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## List of Acronyms

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<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACF</td>
<td>Australian Conservation Foundation</td>
</tr>
<tr>
<td>AIATSIS</td>
<td>Australian Institute for Aboriginal and Torres Strait Islander Studies</td>
</tr>
<tr>
<td>ANZECC</td>
<td>Australian and New Zealand Environment and Conservation Council</td>
</tr>
<tr>
<td>ARMCanZ</td>
<td>Agriculture and Resource Management Council of Australia and New Zealand</td>
</tr>
<tr>
<td>ASEIA</td>
<td>Aboriginal Social and Economic Impact Assessment</td>
</tr>
<tr>
<td>ATSIC</td>
<td>Aboriginal and Torres Strait Islander Commission</td>
</tr>
<tr>
<td>BC</td>
<td>British Columbia (Canada)</td>
</tr>
<tr>
<td>CALM</td>
<td>Department of Conservation and Land Management (WA)</td>
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<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
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<tr>
<td>CCA</td>
<td>Community Conserved Area</td>
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<tr>
<td>CDEP</td>
<td>Community Development Employment Scheme</td>
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<tr>
<td>CEESP</td>
<td>Commission on Environmental, Economic and Social Policy</td>
</tr>
<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>COAG</td>
<td>Council of Australian Governments</td>
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<tr>
<td>CRC</td>
<td>Cooperative Research Centre</td>
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<tr>
<td>CRG</td>
<td>Community Reference Group</td>
</tr>
<tr>
<td>CSIRO</td>
<td>Commonwealth Scientific and Industrial Research Organisation</td>
</tr>
<tr>
<td>DAFWA</td>
<td>Department of Agriculture and Food (WA)</td>
</tr>
<tr>
<td>DDT</td>
<td>Dimethyl-Diamino-Toluene</td>
</tr>
<tr>
<td>DIA</td>
<td>Department of Indigenous Affairs (WA)</td>
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<td>DPI</td>
<td>Department of Planning and Infrastructure (WA)</td>
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<td>DOE</td>
<td>Department of Environment (WA)</td>
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<td>DNRETA</td>
<td>Department of Natural Resources, Environment and the Arts (NT)</td>
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<tr>
<td>DVD</td>
<td>Digital Video Disk</td>
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<tr>
<td>EC</td>
<td>Ecotrust Canada</td>
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<tr>
<td>EK</td>
<td>Environz Kimberley</td>
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<tr>
<td>EPBC Act</td>
<td>Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)</td>
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<td>ESD</td>
<td>Ecologically Sustainable Development</td>
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<td>Fire Control Teams</td>
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<td>FESA</td>
<td>Fire and Emergency Services Authority</td>
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<td>Forest Stewardship Council</td>
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<td>GAA</td>
<td>General Area Agreement</td>
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<tr>
<td>GIS</td>
<td>Geographic Information System</td>
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<tr>
<td>GPS</td>
<td>Global Positioning System</td>
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<tr>
<td>GRP</td>
<td>Gross Regional Product</td>
</tr>
<tr>
<td>GWN</td>
<td>Golden West Network</td>
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<tr>
<td>IFOAM</td>
<td>International Federation of Organic Agricultural Movements</td>
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<td>ILC</td>
<td>Indigenous Land Corporation</td>
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<td>INCRM</td>
<td>Integrated Natural and Cultural Resource Management</td>
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<td>IPA</td>
<td>Indigenous Protected Area</td>
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<td>IUCN</td>
<td>The World Conservation Union</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>KALACC</td>
<td>Kimberley Aboriginal Law and Culture Centre</td>
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<td>Kimberley Aboriginal Pastoralists Association</td>
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<td>Kununurra Diversion Dam</td>
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<td>Kimberley Interpreting Service</td>
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<td>Kimberley Development Commission</td>
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<td>Kimberley Language Resource Centre</td>
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<td>KRS</td>
<td>Kimberley Research Station</td>
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<td>LUM</td>
<td>Land Unit Mapping</td>
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<td>L+SU</td>
<td>Land and Sea Unit (Kimberley Land Council)</td>
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<td>LWRRDC</td>
<td>Land Water and Rural Research Development Corporation</td>
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<tr>
<td>MEA</td>
<td>Millennium Ecosystem Assessment</td>
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<tr>
<td>M-G</td>
<td>Miriuwung-Gajerrong</td>
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<tr>
<td>MOU</td>
<td>Memorandum of Understanding</td>
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<td>NAEA</td>
<td>Northern Australia Environment Alliance</td>
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<tr>
<td>NAILSMA</td>
<td>Northern Australia Indigenous Land and Sea Management Alliance</td>
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<tr>
<td>NASA</td>
<td>National Association for Sustainable Agriculture</td>
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<tr>
<td>NATSSISS</td>
<td>National Aboriginal and Torres Strait Islander Statistical Survey</td>
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<tr>
<td>NCC</td>
<td>National Competition Council</td>
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<tr>
<td>NGO</td>
<td>Non Government Organisation</td>
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<tr>
<td>NHT</td>
<td>Natural Heritage Trust</td>
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<tr>
<td>NOTPA</td>
<td>New Opportunities in Tropical Pastoralism and Agriculture</td>
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<tr>
<td>NT</td>
<td>Northern Territory</td>
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<tr>
<td>NRM</td>
<td>Natural Resource Management</td>
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<td>NSW</td>
<td>New South Wales</td>
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<tr>
<td>NWC</td>
<td>National Water Commission</td>
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<td>OBE</td>
<td>Organic Beef Exporters</td>
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<td>OBP</td>
<td>Ord-Bonaparte Program</td>
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<td>OES</td>
<td>Ord Enhancement Scheme</td>
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<tr>
<td>ORD</td>
<td>Ord River Dam</td>
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<tr>
<td>ORIA</td>
<td>Ord River Irrigation Area</td>
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<td>ROC</td>
<td>Respecting Our Culture (Program)</td>
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<td>Technical and Further Education</td>
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<tr>
<td>TCF</td>
<td>The Christensen Fund</td>
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<td>TO</td>
<td>Traditional Owner</td>
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<td>TWN</td>
<td>Tsleil-Waututh Nation</td>
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<tr>
<td>UCL</td>
<td>Unallocated Crown Land</td>
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<td>UWA</td>
<td>The University of Western Australia</td>
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<tr>
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<td>Western Australian Conservation Council</td>
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<td>WAI</td>
<td>Western Agricultural Industries</td>
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<td>WWOOFers</td>
<td>Willing Workers on Organic Farms</td>
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<td>WWF</td>
<td>World Wildlife Fund</td>
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What Happened and Why

The Kimberley Appropriate Economies Roundtable was held in Fitzroy Crossing, Western Australia on 11-13 October 2005. Organised by the Kimberley Land Council (KLC), Environs Kimberley (EK) and the Australian Conservation Foundation (ACF), the gathering explored options for appropriate development in the Fitzroy Valley and Canning Basin.

Over one hundred people gathered from the Fitzroy Valley, throughout the Kimberley region, and from elsewhere in Australia and overseas. Participants included Traditional Owners, academics, pastoralists, training providers, small business people, farmers, representatives of government agencies and environmentalists.

The Roundtable idea came about in response to people’s desire to assert their rights and set the agenda for the future development of the Kimberley region, rather than continue to respond to unsustainable proposals from people and industry groups outside the region. The overall purpose of the forum is to chart ecologically, culturally, socially and economically sustainable development for the Fitzroy and Canning basins, founded in the vision and values of the peoples of the region.

The Kimberley Appropriate Economies Roundtable Project is part of a wider strategy to provide a framework for dialogue between people across and beyond the north about appropriate development, as well as to promote consistent and coordinated approaches to protection and management in northern Australia.

The Significance

The Kimberley Roundtable forum was the first gathering of its kind in the region, bringing together a diverse range of people including many who are engaged in activities and enterprises that protect and improve the cultural and natural values of the region. The Kimberley region is recognised as being globally significant for its natural and cultural diversity, and includes World Heritage listed areas and areas likely to be listed in the future. Many speakers at the Roundtable highlighted the importance of the region and its peoples.

The Roundtable forum promoted the sharing of information and building of relationships and networks between the participants and the organisations represented. Wayne Bergmann, Executive Director of the KLC, closed the forum by commenting on the strengths of the partnerships that were forming. Other participants described the meeting as inspirational, challenging, illuminating, fascinating—and above all a meeting that inspired hope and a sense of strength in bringing people together, perhaps summarised best in the phrase "mirri mun wangki wulyu" — “a strong response is needed”.

At the forum, participants identified key principles for appropriate development in the Fitzroy and Canning basins that can be applied across the Kimberley. Participants also identified key actions in support of these principles that were necessary for strong and sustainable development to occur. The first recommended action is to develop a process that ensures that governments and other responsible bodies apply these principles to development in the Kimberley.

The Eleven Principles

1. Development proposals recognise that the Kimberley region is a place of special cultural and environmental values with national and international significance.
2. Development proposals acknowledge that culture guides economic activity for Indigenous people, and appropriate development must be based on healthy country and strong culture.
3. Development proposals recognise and respect the rights of Traditional Owners to make decisions about their country.
4. Development proposals consider issues of Aboriginal access to land and equity of land tenure.
5. Conservation and cultural management are recognised as valuable and important contributions to the economy and society:
   - The local economies of hunting, fishing, looking after people, culture and country are valued and supported;
   - The rights of Traditional Owners are recognised when conservation areas are established;
   - Senior Indigenous people are supported in the transmission of knowledge and confidence to young people; and
   - Benefits from cultural information are returned to the holders of that information.
6. The people of the region are able to participate in planning for the region, are supported by government in that process, and their views are respected and included when implementing planning outcomes.
7. The Fitzroy River, ground-waters and conservation areas are protected by a legal framework.
8. A new economic system is developed, based on a diversity of enterprises that support the needs and wishes of Kimberley people.
9. Enterprise planning and management is built upon skills and knowledge transfer, and is tailored to the needs of the local area.
10. Successful and emerging local enterprises are supported by the establishment of region-wide co-operative networks.
11. Ongoing and sufficient funding is a critical component in the support and implementation of appropriate development.

The Sixteen Actions
(Detailed explanations of the following actions are included in “Consolidated List of Recommended Actions”).

Guidelines for Sustainable Development
Action 1: Develop an enforceable Statement of Guidelines for sustainable development in the Kimberley.

Research
Action 2: Develop a long term, integrated, and co-operative research program that includes the provision of results to the Kimberley community.
Action 3: Conduct a survey of local community interest in sustainable agriculture or other developments.

Support and Integration
Action 4: Establish systems and structures to promote, assist and support new and existing sustainable and appropriate enterprises.

Conservation Areas
Action 5: Develop processes that promote and support culturally appropriate conservation areas.
Action 6: Put in place real and effective arrangements for the co-management of the conservation estate by Indigenous people.

Planning
Action 7: Investigate, develop and implement a planning process that includes Kimberley people as main stakeholders and decision makers.

On the Ground Initiatives and Activities
Action 8: Promote and support on ground initiatives managed and operated by local people.
Action 9: Develop ‘quality and integrity’ control systems for tourism activities, which include the Roundtable’s ‘Statement of Principles’ for Kimberley development.
Action 10: Develop and support enterprises built on cultural knowledge and expertise.

Intellectual and Cultural Knowledge and Education
Action 11: Develop and support processes to protect and enhance cultural knowledge, and ensure that it is passed to future generations.
Action 12: Provide legal recognition and protection of intellectual knowledge as the property of Traditional Owners.
Action 13: Develop and support processes to facilitate the teaching of Indigenous culture, knowledge and language in schools and other training places.

Funding
Action 14: Develop a streamlined and regionally-controlled funding system that allows ready access to funds that support appropriate development initiatives.

Land Tenure, Land Access and Land Management
Action 15: Develop and implement a process to efficiently and quickly deliver land title or access to land where appropriate.
Action 16: Provide effective means for control of and access to land where Native Title exists.

The Next Steps
During the Roundtable itself, and in the evaluation survey that participants completed at the end of the forum (see Appendix A), participants identified as a key problem too many meetings in the past that had involved a great deal of talking and little or no action. The organisers of the Roundtable were asked to ensure that results were delivered promptly in two main areas:
• Clear reports and information made available to the participants and to other interested people;
• Steps taken to begin turning talk into action.

Forum participants agreed on a number of key actions to ensure ongoing implementation, some of which have now been completed and others which require continuing attention:
• A ‘Statement of Principles’, developed from the workshops and the main sessions (now completed).
• A ‘List of Actions’, developed from the workshops and the main sessions (now completed).
• An interim report containing a summary of the Roundtable proceedings to be distributed promptly (distributed in early 2006).
• A final report including all of the presentations and papers, to be distributed within six months (this report).
• All the presentations and papers to be made be available on the internet (which can now be found at http://www.klc.org.au/roundtable_docs.html)

It was also agreed that information from the Roundtable be taken directly back to the community through visits and information sessions, and that a short DVD be produced for communities. A substantial program of community visits has been undertaken during 2006, during which the Interim Report was taken back to the Indigenous communities and participants of the Roundtable to ensure people were aware of the recommendations and had an opportunity to comment on them. The production of a DVD is nearing completion.

Participants agreed that anyone could start moving forward with the ideas and actions developed at the Roundtable—responsibility rests with the people themselves as well as the organisers. Further work is being undertaken by the organisers to develop a plan for implementation of the Roundtable recommendations and outcomes and to seek wider partnerships and funding for the implementation of this plan.
Roundtable Background and Methodology
Roundtable Preparation, Planning and Follow-Up

Hill, Rosemary1,2
Golson, Kate3

1 Australian Conservation Foundation, Cairns
2 School of Tropical Environment Studies and Geography, James Cook University, Cairns
3 Kimberley Land Council, Broome

Background to the Kimberley Appropriate Economies Roundtable
Held in Fitzroy Crossing, Western Australia on 11-13 October 2005, the Kimberley roundtable meeting was organised by the Kimberley Land Council (KLC), Environments Kimberley (EK) and the Australia Conservation Foundation (ACF). The meeting investigated options, principles and actions that promote sustainable development in the Fitzroy Valley and Canning Basin, and in the wider Kimberley region.

The Project has developed in close consultation with community leaders and organisations in the Kimberley and elsewhere. It has been driven by the desire of people to be active in setting the direction for future development in the region rather than continue to respond to unsustainable proposals from outside the region.

One such proposal was for the establishment of a Genetically Modified cotton industry in the west Kimberley (see Hill and Mann, this volume). Another more recent example is the study commissioned by the Western Australian Government to investigate the taking of water from the Kimberley and moving it by land or sea to Perth.

The KLC, EK and ACF worked closely with one another and the community in campaigning in opposition to the cotton proposal. The partnership established between these organisations was formalised in a Letter of Agreement in 2004 (Appendix B), and has provided a strong platform to work with the wider community to explore sustainable solutions in the Kimberley.

The Roundtable Project began in mid 2004. KLC and EK representatives who attended a Cape York Peninsula Roundtable in 2003 (see below) felt the idea had merit for the Kimberley region. In October of 2004, a Planning Day was held in Broome, which brought together a small, diverse group from the environment and Indigenous sectors, key government agencies and regional organisations to consider the purpose, makeup and organisation of a Roundtable forum in the Kimberley. A Working Paper was developed on the basis of the outcomes of the Planning Day and circulated to potential regional, national and international partners to seek their support for the concept, both financial and otherwise.

Generous financial support from the Northern Australia Small Grants Program (funded by the Poola Foundation [Tom Kantor Fund], The Wilderness Society and ACF), and The Christensen Fund allowed the Project to proceed. The Mullum Trust, Myer Foundation and the WA Department of the Premier and Cabinet also provided additional financial support.

Preparation for the Kimberley Meetings
Preparation during the months leading up to the Planning Day and the Roundtable forum, which took place in October 2005, included extensive consultations held with people engaged in sustainable activities in the region. Information was sought from a wide range of practitioners and industry groups, including cultural and eco-tourism enterprises, art centres, pastoralists, farmers and other natural resource management stakeholders and communities working on conservation and land management projects. We invited many of these people to come to the Roundtable to participate or present papers.

The Project’s steering committee considered it important for key government agencies to attend the forum and conferred closely with staff in regional offices about sustainable activities in the Kimberley. Representatives from the regional offices of the WA Department of Conservation and Land Management, WA Department of Indigenous Affairs and WA Department of Agriculture, as well as the Kimberley Development Commission (KDC) and the Kimberley College of Technical and Further Education (TAFE), were invited to the Roundtable. The Premier of Western Australia and the State Ministers for Regional Development and Conservation were also invited.

From outside the region, people who could make a useful contribution were approached to participate and present papers. Invitees included researchers with expertise in areas such as Indigenous economic development, governance structures, natural ecology and wetland research. A number of representatives from environmental groups and the funding bodies were asked to attend.

The Roundtable meeting was designed to allow most of these external experts to contribute through their participation in small group workshops rather than through the presentation of
papers. We invited these people to provide short written papers to the present volume that summarised their contributions and relevant knowledge. These papers appear in the Invited Papers section of this Report and form an important policy and research context to the outcomes from the workshop and plenary sessions. However, with one exception, none of these papers has been edited and the views expressed by their authors are not necessarily the views of the Project steering committee nor the participants of the Roundtable.

Three international guests were invited to speak about the experiences of appropriate development activities in other countries. We would like to acknowledge the generosity of the IUCN Commission on Environmental, Economic and Social Policy and Ecotrust Canada in supporting their personnel to attend this Roundtable.

Objectives of the Kimberley Roundtable

The overall goal of the Kimberley Roundtable is to chart ecologically, culturally, socially and economically sustainable development for the Fitzroy Valley and Canning Basin, founded in the vision and values of the peoples of the region.

Objectives include:

• Re-affirm the values and vision of the people of the region;
• Provide opportunities for networking and information sharing between people involved, or aspiring for involvement, in a range of sustainable enterprises in the Kimberley;
• Showcase examples of sustainable enterprises and initiatives in the Kimberley region and elsewhere;
• Identify policy barriers and facilitative mechanisms for sustainable development;
• Explore options and opportunities for appropriate development in the Kimberley, including options that maximise Indigenous employment; and
• Initiate economic modelling relevant to sustainable development based on the values and vision.

Follow-Up After the Roundtable Meeting

Since the Kimberley Roundtable meeting, additional generous support from The Christensen Fund and the Poola Foundation (Tom Kantor Fund) has enabled the Project to continue. Work to follow-up on the outcomes of the Roundtable has begun. The Kimberley Appropriate Economies Roundtable Interim Report was produced in December 2005 in a format specially written for the Kimberley community. This report was taken back to Indigenous communities and other people involved in the Roundtable in early 2006 to ensure they were aware of the recommendations and had an opportunity to comment on them. Consultations of this kind will underpin the activities of the Project throughout the year.

Further work will be undertaken to develop a plan for the implementation of the Roundtable recommendations and outcomes, and to seek wider partnerships to this end.

Links to the Cape York Peninsula Appropriate Economies Roundtable

A Roundtable on ‘Culturally and Environmentally Appropriate Economies for Cape York Peninsula’ was hosted in 2003 by ACF in partnership with the Rainforest Cooperative Research Centre with support from Balkanu Cape York Development Corporation, The Wilderness Society, Cairns and Far North Environment Centre, the Commonwealth Scientific and Industrial Research Organisation, and involving a range of participants from Environs Kimberley, the Northern Land Council, KLC, Environment Centre of the Northern Territory, the Australian National University and others. A full report on the workshop is available from: http://www.rainforest-crc.jcu.edu.au/publications/publications.htm.

Participants of the Cape York Peninsula Roundtable agreed to work together to develop a proposal for reforms that would allow better recognition of Traditional Owners’ rights and responsibilities over land and in conservation management of their traditional lands. In addition, participants agreed to work together to foster pilot projects that implement sustainable options based on both scientific and traditional knowledge systems, to undertake an exchange program, and to further investigate how a concept such as Eco-Trust or Eco-Culture Bank could be applied to Cape York Peninsula.

Appropriate Economies Across Northern Australia

The whole concept of ‘appropriate economies’ for northern Australia was first promoted by the Northern Australia Environment Alliance (NAEA) in 2002. NAEA brings together ten non-government environment organisations around a vision for the future of the north in which economic and social well-being is secured through development that ensures ongoing protection of the natural ecosystems, recognises Indigenous rights and responsibilities and builds on the comparative advantages embedded in the natural and cultural diversity of the region. ACF has played a key role since 2003 in championing the concept of ‘appropriate economies’.

The focus on ‘appropriate economies’ aims to foster viable economic activity across northern Australia generally, but particularly for Indigenous people, with outcomes that will:

• Protect culture and nature;
• Generate jobs and income; and
• Uplift social conditions.

Three steps have been identified as useful to fostering appropriate economies:

1. Identification of appropriate economies:

In partnership with people and communities of northern Australia, identify economic activities that are appropriate for the region based on our scientific, cultural, social and Indigenous knowledge, and consider a range of new options and ideas, explicating clearly the economic outcomes sought in terms of employment and revenue.
2. Development of a facilitative framework:
   Identify, promote and obtain support for policy, legislation
   and resources necessary to enable the identified appropriate
   economies to be developed, including consideration of
   issues such as:
   • Land acquisitions for Indigenous communities;
   • Land tenure and management control;
   • Indigenous land management;
   • Conservation management arrangements and
     protected area partnerships;
   • Business enterprise advice and support;
   • Cultural and natural heritage protection;
   • Sources of green capital; and
   • Pilot projects and case studies.

3. Demonstration of regional and national economic
   benefits and viability:
   Demonstrate the national and regional economic benefits
   of sustainable development based on appropriate activities
   through:
   • Critically analysing the current economy in relation to
     direct and indirect flows of finance, and employment
     at national and regional level; and
   • Modelling of the new appropriate economy in relation
     to direct and indirect flows of finance and employment
     at national and regional level.

The Kimberley and Cape York Peninsula Roundtable meetings
have begun work on the first and second steps above. The
challenge now is to strengthen the regional partnerships and
ensure development and adoption of coherent, rigorous and
practical policy solutions in relation to the issues identified.
Consideration is being given to hosting a third Roundtable
meeting within a sub-region of the Northern Territory. Sound
economic modelling is required to demonstrate the regional
and national economic benefits and viability.

The Kimberley Hinterland—An Indigenous Domain

Indigenous people, who comprise almost one half of the population of the Kimberley, are spread across the region and predominate in areas outside the two main towns, Broome and Kununurra. The hinterland of the Kimberley is a largely Indigenous domain where people are engaged in the management and use of a greater area of land than any other single group of landholders and land managers in the region.

In this context, a wide range of sustainable development activities is being undertaken and explored by Indigenous people—in land management, conservation, cultural and art activities as well as community enterprise and private business development.

Along the Fitzroy River and surrounding country, for example, people are working to protect and maintain the cultural and natural values of the area through activities such as endangered species research and management, art, language learning, cultural education and enterprise development in the tourism sector, and in fire management on pastoral lands. Where people are not living on, or cannot easily visit their traditional lands, trips back to country are made to look after country and satisfy other cultural responsibilities.

The Roundtable forum brought together a cross-section of Kimberley people in order to hear about their experiences and to promote the sharing and exchange of information and ideas.

Consultations

Given the Project’s focus on the Fitzroy Valley and Canning Basin, consultations began with the Traditional Owners from these areas: Bunuba, Gooniyandi, Karajarri, Nyikina, Mangala, Ngarinyin and Walmajarri.

An important network for the consultations was the thirty-two member Executive Committee of the Kimberley Land Council, which is comprised of two representatives from all of the Traditional Owner groups of the region. Information on the Roundtable Project was presented at meetings of the Executive Committee as well as in discussions with individual representatives.

In addition, consultations were carried out through the extensive networks of local and regional Indigenous organisations. Advice and participation was sought from organisations including the Kimberley Aboriginal Pastoralists Association, local art centres and Indigenous broadcasters. Discussions were held with a host of Indigenous tour operators, three of whom were asked to make presentations at the forum.

The Kimberley Aboriginal Law and Culture Centre (KALACC), a community-based organisation established to protect and promote traditional law and culture matters, holds a three-day regional cultural festival every two years at which hundreds of Kimberley Indigenous people gather (www.kalacc.org.au). The last festival, held in August 2005, provided an unparalleled opportunity for information on the Roundtable to be disseminated and the views of Indigenous people sought.

At the KALACC festival, as well as in separate discussions, Traditional Owner groups, in addition to those mentioned above, who are exploring and/or engaged in sustainable activities, were invited to participate in and make presentations at the Roundtable forum. These groups included the Miriuwung-Gajerrong Native Title holders, who agreed to speak about the impact of the Ord Irrigation Scheme on their lands and culture; the Traditional Owners from Mulan and Billiluna communities, who are managing the Paruku (Lake Gregory) Indigenous Protected Area; and the Yawuru Native Title holders, who are co-managing the Broome coastal conservation reserve, Minyirr Park.

Support was offered by many local and regional organisations as well as individuals. Mangkaja Arts in Fitzroy Crossing, for example, assisted the Project by helping to disseminate information to communities and arranging for a local person to be employed as a liaison officer at the forum, among other things. Further, the Kimberley Interpreting Service (KIS) covered the costs of contracting two interpreters for the duration of the forum.

Indigenous People’s Participation in the Roundtable

Golson, Kate
Kimberley Land Council, Broome
**At the Roundtable Forum**

On the basis of the consultations and discussions, a list of Indigenous participants and their agendas for the Roundtable was shaped. The level of interest expressed by people resulted in the organisation of six workshop sessions focussed on the work of Kimberley people to protect and improve the cultural and natural conditions in which they are living.

On the first day of the Roundtable forum, a closed meeting was held for Indigenous participants to hear about and discuss the background to the process and to consider the agenda. Decisions were made about organisational matters such as the use of interpreters, and information about national and international attendees was provided.

Members from many of the Kimberley language groups attended the forum. Interpreters from KIS were present throughout to translate for those who required it. Initially, the interpreters stood next to presenters in order to interpret every word, however it was found to be more effective for the interpreters to sit amongst the audience so that people could request translations when they needed them.

In the afternoon on the final day of the Roundtable forum, participants were able to view the massive Ngurrara canvas, which maps lands that form part of the Great Sandy Desert (www.mangkaja.com). The painting was created by over sixty artists from the southern Kimberley region—men and women from the Walmajarri, Wangkajungka, Mangala and Manyjilyjarra language groups. The painting was submitted in 1997 as Native Title claim evidence of people’s continuing affiliation with their traditional lands. At eight by ten metres, the painting is thought to be the largest collective canvas produced by Aboriginal artists. When the canvas was unrolled on the front lawn of the meeting venue, a number of the artists who were attending the Roundtable spoke about it with the other participants.

**After the Roundtable Forum**

One of the concerns expressed by many of the regional participants at the forum was that the Roundtable should not repeat the failing of many other projects by gathering people together, seeking information from them and then making commitments that were never kept.

The three Project leaders have worked to ensure that key actions from the forum have been followed up as promptly as possible. The Roundtable Interim Report, written in plain English and targeted primarily at a regional audience, was distributed in early 2006. At the same time, a program of consultations commenced, aimed at sharing the outcomes of the forum with participants and other people, collecting feedback about the Interim Report and considering the Project plan for the year.

In addition, an important part of this year’s consultations with people in towns and communities, and on farms, conservation areas and pastoral stations, has been the recording of interviews with many of the workshop presenters so that their stories could be transcribed and included in the present volume.

A range of matters has arisen from visits to Derby and Fitzroy Crossing in April of this year. In Fitzroy Crossing, people proposed that an informal reference group of interested and available participants be set up to begin work on the implementation of a number of the recommendations. This idea has met with a lot of support amongst participants elsewhere in the Kimberley.

In discussions with Indigenous organisations, support has been expressed for one of the main Project objectives, in particular, to gather information on government and non-government programs relevant to the sixteen actions identified at the Roundtable forum (see Consolidated List of Recommended Actions), in order to identify the responsible agencies and to examine the fit between current programs and people’s needs.

Regular consultations with participants and other local people will continue throughout the year.
Socio-Economic Profile

The Kimberley has one of the fastest growing populations in Western Australia. The regional economy remains relatively dependent on large-scale resource extraction, with growing diversification into tourism and other service industries. According to the most recent Kimberley Economic Perspective (Department of Local Government and Regional Development and the Kimberley Development Commission 2003), the Gross Regional Product (GRP) in 2001/2002 was $1.6 billion. The top three industries of the region in terms of value of production are mining, retail trade and tourism, with pastoralism small by comparison and in sixth place, although pastoral leases cover about half the region's total land area. Government administration and defence is the leading employment sector, with the mining sector positioned thirteenth despite its overwhelming dominance in terms of GRP, reflecting the extremely low capacity of this industry to contribute to local employment. Pastoralism is dominated by live cattle exports.

The population of the Kimberley region is small, around 34,000, but growing at 4.8% annually compared to an average of 1.4% for the State. Around 47% of the population is Indigenous, with a median age of 21 years, compared to the Kimberley region's overall median age of 33 years (Figure 1). Aboriginal people comprise the majority of the long-term, stable population in the Kimberley compared with the non-Aboriginal population, which is in nature highly mobile, affected by seasonal conditions and the availability of work. If Broome and Kununurra, where most of the non-Aboriginal population live, are taken out of the picture, Aboriginal people predominate across the region. In the Shire of Halls Creek, Aboriginal people make up 84% of the population. Fertility rates for Aboriginal people are higher than for non-Aboriginal people; the proportion of Aboriginal people is therefore likely to continue to rise in the future.

Kimberley Aboriginal people are extremely diverse in their cultures and languages and have strong connections to their traditional lands and seas, founded in customary law. Native Title claims on behalf of many Kimberley groups have been recognised over Tjurabalan, Karajarri, Wanjina Wunggurr Wilinggin, Miriuwung Gajerrong, Bardi Jawi, part of Ngurrara, and Rubibi. Native Title processes are ongoing for Mayala, Uunguu, Kija (Ngarrawanjji, Purnuluulu, and Malarrongawarn), Lamboo, Gooniyandi, Kurungal, Koonjie Elvire, Nyikina Mangala, Balanggarra, Bunuba, Noonkanbah, Goolarabooloo-Jabirr Jabirr, Djaberra Djaberra, and Dambimangarri (see Kimberley Land Council 2005; Birch, this volume).

Like most of ‘outback Australia’, the economy’s orientation around export industries, particularly mining, generates significant returns to Gross Regional and Western Australian State Product, but has not addressed the inherent problems of local communities, particularly those of Indigenous peoples, who suffer high unemployment rates and extreme socio-economic disadvantage when compared to other Australians. The unemployment rate in the Kimberley region is twice the State average. Some parts of the Kimberley are more robust than others.

The Western Australian Government and the Kimberley Development Commission (KDC) (2001) have examined the Aboriginal component of the Kimberley economy. According to their report, thirty-one of the ninety eight pastoral stations in the region are owned by, or held in trust for, Aboriginal people, covering an estimated 9,738,073 hectares. Aboriginal reserve lands total 5,032,128 hectares (however, note section below on land tenure and management control). Kimberley Aboriginal people generate around $2.7 million per year from art and cultural activities and present 29 regional tourism products and experiences. In 1997/1998, at least $238 million in public expenditures was attributed to Aboriginal people. The data from northern Australia show that participation in customary and cultural activities are very significant components of the economy for Indigenous peoples, within a ‘hybrid’ economy, where State, market and customary activities are all important (Altman 2004). Traditional Owners in the Kimberley have shown a strong interest in businesses based on harvesting native biota that are compatible with maintaining the customary economy without significantly altering the landscape through forestry, agriculture and grazing (see Land Management Workshop). Altman (2004) argues that there are significant national benefits generated by these hybrid economies, including biodiversity conservation, and they
Figure 1: Some economic indicators for the Kimberley Region (Source: Department of Local Government and Regional Development and the KDC 2003)
deserve more active support—not in the form of the welfare State, but the State as the underwriter and guiding hand of development.

Indigenous and youth unemployment, and the rapidly expanding young population, were identified as key economic development issues during the formulation of the WA Sustainability Strategy in 2002 (Government of Western Australia 2002). Securing Indigenous economic participation is recognised as a key regional priority for the Kimberley (KDC 2003). The Federal Government’s recent announcement about Community Development Employment Program (CDEP) recipients being cut off after a year has been received with great alarm across the region. Australia’s largest CDEP Program is based in Broome. Although up-to-date statistical patterns illustrating the extent of Aboriginal unemployment are not readily available, the following two points demonstrate the challenges:

- In 1996, the vast majority of Indigenous adults in the Kimberley regions received incomes below $199 per week; and
- In 1998, the East Kimberley Aboriginal unemployment rate, in conjunction with CDEP figures, was 58%, while the West Kimberley unemployment rate, in conjunction with CDEP figures, was 63% (KDC 2003).

