances of ICNRM effects can be effectively assigned to these more explicitly demarcated categorisations. This is particularly true for the social, cultural, and political categorisations. The current study, combined with the complementary study of the intra-community outcomes of Yirralka Rangers (Barber 2015b), addresses these needs.

Some key external recipients of potential outcomes of ICNRM are summarised in Table 10-1 below. This table is not intended to be comprehensive in every case. Rather it demonstrates the importance of identifying and conceptualising the significance of ICNRM organisations to wider society beyond the communities in which they operate.

Table 10-1 Examples of potential external recipients of cultural, social, political, economic, and health and wellbeing outcomes from Australian ICNRM

Cultural outcome recipients	Social outcome recipients	Political outcome recipient	Economic outcome	Health wellbeing outcome
Non-Indigenous individuals and groups directly learning new values from ICNRM engagements	Collaborating NRM organisations and institutions	Governments requiring Indigenous consultation, direction, and management action	Public and private collaborators and co-investors in ICNRM action	Non-local and/or non-Indigenous people interacting with healthier Indigenous communities
Non-local Australian Indigenous communities	Education system – schools, TAFE and training colleges, universities	Industries requiring co-management of jointly held natural resources	Health, justice, and other government support system saving on remedial action	Direct external collaborators undertaking joint ICNRM activities
International Indigenous networks	Institutions focused on Indigenous people, environmental management, and social cohesion	International jurisdictions requiring ICNRM information, examples and leadership	Economic beneficiaries of improved management of natural and cultural resources enabled by ICNRM	Users of natural and cultural resource amenity fostered by ICNRM

10.2 KALNRMO outcomes beyond the local Indigenous community

The case study was selected to provide the maximum opportunity to identify under-explored categories and subcategories of external outcomes of ICNRM activity in order to further develop and test the conceptual framework. KALNRMO was selected as the case study because it has features that make it particularly suited to generating such externally-oriented outcomes. These are its early establishment, longevity of operation, size, consistency of ICNRM achievement, presence at the mouth of a high profile northern river catchment, and diverse set of near neighbours. The current study also benefitted from a pre-existing research relationship between the CSIRO and KALNRMO. It is not expected that other, much newer and/or smaller ICNRM organisations would achieve the level of external impact generated by the KALNRMO. However, the case study examples are intended to show how ICNRM activities undertaken by lower capacity organisations can be categorised in a similar way and thereby foster understanding of wider outcomes and provide foundations for monitoring and evaluation.

The period at Kowanyama just prior to and immediately following the establishment of the KALNRMO in 1990 was a particularly active one in terms of external impact. The purchasing of commercial fisheries licenses to create an effective river closure, the creation and enforcement of local recreational fishing and camping regulations, the establishment of the Mitchell River Group, the commercial purchase by Kowanyama Council of pastoral properties from the Hughes family, and the initial support for Indigenous ranger training at Cairns TAFE all date from this period. At this critical time, and over the subsequent decade, the KALNRMO was a key exemplar and role model within the ICNRM sector, being regularly cited in NRM policy and research documents and influencing other organisations elsewhere in the country. Through its strong links with Native American communities in Washington

State, it also provided a conduit through which innovative ICNRM thinking and practice was introduced into Australia. The principles articulated in its foundational strategic planning influenced subsequent NRM governance research projects and regional, State and national approaches to NRM governance.

The sustained operation of the KALNRMO also enabled relationship building through repeated interactions with a range of key external people and organisations. These included local pastoralists and others involved in the MRG/MRWGM, key regional Indigenous spokespeople and ICNRM agencies, and international and local researchers. The resulting partnerships and collaborations supported the KALNRMO in its activities, but also generated outcomes for the external partners, enabling them to meet key objectives and enhance their understanding of ICNRM. The international research and NRM partnerships entered into by the KALNRMO have expanded its profile and influence overseas as well as representing a financial contribution to the nation as a whole. Such activities contribute directly to social processes such as reconciliation and underpin various forms of organisational and political recognition. Collaborations also generate economic outcomes, and further economic outcomes noted in the KALNRMO data include those derived from more effective ICNRM management and improvements to Indigenous health and wellbeing. The data located for this study did not contain evidence that was best classified as a health and wellbeing outcome beyond Kowanyama, but a number of plausible pathways for such outcomes are suggested.