Proposals for Water Extraction from the Fitzroy and Canning Basins

Against this background of a very unevenly structured regional economy, with extremely poor outcomes for Indigenous peoples, in 1997 the WA Government called for Expressions of Interest from companies wishing to use water from the Fitzroy River and establish an irrigated agriculture industry in the west Kimberley. Western Agricultural Industries (WAI) won the tender with its proposal to develop a large-scale genetically modified cotton industry, using water extracted from the Canning Basin and building three dams on the Fitzroy River. A Memorandum of Understanding (MoU) was signed by the State Government and WAI in 1998, which gave approval for cotton trials and associated feasibility studies to commence.

These proposals for large-scale irrigated agricultural projects focused the attention of Traditional Owners and others to be more specific about what they value in the Kimberley region and their vision for the future. At a forum in 2001, senior Yawuru and Karajarri people spoke of the importance of clean and living water, and about how the clearing and chemicals that go with the cotton are not right for their country (transcript from Cotton on Trial, Public Forum, Broome Courthouse, Hamersley St Broome, Saturday 27 October 2001). Opposition to the proposal in the Kimberley became widespread, and publicity by environmentalists attracted national attention to the threats posed by the proposal on the natural and cultural values of the region, which are recognised as of World Heritage significance (KDC 2003). The Kimberley Land Council (KLC), Environs Kimberley (EK) and the Australian Conservation Foundation (ACF) came together in response to common interests in protecting the Fitzroy River from this proposed development, and worked closely with the community on a ‘Stopping Cotton in the West Kimberley’ campaign. In 2004, KLC, EK and ACF strengthened their partnership by signing a ‘Letter of Agreement’ committing to work together more broadly to protect the culture and environment of the Kimberley, while calling for the scrapping of plans for broad scale irrigated cotton in the region (Appendix B).

The WA Government in 2000 ruled out the option of any dams on the Fitzroy River, but extended its agreement with WAI twice (in 2000 and again in 2003) to enable consideration of industry development based on underground water supplies. In August 2004, the State Government announced it would not extend its MoU with WAI. During 2005, the WA Government expressed interest in large-scale water extraction from the Fitzroy River and Canning Basins. An Expert Panel was appointed to support the WA Department of the Premier and Cabinet with an investigation of options for enhancing the water supply to the State capital, Perth, including consideration of the option of transporting water by canal or pipeline from the Fitzroy River to Perth. The report of this Panel was released in May 2006, and ruled out all options due to lack of economic feasibility.

Planning

The concept of better planning that enables Kimberley people to chart their own course and be more forthright about their vision for the future has emerged as the most feasible alternative to ongoing disputation and community conflict about development proposals in the region. Achieving sustainability in development requires attention to cultural, social, economic and environmental dimensions.

A number of planning exercises relevant to sustainable development in the region have been undertaken in recent years, some of which have involved engagement with the local community, notably the Australian Government’s Natural Resource Management (NRM) planning process, and the Western Australia Sustainability Strategy (further information below). Several local and regional planning exercises with some community involvement are also underway or have been completed, including:

- Broome Local Planning Study;
- The Shire of Wyndham East Kimberley Local Planning Strategy;
- North Kimberley Land Use and Infrastructure Plan;
- Kimberley Sustainable Tourism Project; and
- Strategic Planning Analysis (undertaken by the Western Australian Government) to develop its Kimberley Sustainable Regions Program, which is focused on a range of specific funding grants for local projects (KDC 2005, 2003).
A number of land use planning studies have also been undertaken with Aboriginal communities. Nevertheless, the Natural Resource Management Planning exercise has been the most substantial regional initiative relevant to sustainable development. Community participation through the process of formulating the NRM Plan for the Kimberley has contributed to the vision of a future for the region by 2050, in which the land is largely unmodified with large areas and species protected and damaged areas restored. The people of the Kimberley value traditional land uses and cultural knowledge alongside scientific knowledge and land uses such as tourism, pastoralism, cropping and grazing (Rangelands NRM Coordinating Group 2004).

In 2002, community participation in the development of the WA Sustainability Strategy within the Kimberley region identified common core concepts of respect for people and country, and for local ownership and empowerment. The need for more employment for local people, more employment for young people, better health, education and housing, and more social and economic opportunities emerged as key to the vision for the future.

Despite these planning initiatives, the Kimberley lacks an overall strategy for sustainable development into the future that has been developed with the active participation of the community. The WA Sustainability Strategy includes plans for Regional Sustainability Strategies, but the development of such a strategy for the Kimberley is not currently scheduled (Government of Western Australia 2002, 2003). The Kimberley Appropriate Economies Roundtable represents an important step forward in this direction, aimed at supporting community decision-making on the future development of the Kimberley, based on the visions and values of the peoples of the region.

Sustainable Development Services and Institutions
Institutions, services and arrangements to support development that is socially, culturally, environmentally and economically sustainable are very weak in the Kimberley region. The following is a summary of key issues with these services and arrangements that were identified during the planning phases of the Kimberley Appropriate Economies Roundtable.

Business Enterprise Advice and Support
Business Enterprise Centres and Chambers of Commerce operate throughout the Kimberley, although their services are not specifically targeted to the needs of Indigenous peoples (KDC 2005). Kimberley College of Technical and Further education (TAFE) is currently providing a range of training and community development opportunities through their Centre for Indigenous Community and Economic Development, using innovative methods that allow for both career development for individuals and community-driven initiatives. For example, TAFE has assisted in the development of a partnership between several Indigenous controlled tourism businesses on the Dampier Peninsula, and encouraged nascent enterprises in gubinge horticulture. KDC is also active in providing support to a range of sustainable business enterprises, including art centres, flower farming and others. KDC is focusing its support for Indigenous economic development on the sectors of tourism, art and culture, aquaculture development and retail (Department of Local Government and Regional Development and the KDC 2003).

Nevertheless, insufficient support and advice is available throughout the Kimberley for many potential entrepreneurs, particularly Indigenous people who constitute almost half of the population of the region and face the greatest disadvantages in accessing services. The KLC’s Native Title responsibilities leave it with a limited capacity to provide sustained support on economic and community development. The new Indigenous Coordination Centres of the Australian Government are focused overwhelmingly on service delivery.

Land Tenure and Management Control
The Kimberley is dominated by land tenure systems designed to facilitate pastoral and mining development. Although mining and pastoralism remain important in the Kimberley, these activities have proven incapable of delivering the full range of benefits sought by today’s society (Greiner 2003). Members of the Kimberley Aboriginal Pastoralists Association (KAPA) have found that they have insufficient control over the management of their leases to meet their cultural, social, environment and economic requirements.

Unlike most Australian States, Western Australia has never adopted legislation to provide for Aboriginal land rights. Forms of inalienable freehold title, such as ‘Aboriginal freehold’ in the Aboriginal Land Rights Act 1991 (Queensland), are not available. The lack of such tenure provisions impedes Aboriginal people in their attempts to advance sustainable economic development. Aboriginal reserve lands in the Kimberley total 5,032,128 hectares but most of these are held on behalf of Kimberley Indigenous people by a seven-member government-appointed board, the Aboriginal Lands Trust. Seven pastoral properties purchased by the Indigenous Land Corporation on behalf of Traditional Owner groups across the Kimberley remain un-divested years after their purchase. Altman et al. (2005) in a review of the relationship between land tenure and economic development, concluded that communally owned inalienable freehold title, such as provided in the Aboriginal Land Rights Act 1975 (Commonwealth), is a sound framework for encouraging economic development.

Conservation Arrangements and Partnerships with the WA Department of Conservation and Land Management
Conservation management and associated nature-based tourism are amongst the most important economic opportunities available in the Kimberley, and areas that Indigenous people are attracted to as land managers, rangers, tour guides and tour managers. During 2003, the WA Government released an important discussion
paper, “Indigenous Ownership and Joint Management of Conservation Lands in Western Australia” (Government of Western Australia and CALM 2003). However, no progress has been made on the suggested legislative or policy changes, although the Department of Conservation and Land Management has instigated a number of Park Councils and other mechanisms to enable greater cooperation and benefit sharing with Indigenous peoples.

**Sources of Sustainable Finance**
Sources of finance for sustainable businesses are not readily available in the Kimberley region. Many Aboriginal people in the region do not hold assets and are unable to raise the necessary capital for small business enterprise. On the other hand, potential investors struggle to identify viable businesses in the region that are worthy of investment. KDC, with assistance from the WA Community Foundation, has been investigating establishing a Kimberley Community Foundation to provide a sustained source of funding through interest receipts for Kimberley-specific purposes as set out in a foundation deed (KDC 2005).

**Cultural Heritage Management**
Traditional Owners have expressed many concerns about the impact of economic development, particularly through tourism, on the cultural heritage in the Kimberley. Specific concerns have been raised about damage to rock art and cave paintings, as well as other cultural sites and values. Tourism in the region appears to be poorly planned and controlled in relation to cultural heritage protection, and as a result many tourists are damaging important cultural sites. Other sites, as yet undamaged, remain vulnerable. A range of measures to protect cultural sites through better management of tourism, cultural heritage listing and cultural heritage rangers is critically important if tourism is to deliver benefits without imposing negative impacts. In addition, Kimberley Indigenous people have expressed many concerns about the misrepresentation of their cultural heritage by non-Indigenous tourism operators. The adoption of protocols and agreements and other appropriate measures has been suggested.

**Natural Heritage Protection**
The outstanding natural values of the Kimberley region are widely recognised, as shown, for example through the recent World Heritage Listing of Purnululu National Park. According to KDC (2003), the region contains substantial areas that have the potential to qualify for inclusion on the World Heritage register in the future. However, no comprehensive strategy exists for identifying and protecting the region’s outstanding natural heritage values in the context of sustainable development. The WildCountry Science Panel of The Wilderness Society is currently undertaking a broadscale natural heritage assessment across northern Australia, which may provide an initial framework for developing an understanding of compatible uses for the region (see Traill and Mackey and Traill, this volume). However, a full natural heritage assessment will be necessary to ensure a robust and reliable framework for protection of identified natural environmental values.

**References**
Economic Development and Indigenous Governance

The current economy of the Kimberley region is characterised by a very uneven structure with overwhelming dominance of the Gross Regional Product by mineral resource extraction, and extremely poor outcomes for the Indigenous peoples, who constitute almost half the population (see Hill and Mann, this volume). The socio-economic disadvantage of Australian Indigenous people is generally pervasive, and in some cases declining. The life expectancy of Indigenous people is around seventeen years lower than the Australian population; the age standardised employment rate in 2002 was 3.2 times higher for Indigenous than non-Indigenous people; and Indigenous household and individual incomes are on average lower (Steering Committee for the Review of Government Service Provision 2005).

Globally, many Indigenous peoples face similar socio-economic disadvantages. In North America, the Harvard Project on American Indian Economic Development was founded in 1987 to understand and foster the conditions under which sustained, self-determined social and economic development is achieved among American Indian nations (http://www.ksg.harvard.edu/hpaied/). Over two decades, this research has identified the most important determinant of successful economic outcomes as Indigenous nation building—strategic planning founded on strong Indigenous governance systems (Cornell and Kalt 2003, Cornell et al. 2005). The approach of driving economic development through resource assessment to identify opportunities and constraints has consistently failed Indigenous peoples, both in Australia and internationally.

An Australian Indigenous Governance Project that builds on the research findings of the Harvard Project has now been established in Australia under the leadership of Professor Mick Dodson at the Australian National University (http://www.anu.edu.au/caepr/). Governance can broadly be defined as the processes and structures through which a group, community or society makes decisions, distributes and exercises authority and power, determines strategic goals, organises corporate, group and individual behaviour, develops institutional rules, and assigns responsibility for these matters. Dodson and Smith (2003) have suggested seven key principles for successful Indigenous governance:

1. Stable and effective organisational structures—how well governing bodies structure, manage, coordinate and communicate the full range of their functions;
2. Capable and effective institutions—these are the ‘rules of the game’ that regulate and delimit the behaviour and authority of community members, organisations, staff and leaders;
3. The limitation of governing powers and separation from day-to-day management—who controls what?
4. Fair and reliable dispute resolution processes—good governance means being able to protect all the different rights and interests of all community members;
5. Professional financial management and administrative systems and backup, and a competent community bureaucracy;
6. Designing economic development strategies and policies—for the whole community, not just parts of it. Community members and their governing organisations have to come to some agreed understanding about two key issues: what kind of economic systems they want to build and support, and which economic strategies and activities they will pursue to get that; and
7. Cultural ‘match’ or ‘fit’—underlying all these key ingredients and principles of good governance is the issue of community legitimacy and mandate.

The Appropriate Economies Project recognises the significance of this research, and in particular, principle six above—a key determinant of economic success for Indigenous peoples in the Kimberley will be the extent to which development is driven through the Indigenous community building their own planning, decision making and governing capacity. Kimberley Indigenous people have clearly established that they want an economic system in the region that is culturally, socially, environmentally and ecologically sustainable.
The paper on Indigenous participation (Golson, this volume) describes the strategies used to inform and engage Indigenous people in the Roundtable, including steps before, during and following the actual forum. The role of the KLC has been critical: it is a community-based organisation representing the land and sea interests of, and governed by, Kimberley Traditional Owners (see also Thorburn, this volume). The KLC also ensured that its cognate organisation the Kimberley Aboriginal Law and Culture Centre played a strong role before, after and during the forum.

Neo-classical Economic Theory and Ecological Economics

An appreciation of the benefits of ecological economics methodology requires some understanding of the problems with the dominant economic paradigm, neo-classical economic theory. Neoclassical economic theory emphasises the efficient operation of the market as the most important means of ensuring economic well-being and sustainability for all, including Indigenous peoples (Hamilton 1997). The central concept is that of an ‘economic agent’, motivated to maximise his/her welfare through buying and selling in the market, operating in free, open competitive conditions. Economic and social problems appear through ‘market failures’, for example monopolies, inadequate information, government subsidies, or ‘externalities’, factors that are not included in the market. Neo-classical economic theory views sustainability problems as arising from the fact that many environmental and cultural factors are essentially external to the market, including for example:

- The resource base, both renewable and non-renewable;
- The operation of the environment as a waste sink, particularly of pollution; and
- The operation of the environment as a producer of amenities, such as undisturbed forests or clean rivers.

Economists therefore suggest that sustainability problems can be solved by means such as:

- Creating new markets for environmental and cultural goods by creating new property rights, e.g. water licences, tradeable forest licenses, taxes;
- Eliminating subsidies that distort the free operation of the market; and
- Estimating prices of non-priced goods through valuation techniques.

Neo-classical economic theory underpins, for example, the recent arguments that Indigenous economic underdevelopment problems in Australia can be solved through the creation of new individual property rights to replace current systems of communal ownership of inalienable freehold title (Hughes and Warin 2005). Altman et al. (2005) demonstrate the fallacy of this argument. Nevertheless, neo-classical economic approaches have proven useful in some situations, for example, by assigning property rights to water and by demonstrating the global values of ecosystem services to be worth at least $20 trillion annually (Daily 1997). However, concerns remain about the validity of the whole concept of extending the market to encompass entities that are essentially non-market goods, and the difficulties of estimating prices for goods such as culture are extremely large. The Appropriate Economies Project has therefore turned to the emerging discipline of ecological economics for better and more appropriate tools to foster sustainable development.

Ecological economics starts from the viewpoint that the market of human consumers and producers is situated within the biosphere, and is completely dependent on the biosphere for its life support services. In this model, items viewed as ‘external’ to the market such as the natural resource base, are, like the market, actually situated within the biosphere (see Figure 1, Diesendorf and Hamilton 1997, Hamilton 1997). The economy is recognised as being contained within the global ecosystem so that complex interdependence, feedbacks and the scale of economic activity are critical to sustainability. As well as operating to maximise their welfare through buying and selling, people also have roles as ‘citizens’. As citizens, humans participate in social interactions, acting not only to maximise their individual welfare through consumption, but also to develop cultures, institutions and processes that protect the welfare of the community and the biosphere as a whole. The role of these cultural institutions and humans as citizens is viewed as important to solving sustainability problems, not simply the expansion of the market to factor in externalities. Ecological economics uses methods like:

- Open forums and discussions between key stakeholders;
- Compilation of data-bases and data analyses;
- Working groups for issue and solution identification; and
- Criteria formulation and multi-criteria analysis.

The Appropriate Economies Project drew on this theoretical context to constitute the Roundtable forum as a broadly inclusive gathering, focused on small businesses rather than large capital-intensive businesses like mining. Small business is recognised as enabling an increased degree of Indigenous participation and control over business decision-making. Small business therefore fits the Roundtable’s focus on supporting Indigenous communities to build their own planning, decision making and governing capacities, as discussed above (Fuller and Cummings 2003, see also KLC/EK/ACF Letter of Agreement in Appendix B).

The Workshop and Plenary Session parts of this Report describe how smaller working groups at the Kimberley Roundtable forum developed sustainability criteria and refined them through open discussions at plenary sessions to form the ‘Statement of Principles’. The working groups subsequently analysed the performance of their economic sector against these criteria to identify the most important actions necessary to support these principles.
Integrating Local and Global Perspectives

These strands of Indigenous governance and ecological economic theory combine to highlight the usefulness for the Appropriate Economies Project of community-based and participatory approaches, which are widely recognised as critically important to achieving sustainability (Borrini-Feyerabend et al. 2004, Ghimere and Pimbert 1997). However, community-based approaches, although necessary to achieving sustainability, also suffer from weaknesses. Lane and Corbett (2005) have demonstrated that the community-based approaches fostered by the Australian Government through the Natural Heritage Trust have served to systematically marginalise Indigenous peoples. Cross-scale integration, the bringing together of bottom-up and top-down processes, was identified by Berkes (2004) in a review of community-based conservation as extremely important to success.

In addition, global climate change is currently highlighting the reality that the future of all regions of the world, including the Kimberley, is linked and that local community action alone cannot secure sustainability (Barber et al. 2004). The Millennium Ecosystem Assessment (MEA 2005) shows the planet has undergone extraordinarily rapid environmental change over the last few decades—34% of terrestrial earth is now cultivated; 35% of mangrove forests were lost in the last two decades; 25% of coral reefs are badly degraded. The MEA was established in 2001 to measure the global trends in ecosystem services, mandated internationally through the United Nations Environment Program (UNEP), and with official status for scientific advice to a number of international instruments, including the Convention on Biological Diversity (CBD), Ramsar1 and others. The MEA investigated measures of links between environment and human well-being, and found ongoing declines in 19 of 22 indicators, grouped into provisioning services, regulatory services and cultural services. The results demonstrated that the connection between ecosystem services and human well-being is very strong but the casual connections are not immediately obvious. Conflict exists between collective costs and individual gains, and the feedback loop between environmental decline and human well-being is slow and operates at a distance.

Importantly for the Kimberley Appropriate Economies Roundtable in October 2005, the MEA paid significant attention to the challenge of linking local and global perspectives. On 17-20 March 2004, the MEA held a conference Bridging Scales and Epistemologies: Linking Local Knowledge and Global Science in Multi-Scale Assessments, with support from The Christensen Fund, one of the key international organisations supporting the Roundtable initiative. The conference fostered dialogue among academic and Indigenous experts on the central challenge of cross-scale integration (see http://www.millenniumassessment.org/en/About.Meetings.Bridging.Proceedings.aspx). Interaction between traditional and scientific knowledge and local and global perspectives becomes more important at the finer, more local scales. A key finding of the assessment is that effective responses are often facilitated by ‘bridging organisations’, fostering coordination and collaboration and providing links between local, national and global levels.

1 Ramsar is the common term used for the Convention on Wetlands which was signed in 1971 at the town of Ramsar in Iran. Ramsar is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. There are presently 152 Contracting Parties to the Convention, with 1601 wetland sites, totaling 134.7 million hectares, designated for inclusion in the Ramsar List of Wetlands of International Importance.
The Appropriate Economies Project has therefore been developed to provide linkages between local, national and global peoples and organisations through several mechanisms. The Vice-Chair of the IUCN Commission on Environment, Economic and Social Policy (CEESP, http://www.iucn.org/themes/ceesp/) travelled to the Kimberley Roundtable forum from Geneva to give a keynote presentation and participate in workshops on conservation partnerships. CEESP is one of six Commissions of the World Conservation Union (IUCN) whose mission is to provide advice on the environment, economic and cultural factors that affect natural resources and biological diversity, and to provide guidance and support towards effective environmental conservation and sustainable development policies. CEESP bases its policy work on the maxim “good policy comes from good practice” and emphasises documentation of local case studies, workshops and learning-by-doing (Borrini-Feyerabend et al. 2004). CEESP is very active in developing criteria related to equity and human rights in sustainability and fostering these into binding national obligations, for example, through the Convention on Biological Diversity.

The President of Ecotrust Canada and a First Nations Board Member, Chief of the Tsleil-Waututh Nation (http://www.burrardband.com/), travelled to the Kimberley forum from Vancouver. Ecotrust Canada’s core proposition is that long-term sustainability is fostered and encouraged by building partnerships with entrepreneurs, rural communities and First Nation peoples through the provision of services embedded in an overall mission of creating a conservation economy, defined as:

- Providing meaningful work and good livelihoods;
- Supporting vibrant communities and recognising Aboriginal rights and title; and
- Conserving and restoring the environment (http://www.ecotrustcan.org/index.shtml).

Subsequent to the Roundtable forum, the Project partners obtained support from Land and Water Australia to undertake a ‘proof-of-concept’ study of the relevance the Ecotrust Canada approach in northern Australia.

The Christensen Fund (http://www.christensenfund.org/), an international group based in the United States of America provided substantial funding to the forum, but was unable to attend. The Christensen Fund has an overall mission focused on sustaining ‘bio-cultural diversity’ with links to a myriad of relevant policy initiatives globally. Many groups with national-level missions attended, including:

- Arnold Bloch Leibler, a leading Melbourne-based law firm with strong expertise in the development of cross-cultural legal frameworks with Indigenous peoples;
- Australian Institute of Aboriginal and Torres Strait Islander Studies, Australia’s premier national research organisation focused on Indigenous issues, based in Canberra;
- Centre for Aboriginal Economic Policy Research, based at the Australian National University in Canberra;
- Universities: Murdoch (Perth), University of Western Australia (Perth);
- Non-government organisations with a national focus: WWF, The Wilderness Society, Australian Wildlife Conservancy, Poola Foundation as well as the Australian Conservation Foundation; and
- Government agencies: Several Western Australian government agencies also attended.

The Roundtable forum was structured to ensure that people with these national and international perspectives were available in workshops to provide insight and linkages representatives from traditional owner groups and Indigenous and local organisations and enterprises. Fundamental to this approach is the belief that with respect and humility, people with very different backgrounds, status and experiences can communicate in an equitable and liberating manner. However, care was taken to ensure a majority of Indigenous participants and to select national/international delegates with cultural sensitivity who did not seek to dominate. Subsequent evaluation of the forum (see Appendix A) identified a number of mechanisms that could have made this bridging more effective including:

- More representation from locally successful businesses or enterprises;
- Greater representation from funding agencies, governments and the Kimberley Development Commission;
- Field trips to ensure national/international participants had greater understanding of the local situations; and
- Greater use of Indigenous languages and interpretation in the plenary and workshop sessions (which would have required more time).

Guiding the Collaboration: The KLC/EK/ACF Partnership

The Kimberley Roundtable forum therefore provided opportunities for:

- People acting in their roles as citizens with cultural, scientific and other knowledge to set the parameters of and criteria for sustainability in the Kimberley (underpinned by ecological economics theory);
- Kimberley Indigenous peoples to build their own planning, decision making and governing capacity (underpinned by Indigenous economic development theory); and
- Bridging between local, national and international perspectives on sustainability (underpinned by recognition of the global dimensions of sustainability).

Clearly, this is a complex undertaking with many underlying themes, inherent conflicts and important issues circulating within what, at the most superficial level, is simply a “talk-fest” held over three days. However, the forum was built on a very strong foundation through the KLC/EK/ACF collaboration and Letter of Agreement. These three organisations had been working together since 1996, building mutual understanding and trust (see Hill and Mann, this volume). The Letter of
Agreement addresses the key issues that can cause conflict between environmental and Indigenous organisations—creation of protected areas, rights to land and water, the cultural basis of environmental management and Indigenous decision-making rights (see Chapin 2004). Planning for the actual forum began some eighteen months prior to its implementation, including a formal planning day hosted in October 2004 (Hill and Golson, this volume).

According to Daniels and Cheng (2004), collaboration is emerging internationally as an important approach to natural resource management that promotes creativity, values difference and seeks mutually acceptable outcomes. Collaborative approaches emphasize the thoughtful process of deliberating on complex and often controversial issues, finding much in common with the theory and practice of deliberative democracy (Habermas 1989, Parkins and Mitchell 2005). Collaborative approaches have arisen in part from growing dissatisfaction with both the agency-driven public participation model and sector-driven negotiations from fixed positions, which often arise from conflictual campaigns around particular issues (Lloyd et al. 2005). When analysed in relation to current theory of collaborative approaches to natural resource management (see Daniels and Cheng 2004), the Appropriate Economies Roundtable process demonstrates robustness against key attributes, including explication of a common purpose, adoption of multiple approaches to communication and an emphasis on mutual learning.

Despite explicit support from the Western Australian Premier, the Roundtable initiative faces considerable opposition from some government agencies, arising in part from weak principal-agent connections in this vast State. More flexible and adaptive government-mandated processes would provide for greater articulation with the Roundtable initiative, and enhance the potential for sustainable development in the Kimberley region.

References


Kimberley Appropriate Economies Roundtable Forum Proceedings
Top: Cattle use the Fitzroy River as a watering hole. Left: Amanda Martin, John Silver, Ronnie Jimbiedie. Right: Desmond Hill

Left: Joe Brown, Tanya Vernes, Ari Gorring, Lennie Hopiga, Max Haste, Sue Hayes, Neville Poelina, Anne Kogolo, Ben Wurm, Kate Golom, Micklo Corpus, Sam Lovell, Michelle Cades, Saah Yu

Right: Tom Lawford, Terry Murray, Hughie Bent, Tommy May, Ronnie Jimbiedie, Joe Brown, Daisy Andrews, Peter Skipper, Anne Kogolo, Rosie Mulligan, Lucy Walgarie

Left: Sammy Lovell, Gary Scott, Neville Sharpe, Neville Poelina, Dickie Bedford, Rosemary Nuget, Laurie Shaw, Rosie Shaw, Gary Taylor

Right: Ben Wurm, Peter Price, Jason Fowler, Scott Goodon, Gabrielle O’Depey

Kimberley Appropriate Economies Roundtable Forum Proceedings
Above Left: Richard Hunter, Micklo Corpus, Tom Lauford, John Silver, Ronnie Jimbobie, Tommy May; Above Right: Desmond Hill, Ian Fowler, Ben Wurm, Peter Price; Centre Right: Rosemary Hill, Grazia Borrini-Feyerabend, Dave Morgan, Ari Gurrong, Shirley Brown, Mark Ditcham; Bottom Left: Danielle Eyre, Anna Mardling, Michael Ramsey, Peter Seidel, Tom Birch; Bottom Right: Tommy May, Joe Brown, Mona Chuguna, Peter Skipper
OPENING AND KEYNOTE ADDRESSES
Can I first acknowledge the Bunuba people, Ian Lowe of the Australian Conservation Foundation (ACF) and my old friend Don Henry, the organisers, Environis Kimberley (EK) and the Kimberley Land Council (KLC), and Chairman Tom Birch.

I would have to say, when I was first asked by Anna Mardling and Kate Golson to talk at this conference I was reluctant to even talk. The first three words that came into my mind when I heard about this forum, and every other forum that’s been held in the last decade, the first three words are ‘Why would you?’ or ‘Why would I?’ think that change could be made if change hasn’t been made in the last ten years. So, I thought today that I would come along and talk about a journey, not only my journey in Fitzroy Crossing, but that of a couple of case studies that demonstrate sustainability through partnerships—one of which is a partnership we are building with Conservation and Land Management (CALM), and another partnership that was built by people in the late 1990s in the fight for the Fitzroy River and the debate about growing cotton and the more recent debate about the canal.

For people who don’t know me, I’m from Fitzroy Crossing and my people are Bunuba. I had never had much to do with Indigenous affairs until about 1992. I was employed as an electrician running the maintenance division at the BHP mine about eighty kilometres from town here. My experience at BHP in the 1980s and 1990s was that it was one of the largest public/private bureaucracies, and it was there that I learnt what I would eventually confront in Indigenous affairs—the difficulties Indigenous people have not only with bureaucracies, but dealing with people from outside our communities. Planning, budget management, leadership training, I could access at BHP and I benefited personally from this, but I was still raw in political skills. As the old story goes, ‘If you can master blackfella politics you can handle state and federal parliament, or any international forum’.

In 1993, I resigned from BHP when my mother became ill and wanted to set up our own community. Now there are about twenty of us that live down at the Old Crossing. We are part of the Bunuba group and our clan group is Danggu. I think what drove me to Bunuba and to establish our community was to work with our community and try and lift people off welfare. I think for myself and Tom Birch and many other people in this room today, the struggle that we have in Fitzroy Crossing, and in the Kimberley—right across northern Australia—is poverty in our Indigenous communities.

But one of the key things I learnt when coming back to my family—remember that old adage that you can choose your friends but you can’t choose your family, especially for someone like me who is related to about five to six hundred Bunuba people—was how to work with my immediate family and my extended family. People poor in wealth and spirit and whose lifestyle was based around a subsistence lifestyle—living from day to day, from sunrise to sunset, a twenty-four hour period, turning over and over, 365 days a year. So it took a while to get used to family. But throughout that time working with my family and seeing a lot of our Bunuba people, the little successes that have happened in the last six years gives us enough passion, not only me but other Bunuba leaders, to continue with what we are doing. If you can start with one person, it can grow to two, it can grow to three and eventually, hopefully, it will grow to six hundred people— motivation for Bunuba people to start thinking about their own wellbeing.

Yet, while we as a community strive to make changes in the Fitzroy Valley—not only Bunuba people, but Walmajarri, Goominyandi, and Wangkatjungka people—we really live in a small goldfish bowl. I use the analogy of the goldfish bowl to highlight what really holds us back: that we think this is our little world when there is a great big world outside here that has other best practices that we can bring back to our communities. And sometimes people like myself and others feel powerless when we try to articulate change and the needs of our communities, especially with policy makers and industry based sectors, when our advice and input into conferences like this one here falls on deaf ears. This is really the key thing that I think people must start thinking about, not only Aboriginal people but also non-Aboriginal people that put themselves forward to come and help our people and communities, and are therefore dependant on our wellbeing, our community and our lands.

While our communities continue to struggle with poverty, outside agencies like ACF—and I use the word agency not as a derogatory term—there are many agencies that are out there
as key stakeholders that can help us with our communities. I see our communities struggling with poverty, and agencies struggling with a diminishing public sector resource base and an ever-increasing market driven economy that wants access to take natural resources like iron ore, like uranium, and like water out of this river.

One day, there will be wars fought over water. This market is demanding we use our resources, and that's the big conflict I see in the Kimberley for our elders, especially our elders. I've witnessed along the Fitzroy River: fighting for a cultural asset, and the market looking at that asset as an opportunity to make money. It is the position of these two sectors in the Australian community that has really become pivotal to the future protection of our environment. On the one hand, you have a poor Aboriginal community that needs to make money out of anything if possible, and a middle class sector in our Australian community, in our large cities, wanting to protect the last vestiges of our northern wildernesses. Not only in our national parks, but large areas outside national parks: 'countries' to come and visit—desert country, ranges, saltwater people, things like that.

I think that is the challenge. We still haven't got that link, that real connection between the integrity of law and culture—what people like the Kimberley Aboriginal Law and Culture Centre seek to provide, maintain and help Aboriginal people in the Kimberley—and the industry base, whether you be in environmental protection, whether you be in the money making business. Establishing that link, that's the challenge.

I think you have to be a supreme optimist to be an Aboriginal person otherwise you would have slashed your wrists years ago. I sometimes equate being an Aboriginal person with being a Collingwood supporter. Really!! You will only ever see one premiership in your lifetime if you are a Collingwood supporter. The same for an Aboriginal person, only every so often will we see successes; they are few and far between.

When I said 'Why would you?', I myself have participated in initiatives in the Kimberley in which I feel guilty about how far I have raised expectations in people. To see that look on people's faces when the initiative ends, that really, not only for myself but also for non-Aboriginal people, that we've failed people. I want to take you through some examples of what has happened here in the Kimberley and ask, 'Why would you?'

So, 'Why would you?'; after begging for help from agencies that are legislatively required to assist with such requests, after asking for money and help, and to have the State Government subdivide seventy-five percent of your land and give it to your neighbour without your permission.

Or, after a community like here in the Fitzroy Valley campaigned for years for a new school, a school that in thirty five years has only produced four high school certificates, to have an approval by the previous Liberal government to build our school in Fitzroy Crossing, to have our money taken from Fitzroy Crossing and put into Broome because the voters there are turning Liberal.

Why would you, as an Indigenous Kimberley pastoralist, participate in a process like this after being tricked into thinking the price of your cattle could be raised and to be cut off at the last step by egotistical, politically minded lunatics sitting on boards in Canberra?

After years of affirmative action campaigning to get Aboriginal people into state and federal bureaucracy, to now see chardonnay-swilling black bureaucrats assuming a mortgage on our plight and forgetting about us. Why would you, when you wake up in an environment in Aboriginal communities where there is asbestos housing, houses that are banned in the cities because people are getting sick from them? Yet our people are condemned to wake up to this everyday, children and adults.

Why would you even believe in a Native Title system when the very system and the structures and organisations in the Native Title Act reject and knock back divestments to Indigenous Traditional Owners, and reject the traditional rights of Indigenous owners of these properties; your rights to enjoy the social and economic fruits of your country?

That's what I ask myself, and I reckon Aboriginal people should be asking that too and bringing it up at this conference. Why would you?

But as I said, Aboriginal people are supreme optimists, they're survivors. They're here, they're not going to move from the Fitzroy Valley. You're not going to move the Miriwoong people, the Karajarri people. That's their country. So we have to find a way as Aboriginal people, and non-Aboriginal people, as an Australian community, to find ways to create what this conference is about—appropriate sustainable economies.

The very word sustainable—let's start explaining to Aboriginal people because I don't think non-Aboriginal people have an idea what sustainability is yet. What does the word sustainability mean? Does it mean you get money every week? Does it mean we're going to keep this economy going? Does it mean we put your law and culture to one side for a little while but we'll get it back in ten years time? That's what I say is one of the greatest traits of Indigenous Australians, the ability to survive, especially in this rapidly changing world. And it's changing around us at the moment.

Aboriginal people need to start taking control of their destinies, really talking up. I say to Aboriginal people, 'Talk constructively, think about what you are saying, think strategically, and think long-term'. And though the transgressions of the last two hundred years have created an environment of distrust and disharmony in communities, Aboriginal people will continue to seek partnerships and solutions to maintain that very basic value that our old people talk about—law and culture. Any initiative has to have that basis from day one, whether tourism or even the environmental protection mob who want to count how many sawfish are in the river, they have to understand
that people eat that rare sawfish.

I had this British lady ring me up, wanted to make a documentary. I said 'What's it about?' She said, 'We are making a documentary about freshwater sharks of the world and we want to film the two sharks that are in the Fitzroy River'. I said, 'That sounds interesting, what are you going to do?' She said 'We would like to catch one', and I said 'That's easy, I'll get my two sisters, they'll catch you one. You can only catch them at certain times of the year'. She said 'That's alright'. I said 'What else you going to do?' 'After filming it, we will let it go'. I said 'You can't do that'. She said 'Why not?' and I said 'Because my two sisters want to eat that sawfish'. She said 'What'? So after finishing our discussion I never heard from her again. So it's understanding that rare things get eaten in this country but they're not rare here; they may be in the context of the world, but these sharks are not going to go anywhere, you only catch and eat them at one time of the year, and only Aboriginal people are going to eat them.

But Aboriginal people need to think about the management of our catching, not only of sawfish and sharks, but dugong and turtle. I think Aboriginal people should welcome the level of representation from the ACF. I think our Aboriginal communities should respect the commitment shown by Environs Kimberley, and definitely respect the ongoing support from the KLC. And that history of ongoing relationships, not only of these three organisations, but of Australian people to ably manage, in the context of this conference, our northern wildernesses, rangeland management, law and culture. This conference can continue, even if it is only an inch at a time, to build on what's been done, to build opportunities to develop sustainable projects—but never forgetting that intrinsic value that Aboriginal people place on their lands and law and culture. That's got to underpin everything.

To finish, I spoke about two case studies that we could look at, the first of which is just starting, but both case studies are about leadership. But a little bit different.

The first one is about our cattle company, which owns Leopold and Fairfield pastoral leases, developing a management base to run a herd on about five hundred thousand hectares of land. The cattle company in its wisdom (the Board of which June Oscar chairs) and the proactive approach of CALM to be able to say, 'What can we do together, from an Indigenous enterprise base and a conservation land management department, to bring these two entities together with similar objectives? The cattle company not only wants to make money, but also to think about having fifty to sixty percent of its land turned into conservation zone.

How do you start that process of talking about natural resource management and looking after your lands, and again 'Why would you?' Why, after the acquisitions of the 1970s, when CALM just rushed through here and sectioned off all our country and turned it into national park without asking Aboriginal people? Putting these national parks into Section 22 of the CALM Act and then, disgracefully, for thirty years not even developing management plans for our national parks and no inclusiveness of Aboriginal people. It’s only been in the last three years that the Labor Government has just woken up and gone, “That’s interesting, there are a lot of Aboriginal people up there in the Kimberley, wonder if they would be interested in us giving their country back to them?” So, that’s the history. But today it is an emerging partnership, a good case study of how, from an Indigenous enterprise base, it is possible to continue to operate in a conservation and land management framework of preserving our flora and fauna on our pastoral leases while running cattle. At the same time, the cattle company gets access to training networks, IT networks, and the whole resource base that CALM brings.

I think ACF and Environs Kimberley have to be facilitators in this as well as the Land Council, picking up on Indigenous enterprises, and they don't have to be cattle companies. The second one, and the one I have watched for a while, is the long running debate in which our elders fought for this river in the 1990s when the cotton growers were here talking about sectioning off our country and running all the water out of the Fitzroy. Putting a dam up in our country based on surveys done in the 1950s. At the time, the choice was the Ord or the Dimond, but they went with the Ord and told the people, 'Sorry but you've got five years to get off Argyle Station and move into Kununurra'. At the same time they were thinking about a Jewish settlement in the Kimberley, well before Israel was formed. This is the history that has gone on behind Aboriginal people, who were not involved. A river that puts out about six and a half thousand gigalitres of water; rice growers in the Murray Darling area, their eyes glaze over when you tell them figures like that.

I often think about the 1998 trip we took with six Bunuba people and nine non-Aboriginal people and good leaders like Bob Brown and John Sinclair, Ian Morris from the Territory, journalists, supported by Bunuba. We took fifteen Australians—black, white and brindle—and I look at that crew that was cruising through this country for ten days and I thought that colour really has nothing to do with looking after country. Aboriginal people have strong connections but non-Aboriginal people are there to help too. And the birth of Environs Kimberley and people like Tim Fisher and Peter Garrett, and how Alan Brimeblecome came here and we said 'Just settle down Al, take it easy, we know you want to do something, but come and talk to us. And if you can't talk to us, how about we nominate a facilitator that might be credible’, and so Rick Farley comes along and suddenly old Al realises the value of our river. So, he then says he doesn't want to put a dam on our river. People from all around Australia, and internationally, the Wild Rivers Commission, helped Aboriginal people at the time. This model is a great example of "people power". Poor people in a Western sense but rich in Aboriginal culture, our elders come out of the woodwork just like that.

Non-Aboriginal people came out when the canal debate was on. Suddenly everyone realises after talking about the canal
Why Would You?

that you are not only dealing with the river, you are also dealing with the people. That's what made that example so great—leadership and people power. It is people power that's sitting here—what I call a latent movement that sits there and you light a fire with the canal debate, you light a fire with putting a dam on the Dímond and it will wake up.

In finishing I want to say, it's not my job to tell you mob how to work together. Because I think you can cut back to what, at the end of the day, people are looking for. I think about my own family and tell my children it doesn't matter what this government or any person tries to take from you—your money, your trousers or steal your car—they can't take your colour, they can't take your pride and they can't take your spirit. Only you can take that and give it away. So that's what Aboriginal people are talking about—survival of our families, and getting our families back together.

The last one is, I think, about this conference and this fantastic country of ours and our great river, not only Bunuba country but this whole Kimberley, and I think to myself that Aboriginal people, and I would hope that non-Aboriginal people that travelled up here draw strength from this land. Doesn't matter if it is forty-five degrees out there, it is a beautiful country from the desert to the ranges to the saltwater. We have a responsibility as Aboriginal people, we know that, and the more we tell Australian people about our country and about the values of it, the more people will realise the spirit in this country.

I have given a few little things in my talk but there are other people who are coming to help, others wanting to stand up for their country and culture. Others who want to help make a glue that all together as people—not as opposition, or as black or white—but as people who value this country, who value the well-being of our families, and who recognise that terrible situation of poverty that we Aboriginal people are in. If we can alleviate it without destroying the culture and our country, then you will have certainly done well today, if this is the first step.

Thank you.

Joe Ross is a Bunuba Traditional Owner and community leader.
I would like to start by explaining a little about my personal experiences and beliefs. As a Nyikina man, I have been told the Dreamtime story of the Fitzroy River. We believe, when the world was soft, a man called Wunyumbu was fishing in a billabong called Mijirayikan (past Liveringa). He used a special poisonous tree called Majarla to poison the fish to feed his family. While poisoning the fish a huge serpent rose up, and Wunyumbu speared the serpent and jumped on its back. He rode on the serpent, travelling to Fitzroy Crossing, creating the Fitzroy River system of plants and animals as he went. All things grow from this creation of the river. This is the foundation of our identity.

The Fitzroy River is a part of us and we are a part of the Fitzroy. If we look after the Fitzroy, it will look after us.

For me, this Roundtable is about the future of the Raparapa, the Fitzroy River. It is time for us to show our responsibility and look after it for our kids and their kids—all people, black and white. This spiritual connection to the river and our land can be difficult for non-Aboriginal people to understand. For over forty thousand years our people have been connected to this river, in ceremony and life and death. It has given us food to eat, water to drink, it is part of our spiritual beliefs. It makes us strong. Our grandparents and their grandparents for thousands of years were born, lived and died along this river. This Fitzroy River is mighty and powerful. We have to treat it with respect. We have a responsibility as Aboriginal people to do what is right to ensure its values are protected for the future generations.

The Law of this river has been passed from generation to generation for tens of thousands of years. We must make sure that the Fitzroy River flows freely and is not interfered with or blocked. All the plants, animals and people depend on this river, and not just people who live along the river but also coastal communities. The river is central to our ecosystem and to our lives.

I would now like to talk more generally about the Aboriginal perspective on development in the Kimberley, and about this Roundtable. I would like to acknowledge the role of Environments Kimberley and the Australian Conservation Foundation, who together with the Kimberley Land Council, have put the Roundtable together. This is the result of an agreement made between the three organisations when the cotton proposals were still being pushed onto the Kimberley. Well, we beat them!

I would also like to acknowledge all the people who have made such a great effort to travel here, from each end of the Kimberley—Kununurra in the north, and Bidyadanga in the south—and from around the world, from Canada, Switzerland. All your contributions to this Roundtable are very much appreciated. And we need help from all people.

It’s fantastic to see that this Roundtable is very much a community-driven process. It is not something other people have told us we should do. We have received only a small amount of Government funding for the meeting. This is good. It means we own the Roundtable—it is for us and about us. There have been other talks about the future of the Kimberley, such as the Our Place, Our Future conference in Broome in 1998, the Bungarun meeting in 2004, and The Crocodile Hole report of 1992. This Roundtable builds on those earlier successes.

At the end of this Roundtable, we expect to have a clear Statement from you all about how you think development in the Kimberley should proceed. This will be used to put forward our views to those who think they can make decisions for us, showing them that we have our own ideas and that we are pretty serious about controlling our own future. All the things you discuss during the next couple of days will feed into that statement.

The Kimberley Land Council, along with others, has a great interest in the development of the region and we have already done a lot of work looking at what the future should hold. I will now go through some of the things we have found out.

All Kimberley Aboriginal people, of course, have a long history ‘on country’. That’s really long—thousands of years. Throughout most of those years, we have made a good living from country. At the same time, we made sure that we looked after country—our lives depended on it. As the Kimberley non-Indigenous people settled the region, we were pushed to
one side in both our ability to use the resources of the land and in our ability to influence what was done with and to country.

It was only forty years ago that the Miriuwung and Gajerrong people had their country drowned for the Ord Project. Some were loaded on to trucks and dumped in the Kununurra townsite. Others were left to escape the rising flood as best they could. It was also around that time that we were recognised as citizens in our own country.

Over those past forty years, there have been some significant changes in our ability to both use country and to have a role in decisions about country. These changes have come partly through legislation like Native Title, but also from a broader recognition of our moral rights, our human right, our knowledge and skills, and especially our connection to country and the relationship between identity, culture and well-being.

As we move into the modern context, we have had to become organised in terms that allow us to engage with the ‘mainstream’ community. To do this in the area of land management, we have to articulate or speak clearly and strongly about our beliefs, values and aspirations for country. The Kimberley Land Council has been actively involved in developing a clear picture of what country means to us, and what we must do to care for it.

The centre of this picture is culture, rights and responsibilities. Culture, although it is very complex, is basically who we are, it is our foundation. From our culture, we have certain rights to country and also certain responsibilities to look after country. This applies now, just as it did one hundred, one thousand, or ten thousand years ago. From this cultural centre, we develop a vision for country and a plan for seeing that vision turned into actions. We undertake projects that work with and for country, and get involved in making decisions about how country is managed. What we should end up with is a ‘sustainable development plan’ for country. This Roundtable today will help us make that plan.

Our culture and the rights and responsibilities that go with it define who we are. But defining who we are can only be done in terms of country and our strong relationship to it. I like to describe this idea of country as ‘a place of belonging’. It is not just an area of land—it is a source of both physical and spiritual sustenance. When we ‘belong to country’, we are well in body and in mind. The existence and health of people and of country is a single thing.

Country includes the physical and living environment. It includes spirituality, cultural identity, history, economy and responsibility, and forms the basis for society and life. Keeping country healthy includes keeping people healthy. I’m not just talking about the past—these things apply right now. Our knowledge and understanding remain strong, and our rights and responsibilities to country are slowly being restored. Our focus is still on securing the country’s future, keeping it strong and healthy.

So, what is our vision for the Kimberley? And how do we achieve that vision? We believe that the future must include recognition and involvement of Kimberley Aboriginal people in the management of country, in setting directions for country. We must maintain, rehabilitate and protect country, and avoid environmental problems before they occur.

Is there a role for Aboriginal knowledge and cultural values? If there is, how do we make sure they are recognised, recorded, practiced, passed on, and even incorporated into laws? How do we leave our children with a healthy and abundant environment, full of biodiversity, with clean air and water and a healthy population? Is the time right for strategic long-term planning, covering all generations and land users, backed up by both scientific and cultural research? Aboriginal people do share the benefits of healthy country and we do recognise that in modern times we have to make a new sort of living from our country. There can be no sustainable living from country that is unwell.

We want a future where we have the same opportunities as all other people. Aboriginal people are the Traditional Owners and occupiers of the region. This is now accepted and recognised by the community and in the courts. In today’s context, there are other strong arguments for Aboriginal involvement in managing country. We make up around fifty percent of the Kimberley population and, in fact, more than seventy-five percent of people who live here for more than five years—after all, this is our home. Aboriginal people comprise ninety percent of people living on country (outside the major towns). Aboriginal people form a major part of the Kimberley economy. We own and manage thirty percent of Kimberley pastoral stations and are involved in a number of agreements with private enterprise. Native Title has been recognised over more than thirty percent of the Kimberley, with applications lodged over much of the remaining area.

Our connections to country are clear, recent and provable. There are many Aboriginal people alive in the Kimberley who had first contact; this is where they were born in the bush and where they grew up until their early teens. Native Title is at last securing strong land tenure outcomes for our people, leading to many arrangements and agreements. These help to deliver Aboriginal engagement in land management activities and decisions.

So these historical, economic and population figures show the central role for Aboriginal people in natural resource management in the Kimberley. This involvement is already occurring through a number of processes, including increasing involvement and co-operative arrangements with other groups.

We are in a strong position to determine the future of the Kimberley. What will that future be? Will the important values of country be recognised? Will people understand, practice and pass on the cultural responsibility of caring for country? Will country sustain life: plants, animals and people? Will our rivers, waterholes and groundwater be clean and...
healthy? We are worried our water will be sprinkled on Perth
lawns. Can our children expect bush foods and medicines to
be abundant? Are our important sites going to be looked after
and protected?

Appropriate and sustainable land use works with country, not
against it. If we continue to believe that country is central to
who we are, how can we possibly treat it badly? The big thing
we need to think about first is our attitude to country. All of
Australia needs to look deep and long about its attitude to
country. We in the Kimberley have the opportunity to start
caring for country before too much damage is done. The ‘ways
of thinking’ about country need to be redefined so that we can all
build a strong culture that includes recognition and respect for
traditional knowledge and rights, and for owners of country.
It should be a culture where people are proud to speak up for
country, where everyone agrees on the importance of fairness
and equity. Traditional land management practices must be
used to maintain a balance between the past, the present and
the future.

‘Ways of learning’ about country must give our old people the
opportunity to hand down knowledge, culture and ceremony,
and that knowledge and culture needs to be recorded and
stored for the future. Kartiya (white people) can be encouraged
to understand and value country and culture. Our young
people must learn the culture and the practice of caring for
country through scientific and cultural research, education,
training, mentoring and skillling. New ‘ways of controlling’
will make sure the right people make decisions about country
and allow us to do long term planning (150+ years). The new
‘ways of doing things’ will include improved communications,
partnerships and proper land management training. Good use
of fire and control of introduced plants and animals will be
combined with strategic reserves (sanctuaries, sacred areas,
breeding grounds, etc.) to make sure they survive into the
future.

Of course, talk on its own is not of much use. What can we
do to make these things happen? Can we develop businesses
and employment opportunities that protect our natural and
cultural heritage? Can we convince governments and big
business of the need for long-term planning for controlled and
sustainable development? We need to have faith in our abilities
to build the future of our choosing. We need the courage to
back our initiative, our self-reliance, our self-expression, so that
we can build responsible enterprises that are economically and
environmentally viable, that respect our culture. We must all
work together for our shared future, leaving country healthy
for the next generations.

I started off talking about my own personal experiences and
beliefs, and that’s what I will finish with. We are not greedy
people; we have shared the Fitzroy River with non-Aboriginal
people for over one hundred years. We know we are not alone
in our fight to look after the Fitzroy; we have support from
many sectors of our community including pastoralists, keen
fishing people, environmental groups and the general public.
We welcome their support and hope we can work closely
together to find the balance of protecting the integrity of our
home, the Fitzroy. We want to establish more partnerships in
caring for our country. We know we have a responsibility to
look after the river, but at the same time we are not afraid of
economic development, if it is done in the right way. If there
is development, it must firstly look after the river and the land
around it.

We are looking for projects and ideas that can help Aboriginal
people to start businesses, get jobs and better incomes; we want
a future where our children can share in the economy, like many
Australian people. We as a people want better health, better
education and better opportunities for our children. If we can
hold our law strong and if we bring economic development
gently into our lives alongside our river, we might be on our
way to building a stronger, more independent future for this
region. We don’t want a quick fix; we are here for the long
term. I believe that a fund should be established that assists in
the protection of our country and also provides resources for
sustainable businesses that balance and protect the integrity of
our land, the Fitzroy River and the wider Kimberley region.

Our River is strong and alive. We must work as one people to
keep it this way. We all know if we look after our country it
will look after us.

Thank you.

Wayne Bergmann is a Nyikina man and Executive Director of
the Kimberley Land Council.
PRESENTATIONS IN PLENARY SESSIONS
Why Are We Here?

This is a very special and unusual gathering. People present here come from an extraordinary diversity of backgrounds and experience. I dare say that no government department would be able to assemble such a group. To bring all these people together requires an ability to reject the usual categories and boundaries, to think broadly and inclusively. It also requires a depth and breadth of local and regional knowledge, which is worth more than gold.

We are meeting for two simple reasons: a shared love of country and a desire to see the Kimberley prosper.

And we want to see our region prosper, not plundered. Ever since this continent was first colonised and settled, the main interest of the colonisers has been how to exploit it as extensively and quickly as possible. They have been like kids in a sweetshop: greedy for the glittering goodies before them and unable to know when enough is enough. In their excitement, they have not considered leaving anything for those who will come after them, and have taken little notice of natural limitations. The trail of wreckage they have left is described vividly by Jared Dimond in his recent book, Collapse.

The Kimberley is special because although parts of it have been badly and carelessly exploited and some species are in decline, much of it is unspoilt. As the world becomes ever more crowded and environmentally impoverished, places like the Kimberley become rarer and, through rarity, priceless. And because the region has not yet been over-developed, we are in the happy position of being able to avoid the worst mistakes made elsewhere. We must never become another wheat belt. Our rivers must never turn into “Murray-Darlings”.

We are meeting in Fitzroy Crossing rather than somewhere else in the Kimberley because this is the town that straddles the Fitzroy River, which in recent years has attracted so much outside interest from those who want to take its water. The Fitzroy means many things to the people who live along its banks. It means livelihood, respite from the heat, renewal, recreation. And it means abundance: abundance of water during the wet season, abundance of fish and food, abundance of birds and other wildlife. To its Indigenous people it also means much more than all this, as can be seen from the many sites and stories that run its length. Even at its mouth, where it discharges into King Sound, each year the Fitzroy adds abundance in silt and nutrients to the ecosystems of the Sound. The Fitzroy is a system of natural prosperity, and any serious interference with its flow could only reduce its abundance.

I said earlier that I doubted the capacity of government departments to assemble a group of people like this one. Government departments tend to look inwards or upwards: in at their own workings or up at their ministers, who in turn are looking at the press with a view to remaining in office. Government departments and their ministers seldom really look outwards towards the people they are supposedly serving.

Another thing that governments cannot do is to motivate people. In attempting to solve problems they so often make them worse. They throw money around and think that is enough.

I remember when Bob Hawke was Prime Minister and was going to put an end to poverty. Representatives of the World Council of Churches (WCC) came to Australia and visited Aboriginal communities. They came away shocked at what they saw and wrote a report that exposed Australia’s failures to the world. Mr Hawke was offended. “My government has just given X millions of dollars to services for Aboriginal people,” he said. The spokesman of the WCC was very polite. “I am happy to hear that the government is spending money on services to Aboriginal people,” he said. “But perhaps Mr Hawke does not understand that money cannot solve social problems.”

Companies wanting to establish a big business in the Kimberley have a predictable way of behaving. Because nowadays they can no longer get away with ignoring Indigenous people’s rights and needs, they do two things. One is to consult Indigenous people—not always with the results they had anticipated—the other is to assure the world at large that their enterprise will benefit Aboriginal people by providing employment for them.

Aboriginal people may be forgiven for responding less than ecstatically to such assurances. If you are the Traditional Owner...
of a part of this country, a place you have known intimately and lived in all your life, as your ancestors have done before you, how are you going to feel about giving up your rights to that place, seeing it laid waste, and then being offered a job on it with the industry that has destroyed it? A cattle station lessee whose family has lived on the land for a number of years, decades or generations (though never as many generations as the families of Indigenous people), would be outraged at such an offer. And so, with much greater reason, are Traditional Owners.

In any event, offers of employment seldom come to much. Western Agricultural Industries asserted strongly that they would employ Indigenous people in their cotton fields, yet the tiny workforce they employed on their trial crops was drawn not from Bidyadanga just down the road, but from backpackers’ hostels in Broome. Argyle Diamonds may have done a better job of recruiting Aboriginal people to its workforce, but Barramundi Gap, a site sacred to women, is gone forever.

Money alone does not solve social problems. It does not solve poverty. Big business does not solve poverty. Charity does not solve poverty. Welfare does not solve poverty. What can solve poverty are personal enterprise and initiative, pride and independence, belief in the future, and a society that fosters these things.

**Faith in the Future**

Environs Kimberley has helped to drive this forum because we have faith in the future. We have a vision for the Kimberley that can be realised only if people take the time and make the sustained effort needed to achieve it. Our vision is of a region in which nature and culture are valued, protected and given priority in decisions about development; in which small-scale, environmentally friendly industries and enterprises are encouraged, and large-scale developments are viewed with scepticism rather than greeted with the naïve, unreflecting excitement shown by our politicians.

In saying this, I risk exposing Environs Kimberley to accusations of being ‘anti-development’. If we were ‘anti-development’, we would not be participating in this forum. As a group advocating change we accept the challenge to actively promote better ways of doing business. The scepticism that we propose as an appropriate response to large-scale development proposals is well founded. Broad-scale irrigated agriculture has been an environmental and even an economic disaster for other parts of Australia: why then would we want to see it here where it has failed so catastrophically in the past? Mining is even more destructive, albeit over much smaller areas than agriculture. In the past, mining companies were able to plunder the country and then walk away, as I have seen myself at Koolan and Cockatoo Islands, but today, largely because of the lobbying of environmentalists, efforts are made to rehabilitate the land when the mine closes. Some people stand to make a fortune out of these mega-industries. Others lose their land. And few developers would be making a fortune if the full costs of their activities were factored in: if mining companies were obliged to fill in the holes they have dug in the landscape and eradicate the weeds they have introduced; if sugar growers had to pay for the elimination of the Cane Toad; if farmers in the wheat belt were forced to rehabilitate the ever-expanding salty land. And what price can anyone put on the extinction of a species?

My work with Environs Kimberley has made me very conscious that, while developers reap the short-term rewards of exploiting the land, it is so often taxpayers and volunteer groups who meet the costs of cleaning up after them. We at Environs Kimberley prefer to protect the region from the sort of damage we have seen inflicted on it elsewhere.

So, what sort of enterprises are we looking for in the Kimberley? Do we have any idea? Well, yes, we have some great ideas, but it is not Environs Kimberley that will put them into effect. Some of the participants in this conference are already engaged in environmentally friendly enterprises, and with a commitment motivated by far more than just the income. We are going to hear about them over the next two days.

There are Aboriginal pastoral stations but few other Aboriginal communities have any economic base of their own. They are dependent on government and therefore subject to the whims of the party in power. Amongst other things, especially art production, Indigenous people are setting up small tourist enterprises and working out ways of doing tourism that suit them and their communities, whether as independent or joint ventures. I understand that in the United States there is a large and growing demand from people wanting to learn bush survival and Indigenous tracking skills: something that could be easily and appropriately developed here. But take heed: all such Indigenous enterprises require traditional lands and the species that live on them to remain intact.

In recent years, Aboriginal people have been active in fire control and there is scope for other community environmental projects on country: for rehabilitation, control of feral animals and the like. It is time for such important activities to be properly valued and underwritten by our society.

Does all this mean that we are asking nothing of the government? On the contrary, we are asking it to listen carefully to the messages coming out of this forum. We are asking it to share our vision, to support those initiatives that enhance the nature and culture of our region, the way of life here, and the aspirations of its people. I expect that many proposals worthy of government support will be discussed here today.

So, on behalf of Environs Kimberley, I welcome everyone here today and look forward with you to an interesting and exciting Roundtable.

*Pat Lowe is a Founding Member and current Secretary of Environs Kimberley.*

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Making A Good Living From Our Country

Birch, Tom
Kimberley Land Council, Broome

Our Country
Traditional Owners of the Kimberley of course have a great interest in what happens on our country. We face significant pressures to allow development, sometimes at any cost. Some people even want to take Kimberley water for Perth people to keep their lawns green!

We have won some battles, at least for the moment, such as keeping cotton out of the West Kimberley. And we’ve had some good friends like Environs Kimberley and the Australian Conservation Foundation fighting beside us. But you can’t go from one battle to another. You need to develop a plan for the future; you need to set down what your goals are and how you will achieve them.

Our Vision
The Kimberley Land Council (KLC) developed a vision when it was established twenty-five years ago:

“The Kimberley Land Council is a community organisation, working for and with Traditional Owners of the Kimberley, to get back country, to look after country, and to get control of our future.”

This vision forms the basis of all the decisions we make and all the activities we do. Our activities can be broken down into getting country back, looking after country, and getting control of the future.

Native Title
The Kimberley covers about 420,000 square kilometres (Figure 1). That’s pretty big! Kimberley people have clear, recent and provable connections to country. We know this, but it is also shown through the Native Title courts. There are people alive who remember first contact events. So when we say we belong to country, it is not just some idea, it is a real part of our lives.

Native Title has been recognised over more than 120,000 square kilometres (thirty percent) of the Kimberley (Figure 2). The determination of present Native Title areas makes us confident that other claims will also be successful (Figure 3).

Looking After Country
Part of our vision is to look after country. We have set up a Land and Sea Management Unit to do this, with its own Vision Statement:

“The Kimberley Land Council’s Land and Sea Unit assists the community to keep country and culture healthy, get good social, economic, environmental and cultural outcomes, and maintain strong connection to country for future generations.”

The goals of the Land and Sea Unit (L+SU) are:

• To look after and protect Indigenous traditional knowledge and practice, and pass it on to future generations;
• To promote, protect, and maintain a healthy Kimberley natural, cultural, and social environment; and
• To help get positive outcomes for the lives of Kimberley Aboriginal people, in relation to using and managing country.

The map in Figure 4 shows some of the projects run by our L+SU. Some of our staff and some of the people who are part of those projects are here today. As well as projects ‘on country’, Kimberley Traditional Owners are assisted by the L+SU to provide representation on:

• Northern Australian Indigenous Land and Sea Management Alliance;
• Rangelands Natural Resource Management (Kimberley Region); and
• Kimberley Fire Management Project. I would like to mention that this Project, which is very successful and involves Indigenous people in many valuable activities, is under threat of closure (since closed. Editor’s Comment). I ask who should be making decisions about these things?

The KLC is also involved in many other planning and management bodies.
One way we can look after country is through Heritage Protection legislation. Developers must get heritage clearances before they can disturb our land. The KLC assists with heritage clearances using appropriate ways of doing things that have been developed over its twenty-five years of operation. Traditional owners are included in the heritage clearance process.

**Getting Control of the Future**

Aboriginal people have always made a good living from our country, but over the last two hundred or so years we have been put to one side in the development of the region. Now with the *Native Title Act*, the KLC has a central role in brokering agreements between Traditional Owners and the resource and industry sector.

Title to land and rights under the *Native Title Act* assist the negotiation of a fair deal, and these agreements can deliver real benefits to Kimberley Aboriginal people. The number of negotiated agreements is increasing (Figure 5). Of course, we don’t agree to or get involved in every idea that anyone has. We have fought off cotton and we are fighting off ideas to take our water from the Fitzroy River.

We are not ‘anti-development’, but there are certain things that must be protected.

The KLC has a responsibility to secure the economic future of Kimberley Traditional Owners. We have started a Sustainable Development Trust to help with appropriate activities and enterprises. The Mission Statement for the Trust states that:

“The Kimberley Sustainable Development Trust will promote and facilitate the social and economic advancement of Kimberley Aboriginal people, by utilising title to land as a lever to ensure participation in sustainable development.”

The Trust’s purpose is to relieve social and economic disadvantage, and to pursue sustainable economic and business opportunities for Kimberley Aboriginal people. We are finding it difficult to get the Trust off the ground, but believe that it is important in helping us to secure a sustainable future.

We welcome this Roundtable, and are pleased to be involved with it. We know it is important to give local people, and especially Aboriginal people, a leading role in decisions about development of the Kimberley. We all want to find ways to keep control of our lives and our future and at the same time protect our culture and our environment.

This Roundtable will help us set down ways that we can make a living from the country, ways that work with country, and protect country for our future generations. The things you say here will help to set the direction for the future. This is an important job that we all have, and I thank you for your contribution.

*Tom Birch is Chairman of the Kimberley Land Council.*
Figure 1: The Kimberley Land Council’s area of responsibility as a Native Title Representative Body.

Figure 2: Native Title Determined Areas and Areas before the Federal Court.

Figure 3: Other Kimberley Native Title Claims.

Figure 4: Land and Sea Management Unit Activities.

Figure 5: Current Agreements.
Country and People
I would like to begin by acknowledging the Traditional Owners and thanking them for their welcome to country and allowing us to talk on their country. I would also like to acknowledge the officers of Environs Kimberley and the Kimberley Land Council, who are our partners in this important venture, and thank the elders who are here to guide our deliberations. I especially thank Joe Ross and Wayne Bergmann for their wise counsel, which started the session.