10.3 Summarising the application of the outcome categories to the KALNRMO case

The cultural, social, political, economic, and health and wellbeing outcomes of the KALNRMO were demonstrated in Parts 5-9 of this report. The table below summarises key outcomes, showing how they relate to the main conceptual categories and the emergent subcategories of the proposed outcome framework. This summary table is also intended to demonstrate how a more abbreviated outcome identification and assessment process might be undertaken in ICNRM contexts elsewhere.

Table 10-2: External cultural outcome categorisation and examples of KALNRMO external cultural outcomes

Fostering Indigenous cultures and traditions	Exemplar and role model	Informal learning and knowledge sharing	Attitudinal and behavioural change
Established cultural archive and initiated Cultural Centre project	Smyth, Strang, Dale, Marrie comments about KALNRMO demonstrating ICNRM possibilities in early period of sectoral growth	Establishment of MRG and the opportunities it created amongst Mitchell catchment residents	Strang: 'my attitudes to natural and cultural resource management have been completely transformed'
Bush humpy construction at Laura dance festival	Influence on Indigenous organisations - Dhimurru Rangers visit and model behind Balkanu	Staff exchanges with Washington State Native American communities	Sharp (1998) on changes in Gulf fisherman's attitudes to Kowanyama

Table 10-3: External social outcome categorisation and examples of KALNRMO external social outcomes

Research	Institutional education	Conferences	Media and public communication	Social networks and partnerships	External organisational objectives	Reconciliation
Comments by multiple researchers about KALNRMO leadership of collaborative research	Educational collaborations with local high school and content and support for creation of TAFE ranger training	Initiating and hosting key conferences and workshops for external participants at Kowanyama – fisheries, watershed management, etc.	Land office newsletter and 2008 prospectus for supporters and investors	KALNRMO initiation of MRG/MRWMG and foundational involvement in Gulf Savannah Guides	Government departments needs met regarding NRM and Indigenous collaboration	Strang: role of KALNRMO in improving the way colonial history is remembered
Comments by Strang on KALNRMO role in international work with UNESCO, etc.	Influence on wider tertiary teaching as case study of ICNRM	Participation in national and international conferences	Regular appearance in media – newspapers, fishing and camping magazines, etc.	Networks with Washington State Native American communities and organisations	TCF objectives met regarding bottom-up conservation management	Successful Kowanyama recreational and tourist management

Table 10-4: External political outcome categorisation and examples of KALNRM external political outcomes

Independence, autonomy and self-determination	Natural resource negotiation and governance	Recognition
Conceptualisation and assertion of 13 principles of KALNRM operation	Asserting and securing governance over local lands, fisheries, and adjacent pastoral properties and co-management over Erkk Oyikangand National Park	Comments from interviewees about recognition of KALNRM by external agencies, including government departments
Comments about careful approach to externally-driven programs	Direct and indirect shaping of wider NRM governance arrangements in Cape York and through later research, national arrangements	Recognition of Indigenous interests in major forums, personal recommendations of KALNRM by powerful actors

Table 10-5: External economic outcome categorisation and examples of KALNRM external economic outcomes

Funding	Growth, sustainability and independence	Co-investment and collaboration	Improvements to NRM	Improvements to health and wellbeing
State and Federal government departmental funding obtained	Progressive increase in KALNRM resourcing and capacity with many previous gains retained long-term	International researcher and NGO collaborations represent capital inflows into Australia, not just Kowanyama	Economic outcomes associated with improvements in management of fire, fisheries, water, and feral species at Kowanyama	KALNRM staff training with Qld Health and RFDS to improve immediate staff wellbeing outcomes
Private philanthropic funding obtained	Strong focus on funding diversification	Economic implications of collaborative action relative to separate individual actions	Economic outcomes from indirect KALNRM influence on wider Australian NRM governance and programs	KALNRM support for on-country healthy lifestyle workshops for Kowanyama residents

Table 10-6: Example of potential external health and wellbeing outcome categorisations