I would also like to acknowledge the special region in which we are meeting. When meeting in a special place it is difficult not to feel the guidance of the spirits of those who have gone before us, helping us in our deliberations.

As a whitefella scientist reading about the Fitzroy Basin, I was aware of the things we know about it. The basin has thirty-seven fish species and sixty-five species of waterbirds, most of which are endemic to this region. It has Ramsar-listed wetlands. The annual floods are vital for the preservation of those biological values. The Letter of Agreement between the Australian Conservation Foundation, the Kimberley Land Council and Environs Kimberley last year noted that the region is important to the whole world because of its people, their culture, the land and the sea, and the plants and the animals.

But it’s more important than that as Wayne reminded us—it also a place of belonging, of both physical and spiritual sustenance. Wayne also reminded us in his words that “If we look after the Fitzroy River, it will look after us”, and more generally, that if we look after country, it will look after us. The converse of that of course is that if we don’t look after country, sooner or later it will bite us on the backside. In southern Australia the teeth marks are only too evident. So that’s why it is important to ensure the mistakes that have been made in the south are not made in this special place. That’s why the Letter of Agreement went on to say that “Kimberley communities must decide what developments come to the region and make sure they are managed properly to fit in with local culture, the land, plants and animals.”

So the discussions over the next few days need to recognise, as Wayne said, the relationships between your identity, your culture, your wellbeing and the special values of this region. It is a real honour to be involved in this important Project. It is recognition that the health of the landscape is related to the health of communities. That relationship flows both ways—you can’t have a healthy community without a healthy landscape, and you can’t have a healthy landscape without a healthy community.

Economics—Overcoming the Pig-Headed Model
The purpose of this Roundtable is to recognise that the health of the community in turn relies on developing economic opportunities that are culturally sensitive, socially inclusive, economically viable, sustain the natural systems of the region and maintain your law and culture.

I don’t need to remind Indigenous communities about this relationship—the importance of the land and the importance of balance and appropriate priorities between economic development, social stability and the integrity of natural systems. But I perhaps need to remind the whitefellas in this room, because most decision makers down south still have the pig-headed model of the relationship between the economy, society and environment. They see the economy as the main game—or the face of the pig—and society and the environment as the smaller areas like its ears. And they seem to believe that if the economy is strong, problems in society and environment can always be patched up later on.

That is not only a wrong-headed model, it’s actually not working. Successive reports on the State of the Environment monitor the decline of our natural systems and our natural values. Even the Australian Bureau of Statistics has shown in three reports on measures of Australia’s progress that the unprecedented economic progress over the last fifteen years has come at some social cost and very large environmental cost. So I think it is a very silly model.

Sustainability—the Three Circles
A much better model is the ‘three circles’—the view from space. I tell people if you look at the world from space you can’t see the economy, but what you can see is the perilously thin membrane that supports life and some of the physical boundaries that
mark our different societies like rivers, mountains and oceans. If you take that as your starting point you come up with the sensible model that says that the economy is a means to an end, it’s a part of society and an important part—but only a part. There are things we expect from society—security, a sense of community, cultural identity, companionship and love—which are not, even in principle, a part of the economy. Our society is totally enclosed within and depends on natural systems. The economy gives us some things we need, but mostly it gives us things we have to be persuaded to want, whereas the natural systems give us the things we really need—air to breathe, water to drink, the capacity to produce food, our cultural identity and spiritual sustenance. So I hope that in thinking about economic development opportunities we recognise that they need to be encased within the aspirations of our society, which in turn need to be kept within the limits of natural ecological systems.

In that sense this Roundtable is obviously important for the Kimberley region. It is important for developing ways to go forward that will give economic security consistent with your culture and social aspirations. But I think it is even more important than that. I think it is also a model for the wider Australian society of how we should be thinking about economic development. Far too often we think about economic development and then worry about how we can cope with the social strains and the environmental disruptions that it causes.

**Nurturing Our Values**

More generally, for Australia as a whole, we should be trying to think of economic development as a means of nurturing and sustaining our cultural traditions and our social aspirations, so in turn we should see that our primary duty is to nurture the natural systems of Australia. In that sense we are not just talking about economic opportunities, we are talking about values: the sort of Australia we want to be, the sort of community we want to be and how we ensure that the development choices sustain and nurture those values.

We are obviously here to respect the values of the local people, and to learn from them and work together for mutual benefit, so in that sense, like Joe, I am a supreme optimist. He said you have to be an optimist to be an Indigenous person because of the history of Indigenous people and non-Indigenous people. In the same sense you have to be a supreme optimist to be working as an activist in environmental protection or social justice. We also have strong forces ranged against us. But I would remind you that as a supreme optimist, we have seen some of the most optimistic things happen in recent times. We’ve seen the Berlin Wall come down; we’ve seen apartheid; we’ve seen millions of hectares of Queensland country being returned to Traditional Owners; and these are outcomes I didn’t believe I would live to see in my lifetime. And it is a reminder of what Margaret Mead said, “You should never doubt the capacity of a small group of determined people to change the world, because after all, that is the only thing that has ever changed the world for the better—a small group of people determined to produce a better world”.

This Roundtable is the outcome of a process that has been going on between the three organising groups for some time and it mirrors a similar process on Cape York. It’s now nearly two years since the Cape York Roundtable and there has been real progress made since then on the major issues that underpin development, such as land tenure, return of country and organising the legal framework for ownership. I am a supreme optimist because I have seen the outcomes of the Cape York Roundtable and I have seen in the struggle of people determined to produce a better Australia, that by working together we can make a difference and we can produce the kind of Australia that we want for future generations.

Thank you for being here and best wishes for your work over the next two days.

*Professor Ian Lowe is President of the Australian Conservation Foundation.*
Ecological Values of the Fitzroy River with Links to Indigenous Cultural Values

Storey, Andrew
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Introduction
Worldwide, there is growing concern over the extent of dams and river regulation (ARMCANZ/ANZECC 1996, Arthington 1998, Bunn and Davies 2001, Edgar 2001). This also applies to rivers of northern Australia, where plans for resource developments are typically made in the context of limited ecological information. The Fitzroy River in the Kimberley region of northwestern Australia is one of the few remaining major free-flowing (viz. unregulated) river systems in Australia. There have, however, been proposals to dam the river for irrigated agriculture and, more recently, to divert water through pipelines or canals to satiate the thirst of Perth in the southwest of the state.

Proposals for impounding the Fitzroy River have raised concerns over impacts on the various values supported by the system (i.e. ecological, Indigenous cultural, social and economic). Although Indigenous cultural values have been documented (see Yu in this volume), relatively little is published on the ecological values of the Fitzroy River. The WA Department of Environment (DOE) is responsible for managing and allocating the State’s water resources, which requires balancing ecological, cultural, social and consumptive uses. Developing an allocation plan for the Fitzroy River was limited by the current state of knowledge for the system. Therefore, in November 2000 the DOE funded a qualitative field assessment of the environmental values of the Fitzroy River and its major tributaries. The study (Storey et al. 2001) was conducted in conjunction with an anthropological study (Toussaint et al. 2001) and involved collaboration with Indigenous groups at Bayulu, Djugerari, Jarlmadangah, Kupungarri, Looma, Mimbi and Yakanarra communities along the Fitzroy River. The aims of the studies were to assess water-dependent ecological and cultural values, and the links between them. An outcome of this assessment was to identify potential impacts of flow regulation and outline knowledge gaps limiting successful water allocation planning.

Ecological Values
The upper Fitzroy River (upstream of Fitzroy Crossing) has a catchment area of 46,300 km2, divided into the sub-catchments of the Margaret and Fitzroy rivers. Downstream, the Fitzroy is comprised of a sinuous main channel, which has some braiding, floodplain channels and significant floodplain storage. Long-term annual rainfall for the area is highly unpredictable, influenced by tropical monsoons and cyclonic activity. As a result, river flow is highly variable and unpredictable. The long-term mean annual discharge of the upper Fitzroy River is about 6,150 gigalitres (at Fitzroy Crossing). Since 1968, (corresponding to a ‘wet’ period), mean flows have increased to over 7,000 gigalitres per annum. Flood peaks of approximately 30,000 m3/s have been recorded in downstream reaches (25,000 m3/s at Fitzroy Crossing was recorded in 1983; Storey et al. 2001).

Overall, the riparian vegetation of the Fitzroy Valley was considered to be in “good” condition although some areas of high livestock impact were characterised by extensive weed invasion. The area has a history of rangeland grazing; even so, a number of riparian species, including Acacia gloeotricha, are on the CALM Declared Rare and Priority List as Priority Species.

The significance of the aquatic invertebrate fauna of the Fitzroy system is difficult to assess in a regional context due to the paucity of detailed studies in the Kimberley. However, analysis of the aquatic macro-invertebrate fauna from fourteen sites in the Fitzroy indicated good ecological “health” using the national AusRivAS models. Key macro-invertebrate taxa included two species of Macrobrachium prawns, which were considered likely to be important to fish foodwebs. Previous sampling of subterranean species (stygocave fauna) showed an as yet undescribed family of flabelliferan isopod, with the high likelihood of other endemic taxa (Bill Humphreys, WA Museum, pers. comm.). However, the extremely limited sampling of this component of the fauna makes an assessment of the conservation significance of the Fitzroy subterranean fauna difficult.

In contrast, the fish fauna of the Kimberley in general, and specifically the Fitzroy system, is reasonably well known. About forty-eight freshwater fish are known from the Kimberley, of which eighteen are endemic to the region. Thirty species from twenty-one families have been recorded from the Fitzroy. Of these, about a third are likely marine opportunists but with limited freshwater distribution, and at least three are endemic to the Fitzroy systems. Overall, the Fitzroy is characterised by a diverse fish fauna with many unique species (Doupé and Lenanton 1998). Recent surveys of the Fitzroy River...
by Murdoch University, in association with the Kimberley Land Council and with funding from the Natural Heritage Trust, have extended our knowledge of the fish fauna to forty species from twenty-three families, of which twenty-four are primarily freshwater and sixteen are of estuarine/marine origin (Morgan et al. 2004). Similarly, recent surveys of the system have established that the Fitzroy River is a stronghold in the Kimberley for the Freshwater Whiptail (Himantura chaophyrae), listed as Vulnerable by the IUCN (2002); the Freshwater Sawfish (Pristis microdon), listed as Endangered by IUCN (2002) and Critically Endangered by Pogonoski (2002); and the Dwarf Sawfish (Pristis clavata), listed as Endangered by Pogonoski (2002) and the IUCN (2002). In addition, the Northern River Shark (Ginglys sp. C), listed as Critically Endangered (IUCN, 2002), was collected from King Sound (Thorburn et al. 2003).

The Fitzroy River floodplain supports substantial ecological values on seasonally inundated wetlands and in permanently inundated channels and billabongs. In particular, Carnbmill floodplain constitutes an important waterbird habitat (about sixty-seven species recorded) and meets criteria for listing as a Wetland of International Importance (Ramsar). Many of the waterbirds are listed under the Japan-Australia and/or China-Australia Migratory Birds Agreements (JAMBA/CAMBA). The floodplain supports a number of Western Australian Priority Species including Freckled Duck. Other extensive floodplain regions (e.g. the wetlands of Mallalah and Sandhill Swamp) are also considered important waterbird habitats when flooded.

For the maintenance of biodiversity and dominant ecological processes, the linkage between the river and its floodplain are critically important. As well as structuring habitat (i.e. the morphology of the system), connection during floods results in significant exchange of energy (carbon) and nutrients between channel and floodplain, and provides access to nursery habitat for fish. Therefore, water harvesting that reduces the strength of the river-floodplain connectivity may have a substantial impact on habitat structure, foodwebs and, ultimately, biodiversity.

**Links with Cultural Values**

Toussaint et al. (2001) noted that the Indigenous communities living along the Fitzroy River consider water a major focus of their culture and the basis of many Dreamtime stories. The river provides sites of learning, for passing down information from generation to generation, places of shared memory and history (Toussaint et al. 2001).

Storey et al. (2001) and Toussaint et al. (2001) showed that most locations along the river have traditional names, many of which are associated with Dreamtime stories. To Indigenous communities, the riparian zone represents a concentration of food, medicine and other resources. For example, leaves and bark from certain trees are used for cooking to provide flavour; edible nuts are gathered from riparian plants, i.e. the fringing Pandanus Palm, Pandanus spiralis. The bark of the paperbark trees is used to make containers for carrying food; specific riparian plants are used to make poisons to capture fish; some riparian plants, such as the Freshwater Mangrove, Barringtonia acutangula, provide medicinal remedies for different complaints; some riparian plants can be burnt to provide smoke for ritual healings; vegetation can be used practically to build rafts, make light-weight fishing spears and containers; and the phenology of flowering and fruit production is used to determine the reproductive cycle, and thus the best hunting time, of riverine fauna. The river and billabongs provide a reliable subsistence food source. Most aquatic fauna (fish, crocodiles, turtles, prawns, frogs and waterbirds) are used as a food source, therefore providing a means of economic support. At certain ceremonial times there are special food taboos during which only fish can be eaten. Other foods provide medicinal values, such as river mussels, which, when cooked slowly, produce a milky liquid used to alleviate cold symptoms. It was observed that Aboriginal hunting seasons corresponded to the known lifecycle of the target species, which reveals a strong association between Indigenous culture and the ecology of the river system (Storey et al. 2001, Toussaint et al. 2001).

Through their long and continued association, Aboriginal people have a good understanding of life cycles of aquatic species and issues, such as the importance of floodplain inundation (e.g. to restock billabongs with barramundi). The Aboriginal groups consider permanent pools in the Fitzroy as “living water”. Ecologically, permanent pools are important refuges for aquatic species, enabling them to survive the harsh dry season. Therefore, any process that impacts on pools (e.g. infilling by catchment-derived sediment or de-watering through abstraction) can have substantial impacts on fauna. Aboriginal people emphasise that in-filling makes pools unsuitable for fishing, and that floods are critical to flush these pools and “cleanse the country”. The strong link between ecology and culture is seen in Dreamtime stories, which featured many water-dependent plants and animals. Overall, there is an extremely clear linkage between ecological and cultural values of specific freshwater habitats, particularly permanent riverine pools.

**Lessons to be Learnt**

Comparisons with the regulation of the Ord River, and to a lesser extent the failed Carnbmill Project on the Fitzroy, provide clues to the possible consequence to ecological and cultural values of damming reaches of the Fitzroy River. Impoundment of the Ord River and the constant releases for irrigation and hydropower generation has resulted in simplification and narrowing of downstream riparian zones, loss of inundation of the floodplain, reduced variability in river-flows, loss of migratory species from upstream from the dams, isolation (physical and genetic) of many fish and crustaceans above the dams, modification of sediment delivery to the lower reaches and build-up of sediment in the estuary. Loss of these ecological values has concomitantly undermined cultural values dependent on the various plants, animals and processes (Storey et al. 2001).

The reservoir produced by Argyle Dam is an ideal habitat...
for mosquitoes, which include the vectors for several human viruses (Ross River and Murray Valley Encephalitis). The barrage associated with the Camballin Project has redirected flows to previously lesser-inundated regions of the floodplain (with resultant erosion) and interrupted upstream migration of many important species, including the cherubin prawn and various fish species. Overall, the major consequence of river regulation is the loss of connectivity in three dimensions: upstream-downstream, river-floodplain, and surface to groundwater. The loss of these connections would have major ecological consequences. These changes affect ecological values, many of which underpin Indigenous cultural values.

Conclusion
On the basis of the studies detailed in this review, it is considered that the Fitzroy River and its floodplain still support substantial ecological and cultural values. There appears to be a strong linkage between ecological values (e.g. biodiversity) and cultural values (e.g. living waters). Unregulated floodplain rivers worldwide and in Australia are increasingly “rare” and with the intensification of resource development in northern Australia, require a detailed understanding of linkages between hydrology and ecology and between ecology and Indigenous cultural values. Many of the cultural values were dependent upon ecological values (i.e. species of plant and animal), which were in turn dependent on the hydrology and morphology of the river system.

Management of such a rich and diverse system requires a sound understanding of the ecology and how it functions. However, in the absence of this detailed knowledge it is difficult to assess the ecological consequences of flow regulation and hence it is suggested that a “precautionary approach” to water resource development be adopted. This is supported by Principle 2 of the ARMCANZ/ANZECC (1996) document, which states that allocation of water should be set using the best scientific information available. At present, the knowledge of biodiversity and ecological processes in the Fitzroy River is limited.

Management of the Fitzroy River should aim to maintain the natural flow regime (i.e. natural frequency of floods and dry periods). Floodplain flooding is an essential process and dams/flow regulation can alienate the river from its floodplain. Any new developments need to be economically viable, socially (culturally) acceptable and ecologically sustainable (the concept of the “triple bottom line”).

In some instances, high conservation rivers and their floodplains need to be protected from resource development. This was recognised by Professor Peter Cullen, winner of the Prime Minister’s 2001 Environmentalist of the Year Award. He noted that billions of dollars are spent trying to repair catchments and rivers, yet little effort has been made to prevent the degradation of and further loss of biodiversity in rivers that are presently in good ecological condition (The Australian, 3/8/01). The solution proposed was National Heritage listing of river reserves, similar to National Parks where further extraction of water should be prohibited. Professor Cullen named six rivers in Australia worthy of heritage listing due to their relatively undamaged state, one of which was Western Australia’s Fitzroy River.

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References


Fish Projects in the West Kimberley

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Introduction
Since 2001, Murdoch University's Freshwater Fish Group of the Centre for Fish and Fisheries Research, along with the Kimberley Land Council's Land + Sea Unit and the Kimberley Language Resource Centre (KLRC), collaborated on a number of projects relating to the fishes in the West Kimberley. The majority of work has focussed on the Fitzroy River but has also included King Sound and the King Edward River. This collaborative approach has lead to an increased awareness not only about the diversity and uniqueness of Kimberley fishes, but also in terms of their importance to the Traditional Owners of the region. Much needed information has also been collated on the endangered fishes of the Kimberley and recent work has examined the distribution and cultural significance of fishes of the King Edward River. Information on specific projects is available at wwwscieng.murdoch.edu.au/centres/fish/curres/Freshwater.html. An outline of each Project is given below.

A number of studies are ongoing and include the Diets of Fishes in the Fitzroy River; Biology of Barramundi in the Fitzroy River; Biology of Dwarf Sawfish in the Fitzroy River; Description of Fitzroy River Glassfishes; and Biology of Bull Sharks in the Fitzroy River.

Fitzroy River Fish Project
Fish fauna of the Fitzroy River in the Kimberley region of Western Australia—including the Bunuba, Gooniyandi, Ngarinyin, Nyikina and Walmajarri Aboriginal names.
(Funded by the Natural Heritage Trust)

During 2001 and 2002, seventy sites on the Fitzroy River were sampled for fish. The Project involved Bunuba, Gooniyandi, Ngarinyin, Nyikina and Walmajarri people from the Fitzroy River. The language names for fish captured were recorded by KLRC linguists. Many people from Broome, Derby, Fitzroy Crossing and various communities and stations were involved.

The Project was a huge success with previously unrecorded language names and stories about places and different fishes documented. A total of 117 language names of the fish were recorded across the five languages. Posters were produced depicting the fish of the river and the different language names.

A number of species that were new to science were discovered and others that were not previously known from the river were found. A total of twenty-three freshwater species and fourteen marine/estuarine fishes were recorded from the freshwaters of the river. The Project demonstrated that there were significant differences in the fishes associated with the lower, middle and upper reaches of the main channel, the smaller tributaries, the billabongs and the upper gorge country. The range of many species was increased and the river was found to provide an important refuge for many endangered fishes, including the Freshwater Sawfish.

Sawfish Project

Biology and cultural significance of the Freshwater Sawfish (Pristis microdon) in the Fitzroy River, Kimberley, WA
(Funded by the Threatened Species Network and Natural Heritage Trust)

Elsewhere, Freshwater Sawfish have undergone massive population declines with contemporary beliefs identifying the Fitzroy River as having one of the last known viable populations. The Freshwater Sawfish is listed as Endangered on the IUCN Red List and as Vulnerable under the EPBC Act. This Project investigated the biology and cultural significance of the species in the Fitzroy River. While previously believed to be a freshwater species, all captured in the Fitzroy River were immature, suggesting the Freshwater Sawfish uses the river as a nursery.

This culturally significant species is not only an important food source but is included in a number of stories and beliefs of the peoples of the Fitzroy River, where it is referred to as galwanyi in Bunuba and Gooniyandi, wirridanyinyi or pial pial in Nyikina, and wirrdani in Walmajarri. Mangkaja Arts coordinated an artwork competition inviting people to create a logo for the Freshwater Sawfish Project. A number of excellent paintings of this important species were produced with the winning entry being painted by Joy Nuggett.

In relation to the biology and ecology of the species, of the 73 individuals sexed, 43 were female, ranging in length from 832 to 2,770 mm total length, and 30 were male, ranging in length from 815 to 2,350 mm total length. The Fitzroy River...
is an important nursery for juveniles of the species, which appear to live in the river for up to four or five years before leaving the river to mature. A total of 79 Freshwater Sawfish were captured (and released) between 2002 and 2004. Forty of these individuals were tagged. A poster was produced showing the tags, contacts, different language names for the species and the key difference between the Freshwater Sawfish and the Dwarf Sawfish, which occurs in the estuary downstream of Telegraph Pool.

The stomachs of nine individuals showed that the diet of this species is dominated by the Lesser Salmon Catfish, however fine detrital matter and cherubin were also eaten. Additionally, both the relationship between rostrum (saw) length and total length and the number of rostral teeth in female and male Freshwater Sawfish were significantly different. The number of teeth on the left side of the rostrum ranged from 17-21 in females and 19-23 in males, and although there is some overlap, 97% of individuals with 19 or less rostral teeth were female, and 94% of individuals with 21 and more left rostral teeth were male.

The high abundance of Freshwater Sawfish encountered immediately below Camballin Barrage, and the fact that six of the eight recaptures of a total of forty tagged individuals were also at this locality illustrated the fact that the Barrage hinders the upstream migration of the species.

Barrage Project

Fish migration in the Fitzroy River and the impact of barriers

(Funded by Land and Water Australia)

Covering almost 90,000km², the Fitzroy River catchment is relatively uncleared, non-saline and is largely unregulated with the Barrage, approximately one hundred kilometres upstream from the limit of tidal influence, being the only major artificial obstruction to fish migration. While the Sawfish Project demonstrated that Freshwater Sawfish use the river as a nursery, with all of those in the river being immature, the presence of the Barrage is thought to severely affect the upstream migration of not only this species, but also other important food fishes such as Barramundi. Juvenile and adult Barramundi (and other species) migrate up (and down) the river and, depending on flood levels from the resulting wet season, the Barrage may be impenetrable for up to ten months of the year. During the wet of 2005 it may have only been passable for fish for a few weeks. As part of this assessment the WA Department of Environment is comparing the different magnitude of flow events, based on current and historical data, and the potential need for a fishway is being assessed and discussed with the community.

Monitoring of the fishes above and below the Barrage has demonstrated that there are substantial differences. For example, species that were caught immediately below the Barrage (not above) include Freshwater Sawfish, Bull Shark, Oxeeye Herring, Dimond Mullet and Giant Herring. Each of these species is of marine origin and utilise the river as a nursery and feeding grounds. One Freshwater Sawfish that was tagged in July 2004 at the Barrage was recently (May 2005) caught below the Barrage and has thus been trapped for almost a year. We also caught this same fish in November 2004 at the Barrage, as well as two others that were tagged in July 2004.

High numbers of Bull Sharks congregate below the Barrage and this aggressive species poses a threat to both the upstream migrations of many species as well as being a danger to people swimming. One Bull Shark was found to consume a small sawfish. Isotope analysis of the fishes below the Barrage demonstrated that Bull Sharks are a major predator of sawfish. In some years, this barrier to fish migrations may decimate year classes of Barramundi that move upstream after each wet, only to become trapped and predated on. Recreational fishing is also popular at the Barrage, and the majority of sawfish caught there have fishing line tangled around their rostrum. A study of the biology of the Bull Shark is currently being undertaken.

Northern River Shark

The Northern River Shark, Glyphis sp. C (Carcharhinidae) in Western Australia

(Funded by the Natural Heritage Trust)

During the Fitzroy Fish Project, the Northern River Shark was found near the mouth of the river. This species was not previously known from Western Australia, and only eight individuals were known to science; three from the Fly River in Papua New Guinea and five from the Adelaide and East Alligator rivers in the Northern Territory. The species is listed as Critically Endangered on the IUCN Red List 2003 and Endangered in Australia under the EPBC Act. The five males and two females captured ranged in length from 906 to 1,418 mm total length; weighed between 5,150 and 18,640 grams; and had a vertebral count range outside that previously reported for the species, i.e. 142-151 compared to 147-148. The unusually high incidence of fused vertebrae and spinal deformation in this population may suggest a small gene pool of the species in King Sound. The presence of a small eye, large dorsal and pectoral fins, and well-defined sensory ampullae may be reflective of living in an environment subjected to extreme turbidity and flows.

King Edward River Fish Project

Fishes of the King Edward and Carson Rivers with the Belaa and Ngarinyin names for the fish

(Funded by Land and Water Australia)

During 2004 and 2005, forty-two sites on the King Edward and Carson Rivers and their tributaries were sampled for fish. During the field trips the language names for the fish were sourced from Elders from the Belaa and Ngarinyin people of the region. The results of this study have revealed that the freshwater fish species diversity of the King Edward River is higher than previously been recorded for a Western Australian river. Twenty-six freshwater fish species were recorded; which
is three species higher than the much larger Fitzroy River in the southern Kimberley. The study also resulted in a number of range extensions, including Butler’s Grunter and Silver Cobbler to the west, and the Slender Gudgeon to the north and east. What appears to be an undescribed species of glassfish was captured. Interestingly, a considerable proportion of Black Bream (Jenkin’s Grunter), which are widespread throughout the system but are essentially restricted to main channel sites, had ‘blubber-lips’.

There were significant differences in the prevailing fish fauna of the different reaches of the King Edward River system. Thus, fish associations in the upper King Edward River main channel were significantly different to those in tributary sites and from the main channel of the Carson River. Similarly, the fauna of the Carson River, which was much more diverse than the King Edward River main channel and tributary sites, was characterised by many species that were not found in other parts of the river. The presence of barriers in the form of waterfalls, which do not permit upstream migrations in fishes, are considered to be the main factor in limiting the distribution of many species. Some species tend to only be found within tributary sites, for example. Kimberley Mogurnda, while others are most abundant in tributaries rather than main channel sites, for example Western Rainbowfish and Spangled Perch. Waterfalls are also seen as limiting the number of migratory marine/estuarine species that enter freshwaters of this river. For example, only three species that complete their life cycle in salt water were captured in the freshwaters of the King Edward River system, compared to fourteen species that utilise the freshwaters of the Fitzroy River.

While many of the Ngarinyin names for fish of the Fitzroy River were reported in the Fitzroy Fish Project, the two river systems do not share all species, and only eighteen of the twenty-three species were named in that study. However, during this Project, Pansy Nulgit provided names of fish not previously recorded. Dolores Cheinmora and Agnes Charles provided the Belaa names for fish. The names of sixteen freshwater fishes and two marine fishes were identified in the Belaa language and classified according to noun class. A poster of the fishes of the King Edward River with the Belaa names and Ngarinyin names has been produced.

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Publications From The Studies
Introduction
The 650 kilometre long Ord River is one of the major river systems of Western Australia, stretching from its source northwest of Halls Creek to empty into the Cambridge Gulf near Wyndham. The river has been dammed twice: in 1961 the Kununurra Diversion Dam (KDD) was started, creating Lake Kununurra, followed by the Ord River Dam (ORD) in 1973, forming Lake Argyle. The purpose of the dams was to provide water for irrigated agriculture within the Ord River Irrigation Area, which currently covers around 15,000 hectares, with future plans to expand to 65,000 hectares under Stage 2. The resulting large inland water bodies are used for recreation, tourist boat charter, aquaculture and commercial fishing. From an economic and social point of view, the river is a significant feature and attraction, however many cultural values have been degraded since damming, including loss of heritage sites and loss of people's connection to country.

The Ord River Dam and associated agriculture are often advertised as a successful model for economic development. However, the validity of the financial rationale supporting construction of the dam has been seriously questioned since its inception and in the thirty or so years it has been in operation, the dam has been heavily subsidised. Further, the decision to dam the Ord River was based on poor science that lacked any ecological investigations or regard for Aboriginal custodians. As a result, there are serious environmental and social repercussions. Mistakes of the past, made outside of a sustainability assessment, with poor planning and lacking consultation, are now weighted on the current generations to solve.

The purpose of the presentation is to give a perspective on the changes that have occurred since damming and their impacts on local Aboriginal people and the environment. Social implications are discussed, together with a brief history of how the decision to dam was taken, which draws heavily upon an earlier review by Graham-Taylor (1982). The cultural consequences of construction are then described, followed by the environmental effects of damming the river. The final section of the paper is concerned with the economic validity of the Project as a whole. In order to learn from past mistakes a critique of the sustainability of the Stage I will be given, highlighting issues for consideration prior to further development. The Ord River is an example of a valuable river system with diverse benefits to many people, and future planning decisions will impact directly and indirectly on a number of systems and values.

Social Implications
The decision to dam the Ord River was influenced by the political climate of the time, most notably a struggle for control of the north between the State and the Commonwealth governments (Graham-Taylor 1982). In addition, there existed a fear of invasion from Asia and there was much debate in Parliament and in the press about measures for protection from the “thousand millions of coloured people adjacent to West Australian shores” (Graham-Taylor 1982). Populating the landscape (with settlers) could provide some protection and allay these safety concerns in part.

Early surveys of the Ord River Valley showed agricultural potential and began the dream of opening up the “unexploited tropical north” (Graham-Taylor 1982). Alexander Forrest’s exploration report of the Ord and Fitzroy valleys in the late 1870s sparked an interest in these areas for the pastoral industry, and soon after the first enterprises began (Graham-Taylor 1982). In 1926 the Commonwealth Government offered to assume responsibility of the northwest (north of the 26° parallel), but the Western Australian Government did not accept. Having rejected the Commonwealth’s offer, the Western Australian government was under pressure to formulate a policy for the development of the area. Failures in tropical agriculture and difficulties in the pastoral industry were not conducive to enticing or sustaining enterprises or communities in the Kimberley.

It is not widely known that as early as the 1930s, there was interest in the Kimberley as a possible settlement for Jewish refugees, reinvigorating the Western Australian government’s plans for development in the Kimberley. In 1938 the “Freeland League for Jewish Territorial Colonisation” was investigating the prospects for Jewish settlements in Australia, and in 1939 the secretary and founder of this League visited the Kimberley from Europe on a reconnaissance mission. This was a significant development, as the Jewish league became enthusiastic about
the prospects of tropical irrigated agriculture in the Ord valley and produced the first plan to realise this scheme (Graham-Taylor 1982). The proposal was well received by the Western Australian government but not the Commonwealth, and so never eventuated. However, presumably building on the concept of the Jewish settlers, the Western Australian government embarked upon the development of an irrigation scheme in the Ord Valley for beef production and irrigated agriculture (Graham-Taylor 1982).

The Western Australian government had been seeking financial assistance from the Commonwealth since the mid 1940s to undertake the water resource developments outlined as a means for development in the northwest. A Commonwealth grant of £5 million was finally obtained for the initial development of the Ord River Irrigation Area by building the Kununurra Diversion Dam, even though this was substantially less than the £11.5 million originally estimated to be required. The plan was to develop the diversion dam first and then the main dam as funding became available. The proposal for agricultural development was not based on any detailed scientific information, and it was noted by the Commonwealth at the time that there was a decided lack of knowledge on the economic viability of such a scheme. Graham-Taylor (1982) has investigated the decision-making process in detail and reported, “despite fourteen years of research at KRS [Kimberley Research Station], there were still many outstanding problems, and no single commercially viable crop available. The proposal that the greater part of the money be spent on the Diversion Dam would appear to have been a last resort. All other alternatives disappeared as they were further researched.” However, the proposal for the diversion dam was accepted in 1960, with construction beginning in 1961. The dam was completed in 1963 and the first farms were established later that year (Graham-Taylor 1982).