Communicable health condition outcomes	Intercultural trauma outcomes	Direct ICNRM collaboration outcomes	Environmental and cultural amenity outcomes	Reconciliation and recognition outcomes
No direct KALNRMO evidence located	No direct KALNRMO evidence located	No health information located, but see comments classified in other outcome categories about personal and professional learning and other benefits derived through collaboration	No direct KALNRMO evidence located.	No health information located, but see comments classified in other outcome categories about KALNRMO roles in reconciliation, recognition, attitudinal change

10.4 Further indicators and measures for ICNRM outcomes

This research focuses on an understudied area of ICNRM outcomes and on issues of outcome categorisation rather than on detailed analysis of indicators and measures. Nevertheless, the clarified definitional and conceptual framework is explicitly intended to provide better foundations for the identification, positioning and correlation of outcome indicators and measures, and the data on outcomes they generate.

Existing discussions of outcome evaluation and assessment range from general recommendations to quantify ancillary benefits under a range of potential categories (<http://lwa.gov.au/node/2347>) to more specific discussions of methods that appear relevant to the non-local/non-Indigenous outcomes that are the focus here. As it is focused on assessing social outcomes, URBIS (2012:72) provides the most detailed recommendations about foci for monitoring and these include some which are clearly relevant to non-local and non-Indigenous people:

- the financial contribution of WOC to other local businesses
- partnerships or MOUs between WOC projects and external organisations
- increased willingness by private landholders to contract Indigenous people to work on their properties
- reductions in conflict, violence, and anti-social behaviour
- increased interactions and improved relationships between Indigenous and non-Indigenous community members
- increased political capital (e.g. demonstrated by greater capacity to assist in Native Title claims)
- increased control over land use practices (e.g. visitor monitoring and input into local tourism policies and practices)

As well as being useful in assessing the impact of ICNRM on local Indigenous communities, each of these pathways could be used to provide information about the direct and/or indirect outcomes of ICNRM for non-local and non-Indigenous people.

The KALNRMO represents a strong case study of long-term external outcomes. Based on insights derived from that example, some further means of representing such outcomes could include:

- documenting ICNRM organisational social networks
- producing one or more maps at appropriate scales of where key partners and collaborators are geographically based
- generating a shorter and more rapid social survey instrument designed to assess how a broader and more diffuse set of ICNRM stakeholders and partners perceive outcomes from interacting with the organisation
- documenting where individuals with significant past contact with the ICNRM agency are now professionally positioned
- undertaking formal analyses of economic outcomes at the agency level to complement existing analyses focused on the sectoral level (The Allen Consulting Group 2011) and/or on particular outcome categories (Campbell *et al.* 2011)
- undertaking further analysis of how improvements in Indigenous health and in environmental and cultural amenity associated with ICNRM relate to health and wellbeing in wider society through such measures as surveys of past and present non-Indigenous townspeople, past indigenous residents, and recreational non-Indigenous and Indigenous visitors to Kowanyama lands.

The above list demonstrates some pathways for further understanding impact at the agency level based on the KALRNMO example.

However, although pathways for greater understanding are desirable, the issue of indicators and measures and indeed of the monitoring and evaluation of ICNRM outcomes more generally, requires careful consideration. Some of the outcomes identified through both the literature analysis and case study arise from activities that are effectively 'core business' for the ICNRM sector. Others are more accurately classed as secondary or even tertiary effects of ICNRM agency activities. Identifying these at times more diffuse outcomes is important in understanding the full value that may arise from successful ICNRM. Yet their nature as secondary effects not only makes identifying and assessing them more challenging, it also emphasises that judging the performance of ICNRM agencies based on such outcomes is problematic. The framework for categorisation proposed here is designed to assist in the identification and categorisation of ancillary outcomes that arise from ICNRM activities but which may not have been previously noted. It is not intended as a matrix against which ICNRM performance should be judged. The sometimes fine distinction between outcome identification and formal monitoring and evaluation is an important one in this respect.