When it came to the next phase of damming for expanded irrigated agriculture, there was no evaluation of the results of the diversion dam Project prior to the decision to dam the Ord River. The State Government had commissioned an economic study in 1961, well before the first farmers arrived. The early years of agriculture in the Ord Valley were difficult due to a lack of understanding of environmental issues. Pest plagues and diseases greatly damaged the crops, mainly as a consequence of limited understanding of tropical irrigated agriculture in this setting. Despite information showing no viable crops and the financial distress of farmers, the Commonwealth again granted monetary assistance, this time $48 million for the ORD in 1967. Interestingly, this grant coincided with an upcoming election (Graham-Taylor 1982). Thus, the examination of the social and political climate at the time by Graham-Taylor (1982) shows that these factors heavily influenced the decision ahead of any rigorous scientific analysis.

With regard to other social considerations it seems there was some thought given to preserving non-Aboriginal heritage; the Argyle Downs Homestead and two colonial graves were relocated before the valley was flooded. However, none of the Aboriginal graves or burial sites were considered alongside these actions, reflecting a lack of acknowledgement of Indigenous values at that time. Recognising the high cost of travel and lack of services in the northwest, the state government granted some social assistance to settlers, providing schools, roads and services.

Throughout the planning process, the existing Aboriginal population was marginalised; there were no community consultations and no discussions with Traditional Owners (see Hill and Goodson, this volume; Barber and Rumley 2003).

Cultural Implications
Although archaeological studies were initiated shortly after construction of the ORD began, many were never completed because the dam filled faster than expected, within a year of completion. Monsmont and Miriwun rock shelter, both sites of high archaeological value, are now inundated by Lake Argyle. The flooding also destroyed numerous other archaeological sites and current heritage sites.

Prior to the construction of the ORD, almost no thought was given to the impact on Aboriginal people and contemporary cultural values. The increasing European population and social settings brought about by the irrigation development also impacted upon cultural heritage values. A significant increase in access by non-Aboriginal people to traditional sites resulted in reducing or destroying the ceremonial significance of these places. Access to country and sacred sites became impossible following the filling of the dam, resulting in the flooding of ceremonial sites, hunting and fishing grounds, and seasonal routes (KLC 2004).

Traditional Owners have expressed concern over environmental impacts associated with the development, such as the diversion of natural drainage flows through channels and levees instead of the billabongs of the black soil country associated with the Dreamings (see Hill and Goodson, this volume; Barber and Rumley 2003).

Ecological Implications
Ecological values were not considered prior to the building of the dams. No surveys were commissioned to understand the ecological system (land, water, plants and animals together) or the impacts of the dams upon that system. Two biological studies did take place prior to dam building, recording data on birds (Robinson 1961 quoted in Graham-Taylor 1982) and flora (Gardner 1945 quoted in Graham-Taylor 1982), but these were not undertaken in association with the irrigation development and merely coincided by chance. The lack of baseline data regarding the pre-dam state of the Ord River system impedes accurate determination of current and future conservation status, as it is difficult to estimate the rate and scale of change (Watkins et al. 1997). All other research undertaken prior to the damming (from about the 1940s) of the river was associated with the agricultural potential of the area and viability of various crops (Graham-Taylor 1982).
Despite the modifications to the river system, some areas are recognised as having outstanding biodiversity value. Lakes Argyle and Kununurra were listed under the Ramsar Convention in 1990 due to their importance to waterbirds as a dry season refuge, although this was not an intentional outcome of the dam construction. The lakes have also become an important site for the saltwater and freshwater crocodiles, where numbers have increased to levels such that there were 25,000 freshwater crocodiles counted in Lake Argyle in the 1980s (Webb 1989). The creation of the dams upstream (and Lakes Argyle and Kununurra) have had an impact on the downstream Lower Ord Ramsar site, although the effects on the ecology have never been comprehensively evaluated (Watkins et al. 1997). Lakes Argyle and Kununurra are still actively evolving, thus certain changes to the River’s ecological character may be inevitable, with the lower Ord floodplain currently in a state of ecological re-adjustment (Watkins et al. 1997).

A number of research studies have been undertaken since damming to investigate the environmental impacts on the present ecology. These are briefly mentioned below to give an overview of the current impacts since development and also as a lesson of the environmental problems that can arise from development decisions in the absence of rigorous research.

Flooding
The building of the ORD and KDD has greatly reduced the frequency and intensity of flood flows and increased dry season river levels, leading to a loss of seasonality (Start and Handasyde 2002). This directly affects water levels and flushing times in the river and upper estuary, the salinity regime in the estuary, the frequency of inundation of flood plains and wetlands, and the dynamics of sediment erosion and deposition (Salma et al. 2002).

The mean annual flow has decreased by thirty percent from a highly variable 4,500 gigalitres pre-damming, to around 3,200 gigalitres post-damming with far less variation (Rodgers et al. 2000). Changed flow dynamics have resulted in significant changes in the geomorphology of the Ord River (Doupé and Pettit 2002, Rayler et al. 2002, Wolanski et al. 2001, WRC 2000, WRC 1997). This has changed from 24 megatonnes pre-damming to 0.6 megatonnes post-damming. Of the latter, approximately 0.015 megatonnes of sediment comes from Lake Argyle, and the rest from the Dunham River (Rodgers et al. 2000). Previously, the floods would bring big sandbanks down the river and move them around each year; now much of the sand and sediment is trapped in Lake Argyle with a deposition rate of 24 million m3/yr. This sediment effectively reduces the usable storage by 600 million m3, a little over ten percent of the original volume of the dam (Doupé and Pettit 2002, WRC 1998, WRC 1997).

Vegetation Change
The loss of seasonality and presence of year-round water has resulted in a considerable change in riverine flora. Areas of sparse, temporary vegetation where plants would previously have been washed away annually with the flood water have become dense communities of trees and bushes growing permanently along the banks of the river.

Regulated river systems have been shown to be more prone to weed invasion than unregulated sites elsewhere in the Kimberley (WRC 2003). The reduction in floodplain extent and inundation frequency impacts the health of the ecosystem by restricting the dispersal of seeds and juvenile aquatic fauna across the floodplain (Doupé and Pettit 2002, WRC 2003). An associated change in composition and distribution of aquatic fauna would be expected.

Sediment Changes
Erosion and siltation within the Ord have been an increasing problem ever since pastoralism began in the area. Despite massive dust storms and obvious erosion, negligible conservation action was undertaken until the KDD was proposed, when it was realised that siltation would create problems for the new lake. To combat this, the Ord River Regeneration Reserve was created in 1967 with rehabilitation measures including the removal of feral and domestic stock, contour cultivation and replanting (Start and Handasyde 2002, Woinarski 1992). Despite these measures, erosion and siltation remain significant threats to the river system.

Following the damming of the Ord River, regular storm flood events (in stream) have ceased and flow surges no longer clear the river of debris, vegetation, sand and sediment. Plants can now become established in these areas, trapping ever more sediment, reducing the channel capacity further, and decreasing the depth of the river. These features combine to reduce channel capacity and produce fewer sandbanks in the lower Ord, resulting in a loss of habitat for certain species of fish and smaller animals (Rayler et al. 2002, WRC 1997).

The average annual sediment load downstream of the KDD has changed from 24 megatonnes pre-damming to 0.6 megatonnes post-damming. Of the latter, approximately 0.015 megatonnes of sediment comes from Lake Argyle, and the rest from the Dunham River (Rodgers et al. 2000). Previously, the floods would bring big sandbanks down the river and move them around each year; now much of the sand and sediment is trapped in Lake Argyle with a deposition rate of 24 million m3/yr. This sediment effectively reduces the usable storage by 600 million m3, a little over ten percent of the original volume of the dam (Doupé and Pettit 2002, WRC 1998, WRC 1997).

Changes in the Cambridge Gulf
Wolanski et al. (2001) suggested that the East Arm of the Cambridge Gulf is now geomorphologically unstable as a result of human activities and has changed considerably due to reduced tidal flushing and increased sediment deposition. Suppression of large floods has resulted in the accumulation of silt within the estuary over the past thirty years, and the width of the river has decreased by fifty percent. In contrast, the West Arm (unregulated) appears to have remained more or less stable for over a century. A further consequence of the changed hydrological regime has been a reduction in saltwater intrusion by fifty percent with altered salinity of the Lower Ord (Wolanski et al. 2001, WRC 2000, WRC 1997). This is expected to have notable impacts on species and habitat diversity within the aquatic and mangrove communities.

Riverine, estuarine and marine resources are highly dependent on water quality, environmental flow and nursery habitat conditions, which are all critically affected by up-stream land and water management (Volkman and Watson 2002). The implications of a changed flow regime on commercial fish stocks and fisheries in the Joseph Bonaparte Gulf have not yet been determined. However, studies show that changes in river flows have the potential to impact on the production of the...
offshore prawn fisheries (Volkman and Watson 2002). There is substantial revenue generated from commercial fishing offshore and fishing-based tourism in the East Kimberley. Non-commercial values such as Indigenous subsistence and cultural and recreational fishing must also be considered.

Physical Barrier
The damming of the Ord River has restricted certain species from following their usual migration path, such as Barramundi and Freshwater Crayfish or cherubin (Volkman and Watson 2002). This can result in genetic isolation, and in extreme droughts, the localised loss of species in a reach upstream from a migratory barrier (Storey et al. 2001). This barrier effect and loss of habitat is also likely to have resulted in a reduction of other aquatic species (WRM 2003, unpub.).

Agriculture
There are a number of ecological impacts on the river system as a consequence of farming in the Ord River Irrigation Area (ORIA). Current environmental problems within the ORIA, in addition to those relating to changed hydrology from the dams, include rising groundwater and salinity and decreased water and air quality (WRM 2003, unpub.). The ORD, KDD and construction of the M1 channel have resulted in rising groundwater levels and changed flows (Salma et al. 2002). Salinity problems have already begun in the Packsaddle area, and other areas are predicted to follow (Salma et al. 2002).

The sensitivity of fish populations to irrigation practices in the Ord Valley is highlighted by periodical fish deaths in the proximity of irrigation drains, with pesticides strongly implicated as the cause (mainly DDT in the 1960s and 1970s, and Endosulfan in 1997) (Doupé et al. 1998, OBP 2001). Studies on the Ord have also shown that irrigation increases the loads of phosphorus and total oxidised nitrogen entering the river, raising the nutrient concentrations (Lund and McCrea 2001, Doupé et al 1998).

Ecological Summary
The damming of the Ord River has changed the hydrological regime of both the river and the surrounding floodplains, significantly impacting ecosystem processes such as flooding, sedimentation, maintenance of floodplain habitat, vegetation, composition and distribution of aquatic fauna and control of weed infestations.

Economic Implications
The validity of the economic rationale supporting construction of the Ord River Dam has been seriously questioned since it was first proposed (Davidson 1972, 1982). For the past thirty years, the dam has been heavily subsidised in the expectation that it will eventually provide a significant benefit to the community. Up until 1991, the dam had cost the public over $500 million ($330 million discounted) and the Project did not provide a positive cash flow until 1989 (Hassall and Associates 1993). It is estimated that a positive return on the original investment will never be obtained (WWF Australia 2003, unpubl.). Extrapolating the model used in Hassall analysis, it is likely that the Project has only contributed an additional $33 million in Net Present Value between 1991 and 2002.

As discussed above in the social aspects of the dam construction, the economic viability of the Project was not assessed and the money was spent on creating the dams for political purposes rather than sound financial reasons (Davidson 1982). The grant for the ORD was available, so construction began with no evaluation of the KDD and the initial farms, although the original aim was to continue to the ORD if the KDD had proved successful (Davidson 1972, 1982). Problems encountered early in the Project and extra costs unforeseen included the distance to markets, waterlogged crops, leaking channels, overflowing drains, low yields, pests and diseases. Environmental impacts were not costed-in or included at all.

The Joint Commonwealth and Western Australian Ord River Irrigation Area Review Committee (1979) concluded that the Project had failed “as a result of its own inherent high cost structure” and “incomplete understanding of the basic Ord agronomy” (cited in Graham-Taylor 1982). This view has been repeated many times since (e.g. Davidson 1982). The reasons why the second phase was accepted appear to be economic—so much money had already been invested that it seemed appropriate to continue to invest. Graham-Taylor (1982) summarises this view by suggesting that “early low cost decisions created precedents, making the later, high cost decisions to proceed with Stage II a seemingly inescapable commitment—despite failures and increasing problems.”

The Future
The entire river system, including the lakes, is in a state of ecological re-adjustment (Watkins et al. 1997). The dearth of baseline data prior to damming, the relatively short timeframe of regulation, and the lack of a comprehensive monitoring regime to identify the range and rate of community change makes an accurate assessment of the magnitude of current and future threats to the ecosystem very difficult (Watkins et al. 1997). It is expected that the problems of the present will be exacerbated if they are not addressed.

From an economic and social point of view, the river is a significant feature and attraction providing water for recreation, tourism, aquaculture, and electricity generation (hydropower). However, many cultural values have been degraded since damming, including loss of heritage sites and loss of people’s connection to country. Social, economic and ecological issues of the past are only now beginning to be addressed. In order to provide a healthy river system able to maintain the wide suite of values across the different sectors, mistakes of the past must be understood so that a sustainable system is provided for the future.

Summary
An appropriate development considers the full range of values (ecological, social, cultural and economic) and provides a net benefit. The Ord River Dam is widely regarded as a political
decision based on poor economics, poor science, no ecological sustainability and no regard for Aboriginal custodians (Graham-Taylor 1982). Given the information outlined above, the ORIA Stage 1 decision was not a sustainable development decision.

The ORIA has not demonstrated best management practice in irrigated agriculture to date, although there are recent local initiatives to try and improve this situation with the development of a land and water management plan among other community and agency initiatives (OLW 2000). Irrigation in the Kimberley has a relatively large ecological footprint (water storage, river management, water supply management, land clearing, etc.) and social and cultural impact (alienation, access to resources, cultural and heritage disturbance) within a defined area. The Ord River Project has illustrated that the cost of developing irrigated agriculture in remote regions is very expensive, and the location continues to put producers at a competitive disadvantage. At present, there is little evidence that further major developments of this nature in tropical northern Australia are justified due to the costs of development, inherent competitive disadvantages and highly competitive and volatile overseas commodity markets.

Of particular relevance to future development in the Ord Valley is the Western Australia State Sustainability Strategy Guiding Principle that, "Decision-making processes should effectively integrate both long and short-term economic, social and equity considerations" (Government of Western Australia 2003). The Strategy recognises that while there are a variety of economic opportunities, not all are socially and environmentally responsible. The future of the Ord should therefore act as a case study for northern Australia and embrace a process that fully integrates economic, environmental and social/cultural factors to promote positive net outcomes such as a Sustainability Assessment, as advocated in the State Sustainability Strategy. Future planning decisions in the Kimberley, including those on the Ord River and any new developments in the Fitzroy, must consider the full range of values, not just economic values alone if they are to avoid the mistakes of the past. A community planning process coupled with long-term scientific investigation of sustainable use of land and water for these resources must form part of the sustainability framework for northern Australia.

For the future health of the river system and all the values that rely on it, ORIA Stage 1 should be made as sustainable as possible. This will need to include a process to ensure the environmental impacts of Stage 1 are arrested, and wherever possible, mitigated. Both Stage 1 and Stage 2 should adopt best practice in irrigated agriculture to avoid exacerbating the problems or repeating the mistakes created during the first stage. In addition, Stage 2 should not proceed unless proponents can demonstrate that it will produce a net positive benefit, ecologically, socially, culturally and economically.

Thanks to Tamsin Kilner who assisted with editing this paper.

References


Watkins, D., Brennan, K., Lange, C., Jaensch, R., and M. Finlayson. (1997) Management Planning for Reservoir Sites in the Kimberley Region of Western Australia. Report to the Western Australian Department of...
Conservation and Land Management, Perth.


Figure 1: Historical photograph of the area now occupied by Lake Argyle. Photo: Kununurra Historical Society.

Figure 2: Map of the Kimberley showing the Ord River and Irrigation Areas (Existing and Proposed). (WRC 2004)
Managing Change in the Ord from A Local Perspective

Introduction
The damming of the Ord River in the early 1960s resulted in significant changes to the way of life for Indigenous people in the East Kimberley. This paper outlines some of those changes, how these changes have had an impact on local people and some recent initiatives to address them.

Addressing the Past (Desmond Hill)
I am a Miriuwung Traditional Owner. I have been representing my people in the Ord Final Agreement process between the Miriuwung and Gajerrong (Miriuwung-Gajerrong, or M-G) peoples and the Western Australian Government. These negotiations, which began in late 2003 and ended with the signing of an agreement in October 2005, concern the development of Stage 2 of the Ord River Irrigation Area (ORIA) and the settlement of Native Title and compensation issues.

The ORIA in the East Kimberley region of Western Australia was seen as a major economic development initiative that would have significant national and regional benefits. Yet, at the time of its conception, planning and implementation in the 1960s, no thought was given to the negative impacts that a Project of this scale would have on the Aboriginal people of the region.

During the 1960s, our traditional connection to the land was denied under a racially discriminatory legislative and administrative regime in which Aboriginal people were governed without their consent. Although under this system Aboriginal people were supposed to be ‘protected’ by the WA Native Welfare Department, our interests were never represented during the development of the ORIA Project nor in the subsequent removal of Aboriginal Traditional Owners from our land.

The first stage of the Ord River irrigation Project commenced in the early 1960s, with the damming of the lower Ord River to form Lake Kununurra. This was followed by the construction of the Ord main dam in 1971 and the filling of the reservoir behind the wall the following year, which created Lake Argyle. The Lake has had the effect of extinguishing Native Title on more than 3,000 km² of land.

Lake Argyle has also been the catalyst for further subsequent extinguishment of Native Title as a result of irrigated agriculture development. Stage 1 of the ORIA now covers approximately 15,000 hectares of the Ivanhoe Pastoral Lease and Packsaddle Plains. This Project was conceived and executed without reference to or recognition of the rights and interests of Aboriginal people in the region. No consultation occurred with Traditional Owners and apparently no thought was given to the impact that a development of this scale would have on the Aboriginal people.

As a consequence of the above, the M-G peoples asserted that they did not want to enter into any negotiations with the Western Australian Government (the State) regarding Stage 2 development unless and until the impacts of Stage 1 were addressed.

Because of this, the State funded the Kimberley Land Council to produce a report addressing the social and economic impacts on the Traditional Owners caused by the building of the Kununurra and Argyle Dams and the development of the existing irrigation farm areas. This report was completed in March 2004 and is titled “Ord Stage 1 Fix the Past, Move to the Future: An Aboriginal Social and Economic Impact Assessment (ASEIA) of the Ord River Irrigation Project Stage 1”.

The ASEIA Report contains forty recommendations adapted from a collation of previous reports and through consultation with M-G peoples. These recommendations constitute compensation for the loss of lands and sacred sites, as well as for the cultural and social loss experienced by the Traditional Owners due to the inundation of Lake Argyle and the development of Ord River Irrigation Project Stage 1.

The first six of these recommendations have been addressed through the Ord Final Agreement negotiations between M-G peoples and the State Government. These include the acquisition and transfer of title of land to M-G peoples; the establishment of new community living areas with secure tenure; and compensation measures for future land development.

The other thirty-four recommendations include increased access to funding for language centre activities and heritage site...
Managing Change in the Ord from A Local Perspective

surveys; greater decision-making roles for Aboriginal people in the planning and management of areas affected by the Ord River Irrigation Project stages 1 and 2; joint management arrangements in conservation areas and recreation reserves and the handing back of proposed parks; training and employment of Aboriginal people in environmental monitoring; the establishment of wildlife corridors on developed and farmed land and monitoring of water quality of the river and waterway systems; and a range of health, educational, housing and infrastructural measures.

To work toward implementing the remaining thirty-four recommendations, a group of seven M-G Traditional Owners formed the ASEIA sub-committee in June 2004. This committee has been meeting with various departments and organisations since that time to inform them about the ASEIA process and to find out what, if any, responsibility these third party groups have in relation to the implementing of the recommendations.

In March 2006, an Ord Enhancement Scheme (OES) Management Committee was formed to address the implementation of recommendations through joint management and Project partnerships. The OES Management Committee consists of the seven M-G representatives on the ASEIA sub-committee and one representative from the KDC. With the endorsement of the State Minister for the Kimberley, the OES Management Committee can recommend the appointment of up to two additional members representing the non-government sector.

As part of the Final Agreement between the M-G peoples and the State Government, $11.195 million has been allocated over a four-year period to establish a leverage fund to encourage collaborations with other organisations and agencies on projects that address the ASEIA Recommendations. This fund will be channelled through the Kununurra KDC Office upon acceptance and approval of projects by the OES Management Committee.

Desmond Hill is a Miriuwung-Gajerrong Traditional Owner and Coordinator of the ASEIA Committee,
Yawoorroong Miriuwung Gajerrong Yirrgeb Noong Dawang Aboriginal Corporation

A Personal Perspective (Scott Goodson)
This is a short personal account of my experiences living and working with the Miriuwung-Gajerrong peoples of the East Kimberley region. Arriving in Kununurra in 1990, I was overwhelmed by the lush vegetation and the seeming abundance of water. I did not know that the environment I was looking at was a significantly modified one nor that the natural changes had had a major impact upon the local Indigenous community’s cultural and social values. Then, I only understood that irrigated agriculture had provided significant economic benefits to the region.

The Miriuwung people are river people. Ecological changes such as reduced natural flow regimes have resulted in changes to habitat and the riparian area of the Ord Valley. This has resulted in changes to the way Miriuwung people use the river for cultural and social sustenance and, most importantly, to their connection to country.

Before the dam, the Ord River was much like the Fitzroy with regular flood or flow regimes that maintained the natural environment. The River today is considered a highly modified environment through regulated flow. The physical characteristics of the Ord pre- and post-damming are in stark contrast. Since the building of the dam, the riparian vegetation has increased to the point where local people cannot access areas for cultural and subsistence activities such as hunting. Local people refer to the river now as a “rubbish river”, or describe it as ‘dirty’ when it was once ‘clean’, since it was cleaned out every year when the rains came.

In developing future management directions for the waterways of this area, the connections of Miriuwung people to the river system must be recognised and accounted for. Likewise, Indigenous values must be taken into account in the planning for specific activities, such as the construction of a boat ramp for public access to fishing areas. These values are not known or understood in the wider community and most often go unheard in local planning processes. Local Indigenous people need to participate in the planning and decision making processes.

To effect changes in community attitudes and in local planning processes and objectives, the WA Department of Environment (DOE), Miriuwung people and the Mirima Dawang Woolab-Gerring Language and Culture Centre are working together on an extensive range of projects. For example, they have collaborated in the development and production of two maps of cultural values for the Lower Ord River and for Lake Kununurra; a Miriwoong fish poster; Miriwoong interpretive signage for the Lower Ord; and a brochure entitled Caring for the Ord River Project.

Other projects include collaborative research between Miriuwung people and scientists into pesticide levels in plant foods (bush tucker), the Pesticide in Biota Project, which was requested by Traditional Owners; and participation of local people in the Ord Fishway Project, which is concerned with the re-establishment of the migratory pathways of fish species on the Ord River system. In addition, DOE is committed to a joint management initiative with the Yawoorroong Miriuwung Gajerrong Yirrgeb Noong Dawang Aboriginal Corporation for Reserve 31165, 136,000 hectares of land located south of Lake Argyle.

Currently, one Miriuwung person is contracted by DOE to work on all of the above and other projects. Training for Miriuwung people in natural resource management is being planned. Through activities and projects such as these, we hope to achieve greater participation of local Indigenous people in natural resource management in the region.

Scott Goodson is Waterways Management Coordinator with the Department of Environment, Kununurra
Conservation, Communities and Livelihoods: New Visions Rooted in History

Borrini-Feyerabend, Grazia

The World Conservation Union (IUCN)

A Glimpse of History

"Imagine you shooting an arrow... The farther back you pull the bowstring, the farther the arrow flies. The same is true for our own understanding and vision. The farther back we look into history, the farther we can see into our future..."

Through millennia, the main actors of natural resource management and conservation have been human communities—both settled and mobile (gatherers, hunters, fisherfolk, herders, managers of fire, peasants, forest users, users and keepers of oases and water sources, builders of terraces and water channels, breeders of animals, selectors and pollinators of plants). Many human communities were created around the need and opportunity to manage natural resources for their own livelihood. Cultural and biological diversity evolved together.

Human communities had plenty of reasons to manage natural resources with attention and care (for example survival, security, cultural and religious values). Even without any interest for “biodiversity” per se, they contributed to safeguarding biodiversity and often “enriched” it by developing new agro-biodiversity, promoting habitat connectivity, creating new habitats.

From this basic background we can see that a global change of historical proportion has been taking place through the last several centuries and accelerating in the last two. Starting with the “enclosure of the commons” and continuing with the agricultural and industrial revolutions, colonisation, colonialism and the development of national states, the aristocracy (private owners) and then States and, more recently, corporate owners emerged as new actors in the management of natural resources. They replaced Indigenous peoples and local communities sometimes by persuasion and much more often by force. This process can be observed pretty much everywhere around the globe.

In some countries, community control over natural resources is a memory of the past and there is not even a legal way to own “common property”, only private or corporate owners and the government are recognised. In other countries, however, there is still a rich interface between traditional natural resource management systems and the global agro-industrial market system. Some such countries are coming to realise the wealth of knowledge and skills they still possess, and conservationists are coming to terms with some concepts and practices that allow to them benefit from these hitherto unrecognised resources.

New International Policy

Three recent international policy events ushered this new understanding:

1. The September 2003 World Parks Congress in Durban (South Africa);
2. The February 2004 7th Conference of the Parties of the Convention on Biological Diversity (CBD) in Kuala Lumpur (Malaysia)—first Programme of Work on Protected Areas in CBD history; and
3. The November 2004 3rd World Conservation Congress in Bangkok (Thailand).

Through these meetings, consensus has been reached that conservation is not somehow operating in a different world to other human endeavours. Conservation needs to respect human rights, at least “do no harm” and have a positive impact on livelihoods wherever possible. Conservation is stronger when it builds on equity: a fair sharing of the costs and benefits of preserving biodiversity and managing natural resources in a sustainable way. Conservation ought to pay more attention to the crucial ties between biological and cultural diversity, as well as to the conditions that allow communities to be empowered for conservation. And conservation requires the capacities, concerns and engagement of society as a whole, not of expert professionals only. In particular, Indigenous peoples and local communities should be actively engaged in the governance of protected areas.

In terms of “sustainable development”, this suggests that actions are required to:

- Understand the history (social and biological), the cultures and the power differentials that characterise each context. Historical and cultural changes and power differentials exist. They need to be understood and they cannot be glossed over if we care for the fate of the environment.
• Explore the connection between environmental degradation and the disempowerment of Indigenous peoples and local communities from their land, resources and means of production, their imposed impoverishment in the name of development (or conservation), the abuses of human rights, the loss of cultural diversity, the presence of violence and war.
• Help communities rediscover local values and wisdom and regain their rights.
• Translate as soon as possible into national policy and practice the achievements of international policy (such as the CBD Programme of Work on Protected Areas).
• Adopt and support:
  o Co-managed Protected Areas; and
  o Community Conserved Areas.

Co-Managed Protected Areas

The IUCN is now recognising a new dimension of governance type as well as management category in its classification system for protected areas (see Table 1).

Within this new classification system, co-managed protected areas are recognised as:

"...government-designated protected areas where decision making authority, responsibility and accountability are shared between governmental agencies and other stakeholders, in particular the Indigenous peoples and local communities that depend on that area culturally and/or for their livelihoods."

Co-managed Protected Areas provide opportunities for taking advantage of the different capacities and comparative advantages of different parties, for social experimentation, learning, flexibility, and adaptation. Co-management is a process requiring ongoing review and improvement, power sharing and the fair sharing of the costs and benefits of conservation.

Community Conserved Areas

Community Conserved Areas (CCAs) are recognised as:

"...natural and modified ecosystems including significant biodiversity, ecological services and cultural values voluntarily conserved by concerned Indigenous and local communities through customary laws or other effective means..."

Although at times CCAs are recognised by the state, most often they are not recognised and many are in jeopardy today.

There are three defining characteristics of CCAs:
1. Specific Indigenous peoples or local communities (sedentary or mobile) are closely "concerned" about the area (related to them culturally and/or because of livelihoods);
2. Such communities are major players, i.e. they hold power (de facto or de jure) in deciding, implementing and enforcing management decisions; and
3. The voluntary management decisions and efforts of such communities achieve conservation results, although their intention may not be necessarily related to conservation.
The range of Community Conserved Areas includes:

- Sacred spaces and species habitats, examples include:
  - A sacred crocodile pond in Mali;
  - A sacred lake in the Indian Himalaya;
  - Forole sacred mountain for the Borana and Gabbra people in Ethiopia and Kenya; and
  - Chizire sacred forest, Zimbabwe.

- Indigenous territories and cultural landscapes/seascapes, examples include:
  - Alto Fragua Indi-wasi National Park, Colombia;
  - Paruku Indigenous PA (Protected Area), Australia; and
  - Caribou crossing site in the Inuit territory, Canada.

- Territories and migration routes of mobile/nomadic peoples, for example:
  - The migrating territories and wetlands of the Qashqai mobile peoples, Iran.

- Sustainably-managed wetlands, coasts, islands, fishing grounds and village tanks, examples include:
  - Temporarily and permanently forbidden sites (manjidura) in the Bijagos biosphere reserve, Guinea Bissau;
  - Coron Island, Philippines; and
  - Lubuk Larangan River, Mandailing, Sumatra.

- Sacred species and their means of survival, for example:
  - Many wildlife species in India that remain alive only with the active protection of local communities.

- Community-managed formal protected areas in industrialised countries, for example:
  - Ancestral territory of the Regole di Cortina d’Ampezzo (today Regional Park), Italy.

CCAs are highly significant world-wide because they:

- Conserve a wide range of ecosystems, habitats and species;
- Maintain ecosystem services;
- Are the basis of livelihoods and cultural identity for millions of people, securing resources (energy, food, water, fodder, soil) for survival and revenues;
- Are built on sophisticated ecological knowledge systems, including sustainable use, which stood the test of time; and
- Are managed through institutions “tailored to the context”, usually highly skilled at adaptive management and capable of flexible responses to intervening change.

International policy offers full recognition to CCAs and asks governments to support them as essential components of national protected area systems. Sustainable development advocates, conservationists, educators and legislators can foster awareness of CCA values and their importance and promote their legal recognition and support in national legislation and local practice.

**What About the Kimberley and Western Australia?**

There are some challenging questions for us to consider when thinking of the opportunities for “appropriate economies” here in the Kimberley region:

- Are history, culture and power important in the local context?
- Can co-managed protected areas and community-conserved areas contribute to sustainable development, conservation of biodiversity and a more just society? If so, how?
- Are there related risks to avoid and opportunities to seize?
- Who should do what to achieve their contributions to the fullest?

Answering these questions will help all of us to explore the full conservation and sustainable development potential of this beautiful land.

Dr Grazia Borrini-Feyerabend is Vice-Chair of the IUCN Commission on Environmental, Economic and Social Policy (CEESP) and Vice Chair of the IUCN World Commission on Protected Areas (WCPA).

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**Recommended Reading**

Indigenous and Local Communities and Protected Areas: Towards Equity and Enhanced Conservation, IUCN, WCIPA and CEESP, Best Practice Protected Areas Guidelines no.11, 2004; http://www.iucn.org/themes/ceesp/Publications/TILCEPA/guidelinesindigenouspeople.pdf


http://www.iucn.org/themes/ceesp/Wkg_grp/TILCEPA/CCA%20Briefing%20Note.pdf

http://www.iucn.org/themes/ceesp/Wkg_grp/TILCEPA/briefing%20notes%20on%20governance%20of%20PAs.pdf

http://www.iucn.org/themes/ceesp/index.html
Building A Sustainable Economy in Remote Canada

Gill, Ian
Ecotrust Canada, Vancouver

Purpose and Principles
The purpose of Ecotrust Canada is to build the conservation economy.

We are driven by the triple-bottom-line, where economic opportunity improves rather than degrades social and environmental conditions. Some people call it sustainability—we call it the conservation economy.

A conservation economy:
• Provides meaningful work and good livelihoods;
• Supports vibrant communities and the recognition of Aboriginal rights and title; and
• Conserves and restores the environment.

Practices and Priorities
Ecotrust Canada builds the capacity of communities, institutions and businesses to participate in the conservation economy; raises and brokers capital to accelerate the transition to a conservation economy; and connects conservation entrepreneurs to each other and to the marketplace. We champion the conservation economy.