10.5 Recommendations for further research and ICNRM sectoral evaluation

The current study, and the complementary research with Yirralka Rangers (Barber 2015b), both used the combination of a comprehensive literature analysis and a case study where field circumstances suggested ICNRM outcomes of particular kinds (intra and extra-community) were likely to be observed. This approach provided firm foundations for generating a broader understanding of the cultural, social, political, economic, and health and wellbeing outcomes of ICNRM, and how those outcomes can be clearly conceptualised and categorised. The focus on improving the sometimes poor conditions of life in many Indigenous communities has made a focus on ICNRM effects in this context necessary and important. However, that focus has meant that social and other outcomes that arise for external recipients has remained an under-researched aspect of the sector. This study also addresses that gap.

Other research projects focused on the wider outcomes of ICNRM are currently underway. Results from that research may be significant in further refinements of the current analysis, but are unlikely to radically change the primary conclusions. Based on the results of the work undertaken here, some key next steps for ICNRM outcome research would be to undertake a series of potentially iterative processes involving:

- the application of the categories to other ICNRM case studies that may be less optimal for generating particular kinds of outcomes
- the refinement and articulation of subcategories based on those new applications
- identifying and aligning appropriate indicators and measures to categories and subcategories
- testing whether refined subcategories and associated indicators produce reliable and consistent results across time and space
- develop ways of effectively summarising and representing the results of outcome research

- examining how ICNRM outcome research can be integrated into sectoral monitoring and evaluation processes in ways that enhance understanding of sectoral value without:
 - substantially increasing reporting obligations
 - requiring ICNRM agencies to meet additional performance requirements about outcomes that may:
 - ~ represent secondary effects of ICNRM activities
 - ~ be influenced by co-variables that are not being monitored (e.g. diverse influences on community health) and/or
 - ~ be outside the control of ICNRM agencies.

Appendix A - Additional contacts for a future KALNRMO organisational history

In the course of conducting the current research, a number of additional external contacts were identified that may be important contacts for further assessment of KALNRMO external impacts and for the construction of a detail history of the organisation at a future point. These contacts and their past or present positions are listed below.

Darren Burns – Quandamooka Land Council

Jim Campbell – The Christensen Fund

Tony Cockburn – QPWS

John Courtenay – formerly of Gulf Savannah Guides

Gary Drewen – former KALNRMO manager

Mark Elmer – formerly Queensland Fisheries Management Authority

Noeline Gross/Ikin – former CEO of NGRMG

Ro Hill – CSIRO

Richard Jenkins – Balkanu

Kathryn Larsen – PhD completed about KALNRMO

James Monaghan – former KALNRMO manager

Mark Moran – University of Queensland

Vol Norris – former KALNRMO manager

Noel Pearson – Cape York Institute, North Queensland Indigenous leader

Dale Rusca – Quandamooka Land Council

Steve Robinson – Northwest Indian Fisheries Commission

Michael Ross – Cape York Land Council

Tom Shepherd – Artemis Station

Buzz Symonds – QPWS

Gary Ward – Gulf Fisherman's Association

Eric Wason – QPWS

Murandoo Yanner – North Queensland Indigenous leader

FREE, PRIOR AND INFORMED CONSENT FORM

Marcus Barber

The external social and cultural impact of the Kowanyama Aboriginal Land and Natural Resource Management Office (KALNRM).

Marcus Barber: 0407 867 445 (m) Marcus.Barber@csiro.au

Marcus Barber is the main CSIRO researcher conducting this research, and he is interested in learning from people with experience of KALNRMO and its activities, either now or in the past. This research will result in a public report about the KALNRMO and Indigenous NRM more generally. It might also recommend ways of doing this kind of research in the future. The CSIRO has Marcus permission to do this research. If you sign this form it shows that you have given your permission for Marcus to speak to you and that he can use what you say in reports, community resources, and research articles.

The aims of this study have been clearly explained to me and I understand what is wanted of me. I understand that it is my choice to take part and that I can stop at any time. I understand that any information I give will not be shared without my permission.

Name: <i>(printed)</i>	
Signature:	Date:

We may want to identify you as the source of some information you give, particularly if it is unusual or important. If you give us permission for your name to be written down, tick the box below marked 'Yes'. If you do not want your name recorded in public documents, tick the box marked 'No'. This permission can be changed at any time prior to final publication.

Yes, I give permission for my name to be recorded in the report.	
No, I do not want my name recorded next to my comments.	

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