Building the conservation economy will require a quantum shift from rhetoric to action. To achieve dramatic scale and impact, Ecotrust Canada welcomes collaborations with communities, institutions and businesses in order to leverage massive change.

Six sectors are critical to transforming British Columbia's coastal economy: forestry, fisheries, aquaculture, real estate, energy and tourism. Within these sectors, Ecotrust Canada builds:

Capacity:
• Information and Resource Management
• Business Consulting
• Organisational Development

Capital:
• Business Lending
• Equity Investing
• Fundraising

Connections:
• Policy and Research
• Networking
• Communications

Background and Context
Our geography is the coastal temperate rainforest ecosystem of northwest North America, a place of almost unparalleled ecological and cultural richness. The coastal forests are home to huge spruce, Douglas fir, cedar and hemlock trees, as well as charismatic animal species like grizzly and black bears, white "Spirit" bears, wolves and deer, and sustain some of the largest runs of wild Pacific salmon in the world.

Ecotrust was formed in 1991 (in Portland, Oregon), and immediately began mapping the bioregion and articulating its global importance. Ecotrust works in Alaska, Washington State, Oregon and northern California; its work in British Columbia (BC) was assumed in 1994 by Ecotrust Canada, which is a Canadian-registered charitable organisation based in Vancouver, BC. The two organisations maintain close ties and share strategies and resources, but Ecotrust Canada is a wholly independent organisation in its own right.

Ecotrust Canada was formed on the heels of a protracted "war in the woods" waged in the 1980s and early 1990s by environmental groups opposed to logging of old-growth forests on Vancouver Island and elsewhere along the BC coast. In Clayoquot Sound, for example, more than 16,000 people from around the world protested the logging there in the summer of 1993; more than 850 were arrested that year in the largest single act of civil disobedience in Canadian history.

At the time, coastal Aboriginal communities (known in Canada as First Nations) had been largely excluded not just
from the mainstream economy, but also from environmental campaigns. But early in the 1990s, First Nations won major concessions from federal and provincial governments, who agreed to negotiate modern-day treaties to resolve outstanding land rights issues. In Clayoquot Sound, as elsewhere in British Columbia, First Nations perspectives were not just included but became central to planning and resource management.

In order to understand the plight of Canadian First Nations, consider that the United Nations human development index routinely places Canada as among the top nations in the world in which to live. Applying the same criteria that determine Canada’s rank in the world exclusively to First Nations, they would rank 63rd in the world. Unemployment is double the Canadian average; wages are thirty-five percent lower; there are serious health and social issues, many of which trace their origin to the forced “residential school” system (think Rabbit Proof Fence); populations vary from less than one percent in urban areas to more than fifty percent in remote rural areas. First Nations communities have had almost no involvement in resource decision-making in their territories, and have largely been excluded from involvement in the mainstream economy, or in any significant share of revenues and rewards from resource exploitation in their territories.

In this context, Ecotrust Canada’s work centres on what we call “information democracy”—land-use planning, mapping, and capacity building to enable communities to participate in negotiations and decision-making in a meaningful way; and what might be called the democratisation of credit, i.e. providing loans and helping build businesses in areas that are un-banked by conventional financial institutions.

**Information Services**

Information services are where Ecotrust Canada got its start in communities. We have been able to take sophisticated tools, like Geographic Information Systems (GIS), and help deploy them in communities that seldom have had access or expertise to bring their own vision of their territories to bear on planning and decision-making. We have developed methodologies for designing traditional-use studies, community-based mapping, land- and marine-use planning, habitat monitoring programs and for training and capacity building to enable communities to do their own mapping.

We founded, along with two First Nations, the Aboriginal Mapping Network (www.nativemaps.org), which remains an important resource for Indigenous mappers around the world. We have also produced a number of publications relating to mapping, First Nations forestry, and fisheries policy.

**Lending and Business Development**

In 1999, Ecotrust Canada established what we call our Natural Capital Fund (Figure 1). Since that time we have provided more than $7 million in non-bank, high-risk business development loans (Figure 2). We established the fund with the help of Shorebank in Chicago, one of the world’s best-known development finance institutions.

Many of these loans have been provided to producers of lumber or products certified by the Forest Stewardship Council, an international certifier of sustainable forest products. Other loans have been to shellfish aquaculture operations, eco-tourism ventures, renewable energy companies and other “triple-bottom-line” ventures. About one-third of the loans have been to First Nations communities or entrepreneurs, who ordinarily have little or no access to capital or credit. Our lending has helped create or support several hundred jobs in remote communities. Our capital losses are less than half a percent. We have also negotiated a federal loan loss guarantee that stands behind most of our loans.

In addition to lending, we have developed expertise in business planning, market research and analysis, feasibility studies, strategic planning, management training, product development, and networking of conservation economy practitioners to the market place and to each other. In this way, we are able to provide technical assistance to businesses that might otherwise falter because many of the support systems that are taken for granted in urban areas, or with non-Indigenous people, are often simply not available in rural First Nations.

**Conclusion**

Ecotrust Canada is of the strong belief that conservation and community development must go hand in hand. We are in a sense a “hybrid” organisation, one that champions economic development and conservation in the same breath. We leave it to others to advocate for parks and protected areas. We focus on practical, culturally-relevant ways in which people—especially those most disadvantaged or alienated from the mainstream—can develop the human and organisational capacity to participate in an economy that values nature, and people’s development needs, equally. A capital gain needn’t be nature’s loss.

*Ian Gill is President of Ecotrust Canada  
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Figure 1: Natural Capital Fund for Business Lending.

Figure 2: Cumulative business lending 1999-2008.
Figure 3: Ecotrust Canada developed a business plan to improve the financial performance of the Bella Bella Fish plan, a major employer for the Heiltsuk Nation in Bella Bella, British Columbia.

Figure 4: Ecotrust Canada is working on a Marine Use Plan with the Heiltsuk Nation to ensure that harvesting of fisheries resources benefits the local community while ensuring conservation. Photo shows fish boats in Bella Bella harbour.
Tsleil-Waututh First Nation: Our Lands to Share

George-Wilson, Leah¹,²

¹ Tsleil-Waututh First Nation
² Ecotrust Canada, Vancouver

Community History

The Tsleil-Waututh are the original Salish inhabitants of the coastal area of Vancouver and the Burrard Inlet. Our traditional lands cover some 1,160 km² (Figure 1, 2). Our pre-contact population was up to 10,000 people. There are fifty-six recognised First Nations language groups in Canada, half of which are in British Columbia (BC).

Today, the Tsleil-Waututh Nation are a small community of about four hundred and our traditional lands are located predominantly in the city of Vancouver, BC, Canada. Our community controls only a small fraction of our traditional lands (about one thousand acres in total), although we are in an ongoing treaty negotiation over our traditional lands, which has been in progress for over ten years, starting in 1994. Our Federal Crown Reserves include two blocks, one of 250 acres and the other of five acres, close to Vancouver. We have also purchased 779 acres of land on the Indian River (Figure 1).

Tsleil-Waututh Vision

The Tsleil-Waututh Declaration sets out our Vision:

- To put the Tsleil-Waututh face back on the Tsleil-Waututh Territory;
- To see the environment of the territory restored;
- To care for the land and the water; and
- To find creative means and tools to move forward into the future.

The Tsleil-Waututh vision encompasses all avenues of sustainability and seeks to find a balance between social, cultural, economic and environmental values over time. It is holistic in nature. The key challenge for our community is to find ways to move forward and deliver this vision of care and management of the traditional lands. The strategy to realise the vision encompasses:

- Innovative management approaches;
- Examples through actions; and
- Building internal capacity.

Formation of Partnerships

The Tsleil-Waututh strategy also focuses on the formation of partnerships and the development of relationships—we have embarked on an ambitious journey of partnership development. Our community has formed partnerships and relationships with other First Nations, government, the private sector and non-government organisations. We have negotiated several protocol agreements:

- 1998: With British Columbia Parks over Say-Nuth-Khaw-Yum Provincial Park;
- 1998: With Fisheries and Oceans Canada—our AFS Agreement;
- 2001: With BC Ministry of Forests, and again in 2004 with a Forest and Range Agreement;
- 2001: With the District of North Vancouver over the Whey-ah-Wichen Park Master Plan; and
- 2005-2010: Olympic 4 Host Agreement.

Focus on Ecotrust Canada

The Tsleil-Waututh Nation has been working with Ecotrust Canada since 1998. Ecotrust Canada has played an important role in assisting our community to achieve our vision. Some important aspects of the relationship include:

- It is driven by the Tsleil-Waututh people;
- It started small and has expanded as trust has grown;
- The relationship is based on long term thinking;
- It is based on mutual respect and recognition;
- It is cross cultural; and
- It is collaborative.

The relationship between the Tsleil-Waututh and Ecotrust Canada continues to flourish. Both the Tsleil-Waututh Nation (TWN) and Ecotrust Canada have learned and grown from the successes that have been jointly achieved.
Focus on the Indian River Valley
Ecotrust Canada have assisted in developing our community’s capacity for recording traditional knowledge and information through their support of the Aboriginal Mapping Network, which through GIS mapping delivers the community with highly detailed maps that layer traditional information/knowledge with land form details. These maps are useful to put on the negotiating table for treaty and other agreements. We have worked together on forestry, parks management, fisheries management, ecotourism and planning projects.

Forestry: Ecotrust Canada provided the community with loan finance for the purchase of a native timber forestry property and business, while assisting development of the business through accreditation with the Forest Stewardship Council (FSC):
- 2001: Purchase of 779 acres of fee simple land, ‘Inlailawatash lands’;
- 2003: 400 hectares Woodlot license (Ministry of Forests);
- 2004: Certified by the FSC; and
- 2004: Forest and Range Agreement.

Parks Management and Ecotourism: Ecotrust Canada assisted the community in the development of a management plan for Say-Nuth-Khaw-Yum National Park situated on our traditional land. We worked together on establishment of community-owned ecotourism ventures, such as the traditional canoe tours Takaya Tours on Indian Arm near Vancouver.

Fisheries and Marine Habitat: We established the Burrard Inlet Monitoring Program and are involved in habitat enhancement programs to support better fisheries. We also have annual egg takes and spawning counts.

Indian River Land-Use Plan: This planning process has crystallised our TWN land use vision through a planning initiative led by TWN, and balanced with public interest. Following ratification by TWN, we are seeking Provincial Government recognition of our TWN Land Use vision.

Leah George-Wilson is Chief of the Tsleil-Waututh Nation and the Director of Treaty, Land and Resources for TWN

Figure 2: Extent of Tsleil-Waututh Nation Traditional Territory.
Tsleil-Waututh purchase of 779 acres, site of forestry operations

Figure 1: Tsleil-Waututh Nation Traditional Territory.
Kimberley Appropriate Economies Roundtable Forum Proceedings
WORKSHOP SESSIONS
General Overview of the Workshops

Bessen, Bevan
Bessen Consulting Services

Workshop Sessions
Following the first plenary presentations, participants moved into one of six concurrent workshop sessions of their choice, where they heard presentations on appropriate development. All of these presentations were about sustainable activities in the Kimberley, and most were given by local Indigenous people (see Appendix F).

The six workshops were:
- Land Management;
- Sustainable Agriculture;
- Partnerships in Conservation;
- Sustainable Pastoralism;
- Tourism; and
- Culture and Art.

Many of the Roundtable workshop presenters spoke without written notes. All of them must be thanked for their effort in providing papers for this volume, a number of which are based on interviews carried out with them in subsequent early 2006. These are all included in this section.

In the discussion that followed the presentations, participants were asked to identify:
- What works well for appropriate development;
- What doesn’t work for appropriate development; and
- The key principles for appropriate development—reasons behind successes in each workshop theme area.

Key principles generated by each workshop group were brought together into a draft set of principles. The Plenary Sessions and Recommendations section of this report details how these principles were discussed and further refined in the large plenary session on the afternoon of the final day of the workshop.

In the second workshop series on the morning of the final day, participants were asked to identify the most important concrete actions that are needed in their theme to support the draft principles.

Guidelines
The following guidelines for conducting the Roundtable were agreed by the participants, and helped ensure smooth operation of the workshops:
1. The facilitators are here to make the forum run smoothly.
2. The participants are here for information and discussion.
3. Participation is vital.
4. Treat all input with respect.
5. Allow others to be heard.
6. Take responsibility for times.
7. Photos are being taken for the reporting and promotion of this Roundtable; any other use requires permission.
8. The media are here and may want to talk to people.
9. A video documentary is being made.
10. The two interpreters in the audience can be called on to assist.
11. People at the Registration Desk (Sue, Rosie and Charles) are for general help.
Land Management Workshop
Kimberley Regional Fire Management Project

Philippiadis, Will
Kimberley Regional Fire Management Project

Introduction
This presentation describes the objectives of the Kimberley-Warlu Fire Control Team and how we have achieved effective outcomes for managing country. The Kimberley Regional Fire Management Project (KRFMP) came into existence due to a concern about the lack of on-ground options for fire management for Kimberley landholders. The Fire Control Team (FCT) was developed following the recommendations from Stage 1 of the KRFMP (2000-2002) for a pilot Project to investigate the potential of an Indigenous fire management team as an on-ground management option for land managers. The Tropical Savannas Cooperative Research Centre (CRC) and the Natural Heritage Trust provided initial funding and the KRFMP Management Committee oversees the Project. The Nyikina/Mangala community at Jarlmadangah Burru and Kurungal people on and around Bohemia Downs are involved in the Project (see Lawford, this volume). The relationships with these communities were already established, as they had previously participated in biodiversity research in Stage 1 of the KRFMP.

The objectives of the Project are to:
• Combine Aboriginal and non-Aboriginal knowledge for on-ground fire management;
• Development of the team so that they can assist land managers with on-ground fire control;
• Employment of young people in remote areas and development of rangers;
• Property-level communication, including talking and working with pastoralists for improved fire management for everyone.

The first three dot points above are a ‘work in progress,’ and the fourth point is the end goal. The purpose of this workshop is to share information about our movement towards this goal.

Partnerships
Strong partnerships have enabled the Project to achieve a high degree of success thus far (see also Sullivan, this volume). The KRFMP Management Committee has played a very important role in securing funding, providing guidance and direction, and as an on-ground liaison with land managers. Memorandums of Understanding were set up between each community and the KRFMP Management Committee. These agreements outlined the goals of the Project and assigned responsibilities for the actions of each party.

Our partners have included:
• Yiriman Youth Project—initially based at Jarlmadangah and funded by WWF and the Threatened Species Network through the Bilby Tracking Project (see Watson et al, this volume). They have devoted time and resources to the Fire Control Team Project because it is a positive way of engaging young people;
• Kurungal Council/Bohemia Downs—Envirofund funded fire trials;
• Lotterywest—provides Quad motorbikes to get the job done; and
• Myer Foundation—funding for business and strategic planning.

Project Components
The outcomes have directed how the model has evolved. The best way to describe the model is by the six main components that reflect the different parts of the Project:
• The KRFMP is a constant, with support through the Project Officer, a vehicle, resources, a flexible approach to the Project and sufficient time for oversight of the activities.
• Indigenous Culture: The Project assists in identifying senior leaders in a cultural context and then providing opportunities for relationship building and the transfer of
knowledge to younger people. In fire activities and trips, young people need the support of their leaders for Project success. Cultural boundaries, i.e. the use of maps of who can burn and where, is a critical and ongoing part of this Project. The longer-term plan is to increase the number of rangers and diversify their duties.

- **On-Ground Outcomes:** One of the strengths of the program is enabling people to get onto country with a specific role. They can develop experience by using equipment, planning a fire and then lighting it and observing its behaviour and other factors (heat, wind, fuels) and also putting out fires. Individuals also learn to use resources and technology such as GPS, GIS and maps.

- **Healthy Country:** Fire is seen as the key to a healthy landscape. This Project component includes the Bilby tracking Project that enables people to develop skills and knowledge for collecting information on an endangered animal. The objective is to diversify the skills of the team by showing that fire incorporates all other components of country, including bush tucker, vegetation, cattle, fauna, tourism, etc. The lack of management, i.e. uncontrolled fires, is a recognised issue for the Kimberley, and when combined with other threats, it is clear that this Project can provide a real solution for north Australian landscapes (and the people within them).

- **Working with Pastoral Stations:** We began FCT projects on members’ stations, Bohemia Downs and Mount Anderson. The Project then used a steady approach and good communication to extend out to eight non-Aboriginal stations and some unallocated State land. The communication between teams and their managers is a two way process, so the team gets to take on responsibility and the managers have an opportunity to work with local people by building relationships on the ground.

- **Personal Development:** The goal is to build confidence in the individuals who become team members of the FCT. This is done through a mixture of training, knowledge transfer, on-ground work, conferences, building self-esteem and mentoring.

The Project has incorporated these components in a way that has created:

- Cultural areas/protocols that define our work;
- Solid relationships with our partners; and
- A strong foundation that presents us with an opportunity.

Our goal now is provide for longer-term outcomes through a Business and Strategic plan, which we are currently developing.

*Editor’s Note: Since this presentation the Kimberley Regional Fire Management Project has folded due to a lack of ongoing funding support.*

*Will Philippiadis is Project Officer with the Kimberley Regional Fire Management Project.*
The Yiriman Project is a Kimberley Aboriginal youth project set up to help young men and women aged between 14 and 30 years to promote leadership, build capacity and develop life skills. Through taking youth back onto country, elders believe that the spirit will talk to the young people and make them feel good thinking about where their old people walked.

The Project promotes life skills and sustainable livelihoods in leadership, land management and community development. It does this by getting young people away from towns where there are no jobs, away from substance abuse and back onto country.

Over the years, elders (cultural law bosses) from the Nyikina, Mangala, Walmajarri and Karajarri language groups have been looking at ways to stop substance misuse, self-harm and suicide in their communities. Their ideas led to the establishment of Yiriman, which is community owned and culturally driven. The elders both direct and participate in the activities to help young people reform and to support them to become leaders themselves.

“We want to show the young people their base. If we don’t show them country and identity, they’re nothing.”
(John Watson, Nyikina/Mangala Elder and a Yiriman Founding Director)

“We want to make it known to young people that this is where their family lived and hunted on country, to show them where their grandfather and grandmother were born, what they ate and how to look after the country and animals.”
(Anthony Watson, Nyikina/Mangala Cultural Advisor and Yiriman Director)

The Yiriman Tower, a mesa or small flat-topped hill, is an important cultural landmark in the Kimberley.

“People travelled all over the countryside. Yiriman was a sign for helping people find jila (waterholes). Yiriman is a place that a lot of people got taken away from. We have to take these kids back.” (John Watson)

The Project activities extend from Bidyadanga in the west Kimberley to Balgo in the southeast; the country of the four language groups driving Yiriman. Yiriman maintains support, creates awareness and builds relationships with young men and women throughout this area. It also assists the wider Kimberley community by developing opportunities for youth to engage in activities with a cultural focus. Two examples are the development of pilot ranger projects in the west Kimberley and the connecting of young and old people, and transmission of cultural knowledge, on ‘back to country’ trips in the Tjurabalan Native Title Area in the east Kimberley.

For many years, Kimberley Aboriginal people have been fighting for full recognition of their rights to their traditional countries. In recent times they have done this through Native Title claims.

“Karajarri people had to show the Federal Court their relationship to country. We now have to show our young people our connections through getting them back out to look after country.” (Mervyn Mulardy Jnr, Karajarri Chairperson and Yiriman Cultural Advisor).

Many Yiriman activities build confidence by incorporating ‘back to country’ trips and walks.

“We want to do more of these trips and walks to look after country, jila and animals, instead of young people stopping around the towns where suicide, drinking and other bad things are happening.” (Harry Watson, Nyikina Elder and Cameleer)

“We would like the Yiriman Project to take young people back to country.” (Joe Brown, Kimberley Aboriginal Law and Culture Centre Chairman, Walmajarri Elder and Yiriman Cultural Advisor)

The Project is supported by the Kimberley Aboriginal Law and Culture Centre. Yiriman collaborates with a whole range of organisations and agencies to ensure that young people have the opportunity to participate in land management, conservation, community development, language and cultural heritage activities.
Through Yiriman, young men and women have participated in many community driven projects with local organisations, including trips to the desert with the Fitzroy Crossing art centre, Mangkaja Arts, preventative bush medicine trips with the Derby Aboriginal Health Service, diversionary programs such as camel walks in Nyikina country and a host of cultural land management activities, video documentaries and performing arts.

Joint projects include cultural youth exchanges with the Shire of Derby/West Kimberley and case management with the WA Department of Justice and WA Department of Community Development. Yiriman has collaborated on projects with regional Indigenous organisations including Kimberley Land Council's Land + Sea Unit, the Kimberley Language Resource Centre, and with cross-regional groups such as the Northern Australia Indigenous Land and Sea Management Alliance. We have worked with State and Commonwealth agencies such as the Department of the Environment and Heritage (through its Natural Heritage Trust Fund), the Australian Quarantine Inspection Service, and research institutions such as Macquarie and Murdoch Universities.

These partnerships and joint projects are critical to the sustainability of remote area work. For the future, Yiriman directors want to support all Kimberley communities with similar youth leadership initiatives.

John and Harry Watson are senior Nyikina men, founding Yiriman Project directors and Yiriman cultural advisors. Joe Brown is a senior Walmajarri man, Chair of the Kimberley Aboriginal Law and Culture Centre and a Yiriman cultural advisor. Anthony Watson is a Nyikina leader and Yiriman Project director. Mervyn Mulardy Jnr is a Karajarri leader and Yiriman cultural advisor. Hugh Wallace Smith is the coordinator of the Yiriman Project.
Land Management Workshop: Discussions and Recommendations

Bessen, Bevan
Bessen Consulting Services

Participants
Dr Patrick Sullivan was the facilitator for this workshop. Participants included Judd Kilkenny, Sarah Legge, Reg Appleyard, Andrew Storey, John Watson, Lennie Hopiga, Mervyn Mulardy Jnr., Butcher Wise, Hugh Wallace-Smith and Will Philippiadis.

Principles for Appropriate Development
In the first session, this group focused its discussion on the key principles for appropriate development and identified the following:
• Culture guides economic activity—the role of elders is crucial;
• Economic, environmental, social and cultural activity are not separate from each other;
• Funding is crucial—not just government grants, but also fee-for-service and sale of services and products;
• Support for good management, planning and governance is needed; and
• Ownership and benefit from cultural information is a problem—whose knowledge? Who benefits?

Most Important Concrete Actions
In the second session, the group recommended the following key actions:
• Combine resources from a number of sources;
• Increase the cooperation among projects and recognise the need for local and regional networking;
• Put trust in the capacity of people to manage their own affairs and provide basic resources to do so;
• Push for research (a Royal Commission) into Kimberley Aboriginal development;
• Negotiate access agreements for pastoral land;
• Promote mixed land use and ownership models; and
• Provide a kick-start for pilot projects.
Sustainable Agriculture Workshop
Successful Organic Farming in the Kimberley

Fowler, Tanvier and Jason
Serendipity Farm

Fusion Herbs
Fusion Herbs is a certified organic farming business at 12 Mile, twenty kilometres east of Broome. It is an intensive farm with high productivity and low operating costs, in its fifth year of operation. The property, Serendipity Farm, has been managed organically since 1990. Farm management is based on the principles of biodiversity, ecology, soil biology and the intrinsic value of all life. Examples of the four main groups of plants grown on our farm are:

- Fruit—mango, limes, pineapples, starfruit, guava, tomatoes, luffa, zucchini;
- Leaf—lettuce, rocket, basil, curry leaves, bok choi, oregano, lemongrass;
- Flower—calendula, borage, heliconia, sunflower, hibiscus; and
- Root—galangal, turmeric and radish.

We sell our wide range of produce locally to Coles Supermarkets, restaurants, at the Courthouse Markets, and statewide via the Canning Vale Markets. It feeds our household most of the year. The demand for our produce far exceeds supply because of the unavailability of tropical herbs and long distances from southern growers. Considerable interest in exotic Asian herbs has been shown in the eastern states.

Wherever possible we attempt to add value to our produce through packaging, drying and freezing. Value-adding opens up new markets and allows us to increase sales. As an example, we sell mint in bulk at $20 per kilogram to restaurants, packaged at $43 per kilogram to supermarkets, or dried in herbal tea at $300 per kilogram at the Courthouse Markets.

Only two of us, both in our thirties, work full-time on the farm. Fortunately, we are helped throughout the year by Willing Workers on Organic Farms (WWOOFers), and our four-year-old twins try to help too. Jason grew up on farms but this is the first time Tanvier has lived on a farm.

What Does it Mean to be a Certified Organic Farm?
Firstly, it means we have a legally binding contract prohibiting us from using any chemical fertiliser, herbicide, pesticide or fungicide. All of our inputs have to be certified organic. This means they are made from natural products that have been grown and processed without chemicals. Some exceptions are permitted, for example, we can use cow manure from farms that are not certified if we compost it first.

We are audited annually to ensure we are complying with the standards and conditions of our contract.

The main benefit of being certified is that it enables us to use a logo, which customers can identify as the highest quality assurance available, and that commands higher prices. We can be proud of growing food that is highly nutritious and conserves native wildlife and landscape.

Why Organic?
Both of us have spent many hours working on farms performing the same task on the same plant all day, looking down long rows in the full sun, usually hearing only an old engine chugging along. Agriculture does not have to be this way! So we set out to create agricultural work that was varied, interesting and visually pleasing, and enabled us to enjoy native animals and plants. Native trees are treasured at Serendipity, not felled. Not only do they provide shade but they also encourage the native biodiversity to flourish. Yesterday, when I was spreading compost, a friendly frill-necked lizard was picking out the termites a metre away. It stayed all morning. Our rows are short and broken up by mounds and small ponds. We do companion planting, and most rows have more than two different plants.

What We Have and How It Is Used
Serendipity Farm covers only seven acres and currently around a quarter is unused. There are sixty-five mango trees, 3000 m2 of lemongrass and two acres of raised herb and vegetable beds. Recently, we completed building a 200-m2 shed with a processing room, cool room, office and workshop. The processing room has a sink, benches, electric scales and a dryer.

We deliberately keep machinery to a minimum, as we try to limit our fossil fuel consumption. A small tractor with a front-
end loader is very valuable. We use it to turn out the tonnes of compost we produce every year and to transport it all around the farm.

A ride on the mower is great for getting into the myriad of small overgrown spaces and we use a brush cutter for the herb beds themselves. Lastly, a little chainsaw is put hard to work pruning and eliminating invasive trees. Blissfully, most of the time I can't hear any of them; instead I learn birdcalls.

The main fertiliser is compost. Compost is plant and animal waste that is broken down over time. It is full of beneficial microorganisms that help trap nutrients and store them in a form that is easily accessible to plants. It is slow release and applied once a year. Other fertilisers include seaweed solutions (good for trace elements), dynamic lifter (certified organic) and fish emulsions. Biodynamic preparations are used as soil conditioner, a promoter of soil biodiversity.

Occasionally a pest gets out of control—usually a leaf eater/sap sucker. Dipel, naturally brewed from bacteria in caterpillar stomachs, does a fantastic job of eliminating grubs and caterpillars. Neem oil is an effective, but not necessarily immediate, control for insects that consume leaves. It disrupts hormone processes and acts as an appetite suppressant, which means it tastes bad, stops adults from reproducing and affects moulting in all stages of insect development. There are organic pesticides, such as pyrethrum, that will kill everything straight away, but these are used only in emergencies as they kill both good and bad insects. An example of a good insect is the ladybird, which consumes aphids and is enhanced by the presence of flowers, such as cosmos.

Methods of controlling fungus include using varied irrigation techniques for different plants; species selection; mulch to stop fungal spores from spreading; and pruning to allow airflow. Biodynamic preparations are being trialled this year.

We do not use herbicides. Mulch reduces weed seed germination and weeds are put into the compost. Exceptionally problematic weeds are made into weed tea and sprayed on the garden.

The farm is irrigated from our own bore. Recently, the water was analysed and our water was found to have the lowest levels of salt in the Broome area (302mg/l). We employ many techniques to reduce our water consumption; not only does this reduce the electricity bill but it conserves precious water in this dry country. Techniques include drip irrigation and micro sprinklers, and mulching and watering in the early morning. A strong, flexible irrigation system is used that will last for ten years or more. Initially it is more expensive, but its durability makes it cheaper in the long term and helps us avoid the huge amount of waste created by lighter products, such as T tape, which is discarded after one season.

Organic Farm Management
Organic farm management is not as difficult as it seems. By promoting plant health and biodiversity, we do not often need to use pesticides, fungicides and fertilisers, and when we do, we use alternatives to conventional products. Plant health is maintained by improving soil biodiversity and increasing organic matter (compost does both of these things), companion planting, crop rotation and growing a diverse range of crops. The inputs we use are sourced locally where possible (manure, fish carcasses, etc.). The best way to achieve self-sufficiency in composting is to recycle everything on the farm. We throw all of the pruning and weeds into the compost. We grow plants for mulch, such as lemongrass and bamboo.

In most commercial agriculture ventures, operating costs often account for seventy to eighty percent of gross turnover through dependence on expensive machinery, chemicals and artificial fertilisers. Organic farming ventures usually operate with low costs and far greater profit margins. We have always worked on a sixty to seventy percent profit margin. This is possible because we have low machinery costs, can source cheap, organic fertilisers and rely on natural plant defences rather than expensive chemicals for pest control.

The most common argument against organic farms is the large labour costs, however, at Fusion Herbs we use several strategies to reduce these costs:

- **WWOOFers**—who are usually backpackers who work in exchange for accommodation and food.
- **Extended production**—plants are grown in richly composted herb beds, providing slow release long-term available nutrients. This enables us to harvest the same plants for three to six months.
- **Mulch** is used to manage weeds, reducing the need for continuous hand weeding. When thick enough, it smothers weed seed, preventing germination.
- **Selection of hardy, disease-resistant varieties.** If it doesn't grow well, forget it!
- **Filling in the gaps**—a second round of planting, usually with smaller species chosen for their companion value, shades out weeds and acts as a ground cover.
- **Ground Covers**—during the wet season, nitrogen-fixing ground covers are planted. Not only do they compete successfully with weeds, they are slashed for mulch, which smothers weed seed and protects the soil from heavy rains that leach away nutrients.

As compost and mulch are added every year, the topsoil extends to a depth of half a metre, resulting in less compost being needed over time. In chemical-reliant farming systems the opposite occurs—the topsoil is constantly degraded and more fertiliser is required. This is a very strong argument for organic soil management, especially in the Kimberley region where very poor, ancient, sandy soils dominate. On numerous occasions, conventional farmers have begun a farming venture in the Kimberley only to go bankrupt after five years through increasing operating costs because of badly deteriorated soils.

It has been scientifically proven that organic land management ensures more resilience than conventional methods—the land better withstands change and is less prone to drought. Organic Beef Exporters (OBE) beef, certified organic, is a commercial success story of cattle production in inland Channel country.
The herd totals 75,000 head of cattle over seven million hectares and OBE markets the meat nationally and internationally (Brook, D., International Federation of Organic Agricultural Movements (IFOAM), Congress Handbook).

The Last Word
Some people ask, 'Why go to all that effort?' Organic farming is sustainable development, which leaves the soil in a better condition than we found it for future generations to use. It provides meaningful work that is varied, people-friendly, rewarding and interesting. It promotes healthy soil, healthy plants and healthy animals, including us—people. There are no negative side effects, such as loss of topsoil, salinity, or poisons such as those found in commercial food. Instead, there is bountiful, nutritious local food, more native landscape conserved, less land clearing, meaningful interesting jobs and more opportunities to add value. That has to be good for any culture or country.

References

Discussion
Tanvier’s presentation generated lots of questions and discussion. Some important points made by her and Jason in their responses include:

- Because of the humus in the soil, water use is minimal—twenty minutes each day of drip feed, using an irrigation system that lasts ten years;
- Don’t clear fell, rather, include the natural world in agriculture;
- NASA of Australia provides accreditation to organic farmers;
- Australia has the largest area of land available under organic agriculture, e.g. OBE Beef, Kayala Wholefoods (wheat);
- Wild food harvesting needs research to ensure sustainability, e.g. gubinge harvesting may not be sustainable;
- Plans are being made to set up an education program with internships working on the farm; and
- Kailis Group are planting massive organic olive groves. Initial inputs are great, but decrease over time (“reverse farming”). Pest problems decrease over time, e.g. ladybirds wipe out aphids and humus helps to lock in nutrients and water.

The group found the presentation convincing; it demonstrates best practice; is environmentally sound; and small-scale.

Tanvier and Jason Fowler own and manage
Fusion Herbs Organic Farm
Participants
Ben Wurm was the facilitator for this workshop. Participants included Peter Price, Tan and Jason Fowler, Gabrielle O'Dwyer, Anthony Watson, Scott Goodson, Tanya Vernes and Desmond Hill.

Desmond Hill, Tanya Vernes and Scott Goodson also discussed the impacts of agriculture on the Ord Valley during this workshop. Their papers are included in the Plenary Papers and Recommendations section of this report.

What Works for Appropriate Development
The group identified the following as key aspects of appropriate development in agriculture:
- Fits between skills base and the enterprise;
- Environmental sustainability;
- Appropriateness to the community;
- Awareness (informed decision-making);
- The occurrence of natural resources (soil, water) appropriate to the crop;
- Understanding water resources and hydrology;
- The scale of the enterprise and goal;
- Research facilities in the region;
- Consistent with local cultural values;
- Maintains intrinsic value of country;
- Support for Indigenous community initiatives (enterprises, research and conferences);
- Economic base (future) for Indigenous communities under their control; and
- Demographic impacts must be considered (e.g. new towns).

What Doesn't Work for Appropriate Development
The group identified the following as key problems:
- Only minimal employment opportunities for local, Indigenous people;
- Wrong type of work;
- The type of employment is culturally inappropriate;
- Only small groups of non-Indigenous people benefit from development;
- Resource ownership and land ownership is not recognised; and
- Requires huge investments of public money.

Principles for Appropriate Development
The key principles for appropriate development were identified as:
- Participatory planning with the people in the region;
- Consent of the region's communities;
- Partnerships with private capital;
- Government respect and support for the outcomes of participatory planning;
- Training that is appropriate to the region (with job opportunities) and other support (including funding); and
- Environmental sustainability (scale and management doesn't undermine local ecology).

Most Important Concrete Actions
In the second session, the group recommended the following key actions:
- Develop a Statement of Guidelines for sustainable agriculture in the Kimberley with rules based on community priorities;
- Adherence to the State Sustainability Strategy;
- Seek a public commitment from the WA Government to the Guidelines (a framework agreement?);
- Conduct a survey of local community interest in sustainable agriculture (investigate the New Opportunities in Tropical Pastoralism and Agriculture Program);
- Pursue cooperatives as a support structure for local communities engaged in sustainable agriculture;
- Integrate any new sustainable agriculture in the Kimberley with successful, existing community development programs (for example, the Yiriman Project [see Watson et al, this volume] and land management programs such as the Kimberley Fire Project [see Philippiadis and Lawford, this volume]); and
- Encourage a coordinated research approach, driven by communities in the region.
Partnerships in Conservation Workshop
Great Sandy Desert Indigenous Protected Area: Warlu Jilajaa Jumu
(Fire, Wells and Soaks)

Croft, Ismahl1

1 Kimberley Land Council and Kimberley Aboriginal Law and Culture Centre, Fitzroy Crossing

Biodiversity in The Great Sandy Desert
The Indigenous Protected Area (IPA) includes three main sites and a number of less important sites. The main sites are Kaningarra/Pirluwulu (both on the Canning Stock Route), and Tapu in a less accessible part of the desert. These are all culturally significant places where people used to live near underground water sources.

Traditional Owners lodged the Ngurrura Native Title Claim in March 1996 to gain recognition of their rights to and interests in their traditional country. The proposed IPA lies within the claim area.

People lived on their country until the late 1950s and early 1960s. The claimant group is made up of four major language groups: Mangala, Walmajarri/Juwaliny, Wangkajunga and Manyjilyjarra.

The IPA incorporates significant environmental values; water sources and representative sand hill country in close to pristine condition. The Tapu area includes a complete suite of desert plants, with no known extinctions and no weeds. A number of mammal species and one skink have disappeared from the area or have become extinct over the past fifty years, however the endangered Bilby and Marsupial Mole are still present in some places.

Kaningarra and Pirluwulu, the two major sites on the Canning Stock Route, are found in the rocky, hilly country of the Southeast Tablelands, an area offering a greater variety of land types and ecological niches than the sand hill areas. A field trip in 2000 found a good diversity of plant life and a reasonable diversity of animals, despite the known extinctions. Because of the extensive use of the Stock Route for the movement of stock in the past and, nowadays, by tourists, the area is infested with exotic weeds, most notably buffel grass, which has displaced the indigenous grasses in the valleys between the hills.

How The IPA Started
Traditional Owners have been able to revisit their desert country since 1983, and in 1985 a group established a small camp at Kurliku on the northern fringe of the desert. They have continued visiting country until today; many of the trips being made in conjunction with the Kimberley Land Council to provide information for their Native Title claim.

Traditional Owners made trips to the desert to Kaningarra in 1996 and the Tapu and Kurliku areas in 1998. We recorded many species of plants and some birds and animals and their tracks. We noted that many animals had disappeared, that overgrown country needed to be burnt and that jila (living waterholes) needed to be maintained. We talked about how important it is to continue ceremony and to pass on knowledge to young people. People talked about finding it hard to get back on country. The idea of having an IPA was put forward. The old people visited several jila and talked about changes on country.

What Has Happened So Far
People have been able to get back onto country three more times since 1998. On these trips, the old people have been able to maintain jila. Young people have come on the trips and have learnt from the old people. We have recorded many plants and animals. A management plan for the IPA has been developed.

In 2000, we went to Kaningarra on the same sort of trip as the first. In recording plants and animals, we used traps in a scientific way. The Traditional Owners looked at tracks and litter. We talked about animals that are disappearing and ways to protect them.

In 2004, we went to Kaningarra and Pirluwulu. We identified areas suitable for declaring as an IPA. We recorded stories for country and more plants and animals. Traditional land management practices were conducted. In 2005, the IPA joined up with Mangkaja Arts on a trip to Tapu and Japingka in the sand hill country.

On all the trips to the sites on the Canning Stock Route, people were concerned about the rubbish at campsites, tourists accessing significant sites and the need for signage to be renovated. In both areas, there was concern about feral animals and the extinction of native animals. We again collected information about wildlife and food plants (bush tucker), the vegetation, feral animals and endangered and extinct animals.
Challenges
The work ahead is moving towards declaring the IPA in 2006. We have to identify the boundaries and confirm these with the wider community of Traditional Owners. The Traditional Owners need to be setting the direction for all of the activities. At present, non-Aboriginal people are organising the trips. The younger people need to be trained up to do this and to do the research and monitoring work.

People need to be out on country regularly. The IPA will work with other organisations such as Mangkaja Arts Centre (see Chuguna et al in this volume) and the Yiriman Project (see Watson et al in this volume). We need younger people to come on the visits with the older people, to learn from them.

Plan of Management
In the Plan, Traditional Owners have talked about:
• Using traditional land management practices;
• Recording flora and fauna;
• Monitoring changes on country;
• Transferring traditional knowledge to younger generations; and
• Working with other organisations and research groups.

On the Canning Stock Route, they will also:
• Replace old signs at Kaningarra with new ones to guide tourists;
• Collect and remove rubbish from sites;
• Have rangers trained to patrol sites and control/guide tourists;
• Prepare educational material for schools/tourists/the public.

Future plans include:
• Controlling/eradicating feral animals;
• Seeking a collaborative re-introduction program for missing mammal species; and
• Developing cultural tourism enterprises.

What We Would Like To Do
We would like to make field trips to country that are organised by the Traditional Owners, working with a field officer. These trips need to be recorded using video, photographs and dictaphone, and younger Traditional Owners should be trained to use the equipment to do this. We would then put this information together with the assistance of a Project officer and linguist.

People want to be able to practise traditional land management on country and to do more research into the disappearance of animals and how we can get them back.

In the longer term, we want to train younger Traditional Owners as rangers, especially for the Canning Stock Route.

Ismahl Croft is a Walmajarri Traditional Owner and works as a Project Officer for KLC and KALACC in Fitzroy Crossing.
Paraku Indigenous Protected Area

Brown, Shirley1 and Ditcham, Mark2
1 Mulan Community, near Hall’s Creek
2 Kimberley Land Council, Mulan Community, near Hall’s Creek

Paruku Indigenous Protected Area Activities
The Paruku Indigenous Protected Area (IPA) was declared in 2001. It provides an opportunity for the Traditional Owners and residents of Mulan and Billiluna to retain control of their country, protect their special places and preserve the biological diversity within the region. Over the past four years we have been building networks with relevant agencies and community groups, working towards balanced management between job creation and environmental and cultural protection.

Through our ethnoecology work supported by WWF and the Kimberley Language Resource Centre (KLRC), the ‘Mapping Mulan’ Project, and other field and hunting trips, the IPA has built up a strong cultural map of the Paruku lake system. This map includes locations of important cultural sites, popular fishing and hunting areas, dreaming trails, old people’s camping grounds and areas for possible tourist activities and campsites. With more funding, this information will be incorporated into a GIS database to allow quick and easy access to cultural information relating to any site around the lake. The database will serve two purposes—it will provide current and future generations with a ‘storehouse’ of traditional knowledge, and will work as a tool to guide management decisions within the IPA. The Traditional Owners in Mulan have a desire to see this database, and cultural items found around the lake, stored in a multifunctional ‘Cultural and Training Centre’ that will include a library and IPA office.

Challenges and Responses
At present, the biggest challenges within the IPA are the management of cattle within the Billiluna and Lake Gregory pastoral leases, the large number of brumbies that are found around most parts of the lake, and the looming threat of tourism.

Horse and Cattle Management
With sufficient funding and training, horse and cattle management problems will be the easiest to solve. Through continued communication with the pastoral companies, well-planned fencing and the sinking of new bores, it will be a relatively simple task to keep cattle well fed and watered within a range of pasture types and away from environmentally sensitive areas. At present, the hardest decision for the pastoral company is whether to seek funding to set up this infrastructure itself, or to contract the work out, in which case the contractor will supply the infrastructure.

There are a number of options for controlling the brumbies around the lake, and it will probably take a combination of actions to keep their numbers to a minimum. The most popular option among Traditional Owners is to muster and break in the horses for the pastoral company and community members, perhaps also using them for guided tours around the lake. It is hoped that we will be able to obtain funding to muster the horses in a humane way, without the use of helicopters. Funding may be relatively easy to obtain if this ‘soft’ mustering technique is used, and will pay for the necessary infrastructure for passive horse trapping, with the additional benefit that this infrastructure can then be used for cattle management.

Visitor Management
Tourism is potentially the biggest challenge within the IPA. At present, visitor numbers are fairly low, but this is sure to change over the next five to ten years. The IPA is already working with Traditional Owners to ensure that tourists do not negatively affect the lifestyle of the local people or the environmental values of the area. A Stepping Stones for Tourism workshop with the Kimberley College of TAFE was held in Mulan in September 2005. The workshop helped to outline a plan of action for the development of tourism within the IPA.

The plan is intended to control tourists by limiting their numbers through a camping permit system and directing them with well-designed access roads and signage. An interpretation or education program will also be initiated, which focuses on:

- Teaching kariytas (non-Indigenous people) about the role of Traditional Owners around the lake in the past and present, including their work in the IPA; and
- Sharing traditional and personal stories of Traditional Owners that tell of the lifestyle of the old people before and after European contact.
This interpretation program will be designed to promote respect for the land and its people, and show kariyas that the Aboriginal people here today follow a direct line from the time of creation.

Tourism activities will allow kariyas to share in the lifestyle of these ‘first people’, and allow them to see first-hand why Aboriginal people need to be managing their own land.

The education program will include the production of interpretive signs. These signs will be the tourists’ first form of welcome to the IPA and their first chance to be touched by the words of the Traditional Owners. All of the interpretive signage will be written in the Kriol language spoken by the Traditional Owners. This will leave the tourist in no doubt as to who owns and manages the land they are entering.

**Keeping Language Strong**

The IPA is working more and more to include Mulan and Billiluna schools and their students in its programs. It regularly supports Mulan School bush trips, and is currently working with the KLRC to develop a Walmajarri language program. The language program is based on the thinking that when you are in a place, you should show respect by speaking the language that comes from that place. Speaking the language will strengthen the country. The program will work by taking the children to the same selected sites around the lake for each Walmajarri season. No language other than Walmajarri will be spoken by the old people leading the trips, i.e. no Kukatja, no Kriol and no English. This style of teaching will immerse the children within the language in the same way Walmajarri children have been learning language for tens of thousands of years.

**Ranger Training**

Rangers and their training are of high importance in the development of the IPA. There have been some positive results from the various trips and conferences that the rangers have taken part in. However, there have also been problems. A lot of these problems have arisen from the lack of continuity in ranger activities. A focussed and relevant training program needs to be developed, which can be delivered on-ground around the lake. A base office for rangers in Billiluna is needed to provide an area for rangers to meet, work and study between field trips, training and other organised activities.

**Networks of Elders**

A strong network of elders, especially men at Mulan, is also lacking at the moment. The IPA will need to work at developing a strong men’s movement between Mulan and Billiluna—one that supports and guides the male rangers. We will also seek to gain support from strong male cultural leaders outside the IPA—leaders who are already working with young people in cultural ways—to give our old people ideas for developing strong youth projects. Young women already have strong support from the older women of Mulan and Billiluna.

*Shirley Brown is a Traditional Owner for the Paraku area and Paruku IPA Project Officer. Mark Ditcham is the Paruku IPA Coordinator and KLRC Project Officer based in Mulan.*
Emerging Partnerships: Bunuba and the Department of Conservation and Land Management

Haste, Max

Department of Conservation and Land Management, Broome

Introduction

Bunuba Inc and the WA Department of Conservation and Land Management (CALM) have joint interests in protected area lands of the West Kimberley including Geikie Gorge, Brooking Gorge, Tunnel Creek, Windjana Gorge and part of King Leopold Ranges Conservation Park. These protected areas represent important sites for the conservation of unique Australian landscapes and, additionally, cultural values and sites contained therein. Whilst this merging of biodiversity and cultural values protection is not new to contemporary Australian protected area management, the West Kimberley presents examples worthy of broader consideration and application.

This paper will present information relating to the following developing partnerships:
1. Brooking Gorge Joint Management;
2. Geikie Gorge private boat tour (Darngku Heritage Cruises);
3. Geikie Gorge merchandising; and
4. Joint Ranger trainee between CALM and Bunuba Cattle Co.

It is worth noting that the CALM Act does not make any specific reference to the protection of Indigenous cultural values and sites. Nor are any of the aforementioned West Kimberley protected areas successfully claimed under the Native Title Act. The examples provided herein demonstrate the capacity and willingness of CALM to go beyond legislation to effect partnerships in conservation management that contribute to the broader community aspirations of reconciliation and self-determination.

Brooking Gorge

Brooking Gorge Conservation Park is a small protected area excised from the adjoining pastoral lease in 1996. Access has always been problematic due to the need to travel through Brooking Springs station via station tracks. This requires the permission of the station lessee—the granting of which can vary from time to time for many reasons.

Since gazettel of the Conservation Park in 1997, CALM has done very little in terms of direct management intervention. There are a number of weed species in the park. Cattle continue to access and cause some damage, whilst fire occurs when adjoining stations are burnt, not necessarily when fire is needed for conservation purposes. There is much that CALM needs to do to improve management of this site.

Bunuba Inc represents a number of Traditional Owner groups with land interests in the CALM protected area estate. It is considered that Traditional Owner knowledge and involvement in the management of these lands will benefit both the land and the protection of cultural values and sites therein. However, it often proves difficult for Traditional Owners and government agencies to pull together and maintain appropriate ‘joint’ management arrangements. Any number of problems (beyond the scope of this paper) tends to confuse what should be, in principle, relatively simple management systems. With respect to Brooking Gorge Conservation Park, it was felt that, given the site receives very little use at present, the number of active stakeholder groups is minimal, and that existing site problems (cattle, weeds and fire) appear manageable, it would be a good place to commence some form of joint management. It was also considered that the successful building of relationships between CALM and Bunuba people, and the relevant management arrangements for Brooking Gorge, could form the basis for the future rollout of like arrangements elsewhere within Bunuba country.

Current status:
• An interim access agreement has been reached with the lessee;
• Formal, unfettered access will be finalised next year;
• Agreement has been reached on what Bunuba people will use Brooking Gorge for—this remains to be written up and signed off;
• A formal management structure has not yet been developed; and
• Given there is no management plan, nor likely to be one in the near future, it will be necessary to develop some form of consultative Interim Management Guidelines, therein formalising the joint management arrangements and purposes for use of the conservation park.
**Geikie Gorge**
CALM has relinquished one of its vessel tour operations and allocated it to Darnkgu Heritage Cruises. This represented a significant step towards the involvement of local people in economic activities at this popular tourist destination. CALM has waived the fees for the commercial licensing of this tour.

CALM made a commercial decision to introduce merchandise for sale at Geikie Gorge. CALM further decided to employ local Bunuba people to run the shopfront, thereby returning significant economic benefit to the local community. Bunuba has been offered a contract to supply labour/people for this initiative. The contract includes enough money for payment of wages, overheads and associated costs borne by Bunuba Inc. for administering the contract.

**Joint Trainee**
Following a request from Bunuba Inc, CALM has entered into an agreement with Bunuba Cattle Company whereby a Bunuba person will be formally trained as a ranger. The trainee will work fifty percent of the time on Bunuba cattle properties, and fifty percent of the time on CALM lands. CALM and the Bunuba Cattle Company jointly fund wages and associated costs. The Trainee was employed at the start of July 2005. Upon graduation (about two years), it is envisaged the new ranger will continue to work across both Bunuba cattle properties and CALM protected area estate.

The trainee receives support from the CALM Mentored Aboriginal Training and Employment Scheme (MATES). Support is offered in all areas of formal academic studies and on-the-job learning through the Kimberley Aboriginal Training Officer and other staff.

This is the first initiative of its kind in Western Australia and represents an investment by both parties in capacity building and future joint management arrangements.

*Max Haste is the District Manager of the WA Department of Conservation and Land Management.*
Partnerships in Conservation Workshop: Discussions

Bessen, Bevan
Bessen Consulting Services

Participants
Ari Gorring was the facilitator for this workshop. Participants included Shirley Brown, Craig Phillips, Grazia Borrini-Feyerabend, Don Henry, Paul Butters, Mark Ditcham, Rosemary Hill, Max Haste, Jarrod Coote, Ismaihl Croft, Dave Morgan and Joy Nuggett.

Paul Butters, representing the Kija Traditional Owners for Purnululu National Park, also talked about Purnululu Aboriginal Corporation’s joint management arrangements at this workshop. Paul explained that they now have a Park Council:
• The Council makes decisions at the meetings about the Park;
• These decisions are taken direct to Perth;
• Licenses are to go through the Park Council;
• Studies on land and animals and the impact of fire are under way;
• Researchers report to Council;
• An ant study is underway;
• World Heritage listing has occurred;
• There is a Deed of Agreement with CALM; and
• Aboriginal people must have equity in the Deed of Agreement.

What Works for Appropriate Development
This group discussion focused on the question ‘For people living with an IPA or Park on their country, what is a good way to live?’ Comments included:
• Tourism businesses are worthwhile;
• Tourism revenue may have a trade-off in protecting culture, lifestyles and the environment;
• Levels of tourism should be low key and exclusive, and having rangers on country is important;
• Environmental offsets—mining royalties to State should be redirected into conservation;
• New values—conservation has a value to society and it can produce income for people for preserving country, for example, in Switzerland money is given to people to stay on country;
• Research partnerships are important;
• Local economy—hunting, fishing, language, back-to-country trips with families—all comes down to teaching young people confidence;
• Benefits to the community versus to the individuals depends on the nature of the group, for example, the Tjurabalan mining agreement involves four communities and everyone can apply through the Trust for benefits;
• Conservation of culture is valuable for society;
• Working on IPAs is a good way to make a living, however, parks and IPAs are not set up for people to work well—improved framework and title to land is needed;
• Indigenous rangers are necessary to ensure that traditional knowledge is incorporated into CALM training;
• Sharing knowledge and skills between groups is important, for example, through networking between the Traditional Owners of Mimbi Caves and those from Purnululu; and
• Freedom to negotiate different agreements—Traditional Owner groups need to develop their own agreements, which may differ between groups.

Principles for Appropriate Development
The group identified the following as key principles for appropriate development:
• Working on IPAs is a good way to make a living but needs to be set up better and include recognised title to land;
• Freedom for Traditional Owner groups to negotiate different agreements, as one group may have different values to another;
• Value conservation and cultural maintenance as important for society and build a local economy to include hunting, fishing, language, back-to-country trips with families—”it all comes down to teaching young people and building confidence.”
Most Important Concrete Actions

In the second session, the group recommended the following key actions:

- Encourage business management mentoring from local successful business people.
- Investigate the potential for some land to be registered as conservation agreement areas under the CALM Act and seek funding.
- Key groups to promote strong, long-term support for conservation and cultural maintenance.
- A high priority to be placed on inclusive planning for the Kimberley region.
- Promote and support on-ground initiatives such as Fire Control Teams (see Philippiadis and also Lawford, this volume), visiting other groups and seeing what others are achieving.
- Increase youth engagement—they learn visually (for example, DVDs) so provide training in media editing, camera, photography, etc. Also, take some young people out with others who are really enthusiastic to increase youth motivation.
- Recognise the work of elders and pay them appropriately.

- Include land and language cultural programs in education curriculum on country.
- Build the database by recording knowledge and stories on computers with GIS and databases, as young people are interested in computer technology.
- Funding from one big pot (‘Caring for Country’ funding program);
- Cross tenure funding:
  o Conservation projects Australia-wide;
  o Community Conservation Areas;
  o Long-term funding;
  o Works in a local community context;
  o Funding applications—make forms or processes simple and provide support to groups receiving funding. For example, consider a one-page expression of interest form, have project officers lend their expertise;
  o Regional control of ‘Caring for Country’ program funding; and
  o Incentives to groups who are achieving results in conservation and cultural revival.
Pastoralism Workshop
Birdwood Downs Station

Tredwell, Robyn

Birdwood Downs Station, near Derby

Birdwood Downs Station is a 5,000-acre property on the Gibb River Road, twenty minutes drive from Derby, a township with a population of approximately 3,500 people, sixty-five percent of whom are Aboriginal. While cattle are still run on the station, we have diversified into a range of other activities including eco-tourism, horsemanship and environmental consultancy.

This region of tropical savannah experiences many challenges:

- Long distance from the “halls of power”, making it difficult to access that power and for the decision makers who determine our region’s future to fully understand the issues;
- Long distance from the market, making the sale of products more problematic;
- A population comprising vastly different cultures living side by side, with very different value systems, causing misunderstanding and cultural division;
- Poverty, a high level of illiteracy, high unemployment, a minimal level of health care and education opportunities, and low employment skills;
- A lack of infrastructure to service the community;
- A sense of lack of self-determination;
- Land degradation due to a lack of management skills and poor animal husbandry;
- A variable and harsh climate; and
- Tendency of mismanaged savannahs to degrade towards desert.

Birdwood Downs is situated at the junction of three stock routes where cattle were temporarily held before being loaded onto ships at the port. The land had been severely degraded by overgrazing, with a dearth of ground storey perennial species and a massive woody weed invasion. Over-burning from uncontrolled wildfires has contributed to the degradation.

Since 1978, we have sought to understand the particular challenges of the tropical savannah environment, to rehabilitate the degraded land and to develop sustainable economies and environmentally friendly architecture and wastewater management. Our approach is a ‘total systems approach’ to sustainability. This means not only improving the degraded land, but also becoming economically, socially, culturally and environmentally viable. This has been done through the Institute of Ecotechnics, a not-for-profit organisation interested in management approaches that are informed by the technical, scientific, environmental and cultural worlds as well as the world of commerce.

The initial challenge was to reverse the degradation and develop holistic methods of improving the degraded land. We rotated stock to eat out the undesirable burr grasses and to encourage the spread of desirable species; contoured; removed invasive woody weeds and planted perennial grasses and legumes that would withstand the impact of grazing and hold the soil from further erosion. These species had to be able to grow and reproduce with rainfall variation between 100 and 1500 millimetres annually and temperatures from 0-48 degrees. The pindan soils were acidic and non-wetting, with a high aluminium and iron content, but very few other trace elements or available nutrients and very little humus; we chose Cenchrus and Stylosanthes as the primary species, and trialled many others.

As these pastures developed, we set up an enterprise of perennial seed and hay production, rehabilitation of degraded lands such as mine sites, and consulting in land regeneration, using the knowledge gained from our work in rehabilitating Birdwood Downs. During the period of hay and seed production and processing for sale, Aboriginal workers were trained and employed in seed cleaning and processing and in the collection and transport of hay.

Birdwood Downs began a training programme called Ecological Frontiers, available to young people who were interested in studying Savannah Systems from a holistic point of view. Ecological Frontiers provides hands-on training, which covers land regeneration and woody weed control, machinery operation and maintenance, animal husbandry and management, stock rotation and pasture management, stations operations and the maintenance of infrastructure, small orchardry and gardening, horsemanship, cuisine, theatre and the art of speech and cultural studies. This programme runs for nine months per year for up to four years, and is available to students from Australia and overseas.
Changes in land use, economics and the social scene in the Kimberley over these last thirty years have spurred Birdwood Downs to diversify further into training, consulting, environmental work, workshops and ecotourism.

In addition to the Ecological Frontiers training programme, Birdwood Downs runs a TAFE College training programme in Rural Operations for Indigenous People, and a horsemanship programme with the Kimberley School of Horsemanship at Birdwood Downs, to prepare Indigenous people to enter the workplace as skilled workers. From time to time, Birdwood Downs organises and hosts workshops for artists. One of the most notable of these was run in collaboration with Triangle Artists Workshop and Gasworks in London, which bought Aboriginal artists together with San Bushmen from the Kalahari to create collaborative artistic works.

For a community to be sustainable, primary requirements include good hygiene and treatment of wastewater to protect the community’s sources of clean, potable water; and protection and intelligent utilisation of its environment and natural resources, and training in the necessary skills, not only to maintain and improve their own infrastructure, but also to be able to build on that knowledge and skill to provide the community with an economic base. The community and its people will then be able to move with the times and have a sustainable lifestyle, culturally and economically.

In an effort to prevent further contamination of spring water and ground water from sewage, Birdwood Downs personnel have been installing Wastewater Gardens—subsurface flow constructed wetlands, with a high diversity of wetland plants, to provide high levels of treatment for reuse of black and grey water sewage on Aboriginal communities in the East and West Kimberley. These simple, natural ecological systems use no chemicals and are gravity fed. They result in high levels of water purification and keep the sewage out of contact with people. These systems improve hygiene and health on communities by preventing pollution of the groundwater, and protect the environment from human pollution.

We have also been developing our approach to landscaping, ‘Savannah Ecoscapes’, creating an oasis of beautiful gardens and tree scapes providing cool, shady and beneficial microclimates for people and animals. We have installed similar Savannah Ecoscapes on Aboriginal communities, in consultation with the residents, as a means of greening the communities with the use of valued native and bush tucker plants. Savannah Ecocaping can be done in conjunction with grey water recycling and the final tertiary treatment and reuse of the effluent from the Wastewater Gardens. Community people receive hands-on training in building and maintaining these systems. The ecotourism enterprise at Birdwood Downs showcases the diverse approaches that have been developed there over the last twenty-eight years.

Robyn Tredwell is a Kimberley pastoralist.
### Starting Out

The title to Bohemia Downs Station was handed over to Aboriginal people in 1989. It's a small station of 98,000 hectares. When we moved out there from Fitzroy Crossing that same year, the country was wrecked. There was bad erosion, the river frontage had no feed, and the paddocks were full of spinifex and woody weeds. The infrastructure was completely run down and there were no fences. The owners before us were a company who had overstocked the place. The Aboriginal and Torres Strait Islander Commission (ATSIC) bought it de-stocked.

First, we had to build new infrastructure and then we stocked the station with about 600 cattle, which ATSIC provided funds for. The carrying capacity of the station was 1,500 head. We introduced some good quality bulls and cows and tried to bring the numbers up. Sometimes I didn't muster for six months to let the cows have more calves.

The station and community started off, and continues, as one. Ngumpan and Kupartiya communities got together and formed the corporation. We appointed directors to sit on the board of the station and to report back to the communities. Kupartiya community was established straight away—we put in boundaries for the community, and the station was for the community. We shared things. The community is three kilometres from the station house and we worked together to dig holes and put in power lines and develop the station infrastructure. We planted seeds, fenced off many areas that were badly eroded and started to bring the place back again. We did this together and by ourselves, without any government funding. We lived in army tents for three to four years and picked up things along the way, like demountables from a mine that had closed down. We shared resources between the community and station.

My knowledge of country has come from the old people—from Butcher Wise, from my mother and a couple of grannies and my father. It is a part of me. It is looking at the land from the ground level.

I am the fifth manager of Bohemia. All the managers have been from our family. I started out as a yard builder, putting up gates and yards. We've had help to do the financials, the bookwork, but we've done all the work on the ground—fencing, the cattle work, bores. Along the way, we have done a fair bit of training in management and courses in animal husbandry and land management. There was a conference in the United States that I went to with people from all over the world to talk about better ways to manage the land. Before I went, I thought we were the only people with these issues. It was a real eye-opener.

We see ourselves as fully capable of looking after our land. Our carrying capacity has been increased to 2,000 head and we're turning over a profit.

### Fire Management Activities

Fire is a big management problem. Some of the first things we did when we started at Bohemia were to put in fence lines to act as firebreaks. We introduced cattle to feed along the place to cut firebreaks. We used a lot of hands-on methods because we couldn't hire machinery to knock down big creek beds. We used animals to do that.

This is why we worked so hard through the Kimberley Regional Fire Management Project (KRFMP) (see Philippiadis in this volume). The KRFMP Management Committee formed because fire was a serious issue and government wanted to do something about it. The Committee talked for three years and nothing much happened.

When I became Chairperson of the Fire Project we started a few small projects on the ground at Bohemia. Through the Project we worked with the staff on land and fire, looking at areas that had been burnt out. We started tracking bilbies and other native animals and birds and monitoring them. A few of them you don't see anymore. Why is that? Fire kills these animals and takes away their habitats and shade. This work was all part of looking after the land.

### Early Burning

We talked a lot about how fires seemed to happen around the late season and what we could do about it. One big question was why we couldn't burn early in the season so that there would be smaller amounts of fuel going right through the country when the fire season came.
Fire is not only bad; it can be used in good ways. Fire is bad when you light it in the wrong season, but if it is used under controlled conditions, such as mosaic burning over small areas, then it can be used to regenerate the land. All the front yard of Bohemia used to be spinifex. With the early burning that we’ve done, that spinifex has turned into feed for cattle. When you burn in the cool time, with the cold southeasterly wind, there is dew around for a month or so and the bottom layer of the ground is still damp. After a burn the plants will pick up again without any rain. After the big rains have finished, when the plants are turning from green to grey and the spinifex is about a metre high, that’s when you do an early controlled burn. It might be around March or April, all depending on how much rain has fallen. That is what we call ‘early burning’.

We started to test an early-burning regime on Bohemia. We got approval to burn and worked with the Shire and Fire and Emergency Services Authority (FESA) and the WA Department of Agriculture and CALM to set up and monitor test sites for early burning in paddocks with spinifex and woody weeds.

For the past six years, it has been very effective. After the work on the test sites, people started asking us to come out and work with them at Christmas Creek and Bulka and Mornington. Our neighbours have all begun doing the same thing. We have made people in the pastoral industry take notice of fire management through early burning.

Fire Fax System
Fires are like tsunami, moving so fast and taking villages without warning. We’re 120 kilometres from the nearest town and if we wait around for people to come out to help us fight a fire, it’s one and a half hours before anything can be done.

Through the Fire Project, working with Nat Raisbeck-Brown and Will Philippiadis, we developed and introduced a fire fax warning system. Bohemia was the first station to start using it. We helped to set up a system where you register an area around your station or community and, if there’s a fire in or near that area, you receive a faxed map from the Department of Land Information with fire location information. With satellite information about where the fire is, and knowing how the wind is moving, you can plot and monitor the direction the fire is heading and move into areas before it reaches them.

We can then let our neighbours know where it’s heading and build up a warning network from neighbour to neighbour.

Fire Control Teams
From our side, we were also looking at ways to motivate the young men in the community who weren’t doing much. We focused on these boys and some from the Jarlmadangah community on Mount Anderson Station, took them out on country, collecting data and monitoring wild animals and other Fire Project work. We got FESA to do some training with them so that they learnt how to use equipment and knew about first aid. The boys have learnt about mapping and using Geographical Positioning Systems (GPS) technology. We wanted to create work through land management. Some of the boys might want to work in the Agriculture Department, getting rid of acacia, trapping feral animals, whatever. We were looking at opening up opportunities for the twenty boys that were involved from Kupitiya.

The two Fire Control Teams grew and grew from the Project activities and, when they were up and running, they were working around the east and west Kimberley. We carried out fire control work in National Parks like Purnululu and conservation areas, and down in the desert at Paruku (Lake Gregory). We went to other pastoral stations, Aboriginal and non-Aboriginal. People got us in to help protect their properties against fire through controlled burning. We covered the whole region, talking to people about fire management and control and other land management issues.

There are small communities spread all around the Kimberley in the most remote places. They could look after the country around them, protecting them from wild fires, using early burning to regenerate the lands, monitoring the animals. There are different land types in the region and the burning regimes would be different depending on these.

Cultural Learning and Looking After Country
The Fire Project involved doing a whole lot of things with young people and older people and led to other things happening.

The old people from Ngumpan community are teaching their knowledge of country to the young ones.

We went to Wangkatjungka School to talk about fire. Everyone put together a big book for the school to teach the kids about the danger of using matches and playing with fire.

We’ve gone together, young and old, on ‘back-to-country trips’. One of these was a five-day walk with over one hundred people, out to the desert to visit places that many of the young people had never seen before. This started out as an idea about working with a few mischievous kids from the community and grew into a trip where older people spent time with the kids. During the days, we hunted and talked about ways of looking after country. We also showed the kids how to use GPS technology to track how far we’d covered. In the last two days of the trip, we ran out of stores and lived off the land.

It’s all right to sit in an office, but the Fire Project was about getting people out and doing things using the knowledge that they have.

At Jarlmadangah, the young people were already doing leadership activities through the Yiriman Project (see Watson et al in this volume) and had been helping with the monitoring of wild animals. The KRFMP started working in with these other activities, which led to more things happening such as the older people taking the kids out onto country on camels.
The End of The Fire Project

Everything was working really well and then they cut the Project down in late 2005. We don’t know why. Maybe people could see it going the Aboriginal way and that’s when they started worrying about creating a lot of firemen in the Kimberley.

Now, you can see the grasses are getting high again.

The Future

For the future, I would like to see the whole of the Kimberley pastoral lands with fire plans and management plans.

We need to work together, continue to share our knowledge like we have been doing. We need to be reasonable in this industry. It is not only about looking after business but also about what is happening with land on a global scale. We’re doing something for the earth. The more fires we have, the more we’re breaking up the ozone layer, the more tsunamis and land-slides.

Allan ‘Doodie’ Lawford is a Traditional Owner for Bohemia Downs and surrounding country, manager of Bohemia Downs pastoral lease, a member of the Kimberley Aboriginal Pastoralists Association and Chair of the Kimberley Regional Fire Management Project.

Editor’s Note: Since this presentation the Kimberley Regional Fire Management Project has folded due to a lack of continuing funding support.
The Integrated Natural and Cultural Resource Options for Pastoral Properties in the East Kimberley Project

Schiller, Nadine
Department of Agriculture, Kununurra

Project Aims and Objectives
The Integrated Natural and Cultural Resource Management (INCRM) Project commenced in 2004. It developed from the earlier Ord-Bonaparte Program (OBP). The OBP sought to investigate how natural resources could be managed more sustainably in the East Kimberley and across Northern Australia, with a particular focus on Indigenous properties. The program as a whole ended in 2003 with the INCRM Project beginning the following year.

The Project is funded by Land and Water Australia, Tropical Savannas Cooperative Research Centre, the Indigenous Land Corporation, the WA Department of Agriculture and Food (DAFWA) and the Kimberley Land Council (KLC).

The main objectives of the Project are to:
• Develop plans for each of the case studies;
• Assemble useable digital datasets;
• Complete an analysis of community aspirations;
• Develop training initiatives;
• Map cultural landscapes;
• Identify alternative economic opportunities;
• Identify options for sustainable livelihoods; and
• Assemble multiple land use strategies.

The process will be thoroughly documented and a process paper written. The process paper is intended to assist other Indigenous property owners in the East Kimberley who are operating under similar circumstances as well as research organisations who might provide funding assistance and support to similar projects in the future.

The main outcomes of this Project at the end of 2005 were a property land use plan for Violet Valley and a fire management plan for Bow River station. In 2006, a land use plan will be developed for Bow River station and the process report completed.

Case Studies
Two case study properties form the basis of the Project. In 2004-2005, the Project commenced working with the communities of Violet Valley and Bow River stations.

The case study properties were chosen for the following reasons:
1. Recommendation from KLC;
2. Community capacity (availability, participation in other projects);
3. Community relationships;
4. Availability and/or willingness of young people to work;
5. Historical relationships with the KLC; and
6. Lease / property’s willingness to liaise with Traditional Owners.

The Project is underpinned by the engagement of people in the local communities. Therefore, much thought and consideration went into the choice of the case studies and communities that would be approached to take part.

Department of Agriculture and Food
DAFWA had been associated with OBP and began working with the INCRM Project in early 2004. The initial work for DAFWA was to complete the land unit mapping for the selected case study properties.

The land unit mapping (LUM) was an important part of the Project because the original land resource dataset for the Kimberley region had been produced as long ago as the 1950s, at a land systems mapping level (1:250,000 scale). This original dataset lacked sufficient detail for use at property level, and if the land use planning was to be effective, more comprehensive and detailed soil and landscape information was required.

The LUM was completed for three properties, Violet Valley, Bow River and Carlton Hill/ Ivanhoe. This information has proven to be valuable to the land use planning on Violet Valley and Bow River stations, forming the basis of planning new grazing areas and associated infrastructure and of redefining potential pastoral areas.
In 2005, working together with community members, DAFWA collected additional natural resource and enterprise data from the Violet Valley Aboriginal Reserve and Bow River station. The information collected included:

- Plans for updating existing and installing new infrastructure;
- Land condition assessment (overall condition and health of country);
- Environmental observations (weeds, pests, feral animals);
- Pastoral enterprise particulars (stocking history, management philosophies, resources);
- Fire management information (fire history, fire management philosophies, resources); and
- People audit (skills, goals, etc.)

This information was collected on field excursions and through formal and informal discussions and meetings and workshops.

The managers of the properties, Bruce Thomas at Violet Valley and Michael Ramsey at Bow River, were instrumental to the work, providing advice and information and helping to organise meetings and workshops. Community members were kept informed through regular informal discussions and meetings.

Expert advice was also sought from DAFWA staff throughout this process. Advice from specialists in the fields of biosecurity (pests and weeds), rangeland management, fire management and station management was obtained.

**Kimberley Land Council**

KLC, which was also associated with the OBP, commenced working with the INCRM Project in late 2004. KLC employed two staff, a Project officer and a field assistant.

One of the main roles of KLC was to disseminate information about the Project and, once the people of Violet Valley and Bow River stations had agreed to participate, to ensure that an appropriate and effective process of community engagement was developed and maintained. Regular visits and meetings to consult with people were a key part of the work.

KLC Project staff were responsible for the collection of cultural information, which included:

- Burial sites;
- Birth sites;
- Initiation areas;
- Creation stories;
- Hunting and fishing areas;
- Bush tucker areas; and
- Other areas of cultural significance.

Further information was collected about cultural sites, including threats to sites and management issues. In addition, discussions were held about each of these sites so that land use opportunities could be determined.

**Collaborative Approach**

From the outset of the Project there has been a close working relationship between DAFWA and KLC Project staff, both on the ground and in the office. It was important that the Project officers formed a close alliance and that they were aware of one another’s role. A ‘team approach’ was used in the majority of activities that the officers took part in, particularly in the field. Through collaborating, they were aware of the activities and the information that was being collected and what opportunities and issues might arise.

A collaborative approach was also adopted in the integration and analysis of datasets and the presentation of information back to the communities, as well as during the final preparation of maps and reports.

Without the collaborative effort of the two on-ground Project partners, the main objective of the Project - to achieve the integration of cultural and natural information - could not have been achieved.

**Case Study: Violet Valley Aboriginal Reserve**

The Violet Valley Aboriginal Reserve was the first case study in the land use planning exercise. The community having agreed to participate in the work, one of the first steps was to collect information on community aspirations on the basis of which land use opportunities could be identified.

Violet Valley community’s hopes and desires included: protecting and maintaining land and culture for future generations; protecting and maintaining sacred sites; the establishment of businesses that would not be reliant on outside funding, government or otherwise; and maintaining a killer herd for the community.

The next step, and largest component of the Project, was to with community members to collect biophysical and cultural information on the property. This entailed months of field trip research and consolidation. This work was followed by the integration of the cultural and biophysical information. On the basis of this, key land use issues and potential problems and opportunities were identified, including potential areas of conflict between, for example, people’s cultural priorities and their aspirations for pastoral expansion and the development of other land uses.

Following the integration and analysis of data, the final property land use plan and associated maps were developed.
The main outcomes were:

- Research revealed that the property has the capacity to build on its current pastoral enterprise and to run significantly more cattle. Three new areas for development of the pastoral enterprise were identified. Planning and mapping focussed on the associated infrastructure requirements to support these areas, as well as associated cattle breeding strategies, was undertaken.

- Two additional areas were also identified as suitable future grazing land. One of these, however, encompassed an area of cultural significance, while the other lay within a current mining exploration tenement. Community members resolved that neither were appropriate for pastoral expansion.

- In the course of the land use planning, people identified several cultural sites as suitable locations for a tourism and cultural awareness business. These included bush tucker areas and sites with engravings and markings.

- Fire, and its impact on bush tucker, was an important issue for the community. It was resolved that particular bush tucker areas were to be managed (for example, with fire breaks and planned burns) to protect food plants.

- Dog baiting was also an important issue on the property. It was resolved that particular areas would become exclusion zones from baiting to ensure safety for people and valued sites.

- The training needs of community members in relation to their present tourism and cultural businesses include skills in fire management and business management.

**Case Study: Bow River Station**

A second aim in 2005 was to complete a fire management plan for Bow River station. This arose from a request by the Pastoral Lands Board in 2003 after it was determined that the rangeland condition of the property was declining and that fires were a contributing factor.

Numerous informal and formal discussions were held with the Bow River community during the 2005 dry season, at which the following points were discussed:

- Historical burning;
- Present burning;
- Burning on different ‘country’ types;
- Fire management resources;
- Fire affected areas and fire frequency mapping; and
- Current fire ideologies.

Community members agreed that fire management was a priority. Their plan incorporates traditional management practices as well as adopting conventional fire management methods. The final plan completed for the station incorporated cultural aspects and Indigenous management of fire into a pastoral-based fire management plan.

In 2006, a property land use plan will be developed for Bow River station. Cultural and natural information has been collected and was partially mapped in 2005. There is still a significant amount of work to finalise in the datasets and the process of data integration has not yet commenced.

**Conclusions**

The INCRM Project is based on the collection, integration and analysis of cultural and biophysical information in a land use planning exercise. Violet Valley Aboriginal Reserve was the first case study in this research and a land use plan was developed for the property in 2005. A property land use plan will be developed for Bow River station in 2006.

The Project has demonstrated that natural and cultural information can be integrated in such a way that existing enterprises can expand and new opportunities developed while the protection of cultural values is ensured.

A collaborative approach between organisations has been determined to be critical to the success of a Project such as this.

_Nadine Schiller is a Project Officer for DAFWA based in Kununurra._
Pastoralism Workshop: Discussions and Recommendations

Bessen, Bevan
Bessen Consulting Services

Participants
Danielle Eyre was the facilitator for this workshop. Participants included Janelle White, Robyn Tredwell, Louise Matthiesson, Sandy Toussaint, Allan ‘Doodie’ Lawford, Peter Seidel, Vicki Laurie, Bronwyn Herbert, Stuart Blanch, Nadine Schiller, Tom Birch, Michael Ramsey and Maria Mann.

Principles for Appropriate Development
This group produced a succinct set of principles:
• Diversity—of challenges, natural resources, tenure and title, people, activities, financial structure and governance;
• Skills and knowledge—specific, transferable, available;
• Legal framework for consultation—agreements;
• Planning—responsive, consistent, long-term; and
• Absolute basis in healthy country and culture.

Most Important Concrete Actions
In the second session, the group recommended the following key actions:
• The Indigenous Land Corporation or other owner to be specific in negotiated transfer of leases, so that Traditional Owners have control of title sooner.
• The Indigenous Land Corporation and other bodies holding land in trust for Aboriginal people be clear and specific in the negotiated transfer of leases, so that Traditional Owners gain ownership and control of the titles sooner.
• The WA Department of Planning and Infrastructure (and Pastoral Lands Board) to consider, promote and develop other forms of land tenure to suit a range of activities, people, resources or governance structures.
• All levels of government must legally recognise that cultural information and knowledge is the intellectual property of Traditional Owners.
• The Kimberley Land Council and others to advocate changes to fire management so that it becomes based on local, on-ground teams.
• Cooperative Research Centres and other research bodies’ activities to extend into longer term partnerships with Traditional Owners and include uptake of results.
• Appropriate agencies and organisations to promote local schooling and other educational opportunities so that younger people have closer contact with older people, to learn from them.
Tourism Workshop
I am Bunuba from my father and Walmajarri from my mother’s side. My father’s traditional country is where our community, Biridu, is. But I’ve got family in Billiluna too and I can go and visit them.

I grew up on Bunuba country, mainly at Leopold Downs Station. Bunuba call the station Yarange, the name of the spring there. I grew up there so I know the country from Yarange to Yuwa, Fairfield Station. I worked there as a stockman when I was a younger man. Today, I’m living out at Biridu. That is where we’ve set up a tourist camp and we run our tours.

In the late 1960s, my family moved in from the station to town, to Junjuwa community in Fitzroy Crossing. I was working in the store for a while. Then I started a tourism course with the TAFE College. Christine was my tutor. I bought a business from *karriga* (non-indigenous people) who were operating a Fitzroy Crossing tour. I called it Bungoolee Tours. Christine’s husband, Gary, was also running a tourist enterprise in Fitzroy. Gary and I started working together. He had his business and I had mine, but we combined them to do tours. I had the cultural knowledge, and Gary had the business experience.

When we came together we ran the best tour around the Kimberley. We started off with a one-day tour and ended up doing some longer ones. Then Gary moved to Derby and when he went I bought the vehicle and kept going on my own.

After a while in Fitzroy, my father began trying to move back out to Yarange. There were lots of problems in town with alcohol, and today, there’s gunja (marijuana) too. Biridu community was set up. This was around the time I was starting out with my tour business, so I stayed in town but my aim was always to live out at Biridu, to look after my country. Now I want to make my living there. There’s been a lot of rain this year and it’ll be good hunting and fishing, plenty of goanna and snakes this year. We’ll be able to live off the land.

It took a while to build up my business and to get a name in the market. It wasn’t an easy thing. We started to get people on day tours and now we’ve got a camp at Biridu where people can stay overnight.

I’ve been working in tourism for about ten years now and I love doing the work. After being a stockman, finding this was like a new hope, a new dream for me. Talking about my country and my culture to other people was eye-opening. I found out that people from elsewhere really wanted to know about Aboriginal culture and how we live, our language, our country, how we hunt and make bush medicines. It is good because we meet people from all walks of life.

Aboriginal people have been brought up with the *Ngarranggarni* (the Dreamtime), the spirits in the country, the stories of the places, the ceremonies, the ancient paintings, and proper ways to take strangers onto country. This knowledge has been passed down for thousands of years and I am passing it on to my nephew and others. We are protecting our sites and teaching the family to take on these responsibilities. We look after our country; we cherish it. It is our home. We live on a pastoral station with boundaries but our country crosses these. Traditional boundaries have to be learnt through passing down knowledge. The tours I take are based on the knowledge and wisdom of the elders, which they’ve passed onto the younger people. It is a hard thing to take on.

Now, there is a really big market, but when I started out there wasn’t much going on. I started off with no money and business skills. I didn’t know what to charge people and didn’t know about the marketing side of things. For a while, I was under-charging so much that people started telling me I had to put the rates up. I had to learn about advertising and the maintenance of the vehicle and making sure everything was kept in order.

The main thing is that you have to work hard with any business to see a profit. It takes time, working slowly, building things up. You have to do lots of things behind the scenes; very early mornings and long days; lots of cleaning of cars. People don’t see this part. You have to commit yourself and keep everything in order. I have learned these things as I’ve gone along. In 1989, Bungoolee Tours won the GWN Enterprise Award and we have been finalists in other awards.
I’ve been doing it on my own and not with government assistance, but with some help from TAFE, mainly working together with non-Aboriginal operators. It is important to have partnerships with non-Aboriginal businesses. We share the land and they share the business side and we work together. Aboriginal people need to better their skills and their understanding of business, and working closely with other people provides this. This is the way we can make a better Australia. The government needs to promote these kinds of working relationships between people.

Today, I have a couple of partners based in Broome. And now I’m looking at building a partnership with the Lodge in Fitzroy. My other plan is to start horse tours along the Fitzroy River from Biridu to Fitzroy Crossing.

We need organisations like Kimberley Land Council and Kimberley Aboriginal Law and Culture Centre to support us to get Native Title and joint management and to make better relationships with agencies.

We want control over the management of our country. Government, and agencies such as the Department of Land Management and Conservation need to understand how important places like Tunnel Creek and Windjana Gorge really are.

_Dillon Andrews is the founder and operator of Bungoolee Tours._
I was born in 1933, and taken away from my family at Noonkanbah in 1936 to Moola Bulla Station. My mob is Walmajarri and Nyikina Mangala but I grew up around Kija and Jaru and Gooniyin people at Moola Bulla, and I have worked all over the Kimberley with Worrora, Ngarinyin, Wunambal and Bunuba people and others.

When I was growing up and working as a saddler at Moola Bulla, I got to know the Kija country right around Elgee Cliffs and Landsdowne, right up to Glenroy Station. Then I got offered a job at Glenroy. In those times, Native Affairs controlled Aboriginal people and I needed permission from the Moola Bulla supervisor to go and work somewhere else. He said it was OK and I worked all around the place as a stockman together with people from the Unggumi tribe, Worrora people, all sorts. I was the head stockman at stations such as Napier and Kimberley Downs, and worked at Brooking Springs and Leopold Downs in Bunuba country. In 1962, after I broke my back, I cut back to shorter-term contract work yard building and mustering, and about seven years later, I moved on to work with Main Roads. I was there for twelve years.

At Main Roads, we'd be working all over the place. I'd take people off for a swim at gorges and places off the road that I knew about from my mustering days. They'd tell me I should start up a tour, and that set me thinking. And I thought about it for around five years. Then, my wife and me took long service leave and went on a trip around Australia. We saw a lot of country and went on some tours. When we returned, Main Roads told me they had no use for my truck anymore and they were letting me go. So, I thought I'd have a change and get into tourism.

I had a good understanding of the land and the people. That made it possible for us. Before we started, I went around and saw the Traditional Owners for each area that we were hoping to visit. I knew all of them already and I talked to them about what I wanted to do and asked them if it would be all right if I took visitors to places on country, such as gorges. They told me that it was OK to do that and to look after the places. I also saw the station owners and I asked for permission to go onto the stations. Nobody said 'no', but they wanted me to let them know before I came, and if they were mustering then I'd go somewhere else.

When we began, Rosita and me didn't know anything about tours, such as needing licenses, brochures and timetables, all of which we did need. I thought word-of-mouth would be enough but it wasn’t. We got help from people we knew, including a friend who took us around the tourism commission in Perth to meet people to talk to about special licenses and things.

There were only two people operating at that time in the West Kimberley. They were only going along the highway, never walking into the gorges, as well as a few town tours. Our business was the first camping tour. In the first two months of operating, we got four hundred people. That was through word-of-mouth for one-day tours from Derby to Tunnel Creek and Windjana Gorge. It went off like a big explosion; it went wild!

Then a very important thing happened. We did a camping trip that first year and there were a couple of people from the WA Tourism Commission and from Ansett on it. We even made a short documentary to show them. Ansett advertised our tour and starting sending people to us. They wanted to be our agents. We were the first Aboriginal tour business around and they saw first-hand how we operated the camp well, that the equipment was very good, good tucker. They advertised us not with our business name, which was Kimberley Safaris, but my name, Sam Lovell Tours.

What people liked most about our tour was that driving past we might pull over and talk with some Aboriginal stockmen, who’d be introduced to people, and we might end up stopping and yarning or going into the community. There were always opportunities for people to talk together and the highlight of the trip for people was to talk to Aboriginal people for the first time. We’d stop at Imintji store and Barnett and Kalumburu, sometimes Gibb River station on the big trip for a break on the way through. And, if people were around, we’d invite them to come and eat with us.

Rosita and me had to learn what people wanted through the questions they asked. They’d ask a lot of things and I'd sometimes say, 'I don't know but I'll find out,' and every wet season we'd study these things in books and talk with people. It was great, the visitors were learning and we were too. And, from early on, we started to experiment with things. At first,
on drives when there wasn’t too much to see, I started talking about different plants, whether they were good for Aboriginal use, or whether they were good for stock, and spoke about different rocks. And this got bigger and bigger because people wanted to know about these things.

The longest tour we did was sixteen days from Derby to Mitchell Plateau, Kalumburu onto King George Falls, but we also did ten days to Purnululu and a circuit back down the Gibb River Road, and six-day tours. My wife and me worked together on every trip until we got too big, with four buses operating, and then she had to take some tours herself. Companies who wanted to send people through to us forced us into getting all these buses. We got in some other drivers and cooks, all Aboriginal people we knew.

Over the eleven years we operated, there were three complaints and no accidents. And those people would have complained wherever they were. People came back three or four times, the same ones again and again.

Times were harder with the air strike in the mid 1980s, but we were among the few who didn’t go broke. Instead of flights, the companies sent full buses through and we were still getting lots of people.

We’d always thought that in the end we would pass on the business to other Aboriginal people and it could be used to train people up. The Department of Aboriginal Affairs was interested in buying the business once and they did a feasibility study and made a lot of recommendations. We were ready to stay on and work but they wanted us as partners and they didn’t end up buying it.

We got a lot of criticism from some Aboriginal people who thought we were making a lot of money. We’d invite them to come on the tours, even to do the talking, and, when they did, we never heard any complaints again. They could see how hard we were working.

One of the most important things about the business side is that the money you make has got to be put aside for equipment and a vehicle and for looking after the vehicle. Money needs to be saved, and that is the trap, to go without other things such as a new TV and a washing machine and a car for yourself. And you’ve got to think about where you’ll be five years down the track. If you don’t think ahead and save money and not spend all your earnings, it won’t work.

Aboriginal people don’t think they are experts in the land, which they are. You can’t teach at TAFE what we know. It is natural, we have it, and we’ve lived it. We know where to take people and where not to go. Non-Aboriginal operators need to work with people from each of the communities on their tours. There needs to be a local person going with the tour. This should be a requirement through the WA Tourism Commission or whoever. Everyone will benefit, both the community and the operator. There’ll be jobs for Aboriginal people and this knowledge and information will improve the tour and more people will come on their tour.

A lot of knowledge is lost with people passing away. Cultural tourism is an important way to keep the culture strong and to pass it on. In Arnhem Land, there is a mob that opens up some of their cultural activities when they are making ceremonies at a particular time in the season. They allow visitors to pay for a cultural tour over three days. They restrict the numbers and the visitors pay big money. The Aboriginal people talk about their culture, ceremonies, they separate into men’s and women’s groups and go and gather and hunt for food. They don’t open up any secret business but take people out to experience some of their culture first-hand. The mob will be doing it anyway and it provides a way to make some money. And people are educated about Aboriginal culture, they learn about cultural things in a deeper way. Tourists want to know about these things. People from this side need to go and see what’s happening in the Northern Territory.

With cultural tours, Aboriginal people can only say so much. The right people have got to operate the tour. The old people can say what is allowed to be talked about and how far we can go with different things. And how we tell other people. How to explain things that visitors have no idea about, such as a smoking ceremony and ancestor spirits, and what you need to do to approach places on country where the rainbow serpent lives. We have to think about how to put it all together so that people will understand. What trees did people use to make boomerangs, what stone was used for axes and how were these made? How do you get the wax out of the spinifex, how is the stick straightened in the fire, how is the wood hardened? How to get sugar-bag out of a tree with a stone axe. I’d talk about this. Some tours might have a bit of culture but the main thing might be the fishing so they are not what I’d call a cultural tour.

I had to go and get permission from the old people to visit places on my tour and they knew I would not go over the limit. In some places, I’d go and get someone from the local community to take us. And that person would talk to all his ancestors first before we went in and he’d keep an eye on the visitors, telling them where they can go and where to be careful not to go.

It’s a big concern, losing parts of the culture.

To be successful from the business side, you need to learn to talk to people, to pick out what you are going to say, to be confident in yourself. We always got to go back and ask the old people when we don’t know what can be said, and they will tell us.

Starting a business without enough money is a big issue. But how much money do people need to have? You don’t have to have your own vehicle. Let someone else bring his or her vehicle to you. All you need to do is turn up, jump on their bus and charge for the day or week. You look after your expenses of getting to the meeting point and that is all. The other person is responsible for looking after the people, getting them there, the vehicle, the food. You take the tour. There are all sorts of ways that people can be involved in operating tours.
Partnerships are very important. The partner can provide the bus, license and equipment and also the expertise of running a business, which he can train you in. You bring your knowledge and can jump on the bus and do your talking. There are a lot of partnerships around. People want to go into partnerships with Aboriginal businesses all over the Kimberley. Some involve the Aboriginal partners taking over the business down the track when they have learnt the ropes. People need advice on where they might be going wrong, especially on money management and saving. People are often getting enough work but it’s information and advice, sometimes on small things, from people who’ve run businesses that are useful.

We need to make sure our people are aware of what is happening in other places. We need to take people out of their environment and see what other people are doing and how—the cultural tours in the Northern Territory, the markets for artefacts and paintings, how to protect the environment.

Traditional Owners from here should visit New South Wales to see what has happened where the cotton has been grown, the damage that has been caused there. That sort of environmental damage affects culture. People need to talk to people over there. And people have to learn about what is happening with water rights, that people are trading in water and wanting our groundwater and rainwater.

We need to look to our history. Aboriginal people knew not to camp too close to a waterhole so all the animals could go to the water too. They knew that if the animals couldn't get there, they'd move away and then the people would go hungry. And they'd know when it got a little bit light at this waterhole and it was difficult to get food, then it was time to move on to the next waterhole.

I think the more awareness and understanding non-Aboriginal people can have about our culture, the more respect of country and culture there’ll be.

Sam Lovell established the first Aboriginal tour in Kimberley. He is Patron of the West Australian Indigenous Tour Operators Committee and the only Kimberley-based Project Officer with the Office of Aboriginal Economic Development, WA.
Ngooloodoo Bush Adventures

Shaw, Laurie
Gillarong Community, Fitzroy Valley

When I left school at 15, I went straight onto the station. I have worked in the mines and been involved in politics and community decision-making. I don’t want to see my kids and their generation miss out on opportunities for work and in decision-making. The Community Development Employment Program (‘Work for the dole’) won’t be around forever and people can’t live off it anyway. I see running my own family business as an opportunity to change the way we live, to get onto mainstream wages and be doing work with other businesses and agencies. Our tourism business is about our family. My son will take over from me and later I will step back. We want to make a living and create jobs but also to show people that we got the land and culture that have been left to us by the old people.

My grandfather got Mount Pierre back. It was part of Go Go Station that wasn’t being used. This return has meant getting our land back and we are creating jobs and sharing our knowledge of language and our culture with other people. My grandmother told me that the main thing was to look after the land. I’m finding it hard, you’ve got to talk to the right people to look after the country. We’ve been taught by old people when to burn off, how to kill animals and how much or little to take. All the knowledge I have about country has been handed to me by my old people. I have it all here and I need to pass it down to the younger generation.

We want to look after the country properly and get our kids out to teach them respect for their country and people. We were born and grew up here and we’ve seen the changes over time. We want to set up full-time rangers. In the past, before we had control over our country, maringardi (non-Indigenous people) came in and took away fossils, big chunks of rock. Conservation and land management needs to be done by us, not directed by government. The Department of Conservation and Land Management have their rules and it’s as if we don’t have any rights to the country. We will tell the young people what needs to be protected. Fireplaces need to be built. We want to employ our people to do this, same as the Yiriman Project’s work at Jarlmadangah (see Watson et al, this volume).

We’re sharing our knowledge of culture and country with other people. The local schools have come out on our tour as part their Aboriginal history Project. They learnt stories about Gooniyandi people, about bush tucker and medicines and skin (sub-section) groups. The school principal told me that they have included this in the curriculum, and the kids are also learning from Bunuba and Walmajarri people.

Setting up a business is not an easy thing. We get told to do it in particular ways. Getting a business plan and getting everything down on paper is difficult. Where do we go? Who is responsible for what? We need advice and help to understand things. We don’t need money to get ourselves set up properly. We need to show that we can do it on our own. People need motivation. If we start doing what we want maybe we can lead others to do what they want. We need to work with the local resource agency to see what support is possible. Partnerships are very important.

Laurie Shaw is a Gooniyandi Traditional Owner who operates a tour business on his traditional country to the east of Fitzroy Crossing.
Tourism Workshop: Discussions and Recommendations

Bessen, Bevan
Bessen Consulting Services

Participants
Petrine McCrohan was the facilitator for this workshop. Participants included: Dillon Andrews, Sam Lovell, Laurie Shaw, Rosie Shaw, Rosemary Nugget, Neville Poelina, Leah George-Wilson, Kalila George-Wilson, Dickie Bedford and Gary Taylor.

What Works for Appropriate Development
The group identified the following as key aspects of appropriate development for tourism:
• Fit between skills base and the enterprise;
• Bring tourists in and treat them as friends;
• Commitment;
• Knowing your area;
• Permission to work in an area;
• Having a good network system in place with other Indigenous operators;
• Cultural knowledge;
• Advertising product well;
• Accessing business skills and information;
• Success happens slowly;
• Use of ‘word of mouth’;
• Knowing how much to tell people about your culture;
• Knowing your environment—keeping country healthy with the right practices and wet season rejuvenation;
• Cross cultural—reciprocity;
• Familiarity with sellers; and
• Building relationships and agreements with pastoral lease managers.

What Doesn’t Work for Appropriate Development
The group identified the following as inappropriate for tourism development:
• Being late;
• Lack of communication;
• Drugs and alcohol;
• Not maintaining equipment;
• No back up;
• Lack of protocol;
• Bad advice;
• Not being honest—admit to your limits of knowledge;
• Under-selling your product; and
• No money for infrastructure.

Principles for Appropriate Development
The group identified some key principles for appropriate development:
• Commitment;
• Control over the country you work in;
• Capital—financial and natural resources; and
• Cooperation and networking, including:
  o Coordination for wide knowledge;
  o Commercialisation; and
  o Culturally wise knowledge.
Most Important Concrete Actions

In the second session, the group made the following recommendations with key actions:

Capital
- Government should have one body where Aboriginal people can go to find out about where to find funding:
  - With a clear picture of already existing departments involved with funding for Aboriginal enterprises;
  - With a person to follow through with the whole process; and
  - Involving local operators who are in business partnerships already.

Control
- Need legislation that fully recognises the ownership of Traditional Owners, incorporating co-management with existing National Parks and potential agreements; “if you own a bus, be the bus driver”.
  - Action: KLC, EK and ACF to support and facilitate all stakeholders (mining, pastoral and the Department of Conservation and Land Management) to recognise and have a legal requirement that Traditional Owners have a major part in any decision making in conservation and management.
- Introduce accreditation for tour operators who want to operate in the Fitzroy Valley.
  - Action: Organise interpretation workshops with Traditional Owners to make sure operators accessing important sites know the protocols and rules.

Cooperation
- A group of Indigenous tour operators from the Fitzroy Valley form a steering committee to make decisions and recommendations.
  - Action: Invite other individuals and organisations in as “passengers on our bus.”
- Cultural Knowledge
  - Action: Access training for young people to learn traditional knowledge and guiding skills.
Culture and Art Workshop
The Mangkaja artists have achieved considerable acclaim, many as individual artists as well as producers of large-scale collaborative works. The Ngurrara canvas that was unfurled at the Kimberley Roundtable meeting in October 2005 is the most ambitious of these to date. As the artists move around their country on their painting, it is impossible to gloss over the serious and strong connection to country that resides in these works.

The idea of making a large canvas emerged during a period of regular visits to a large number of sites across the Great Sandy Desert. The purpose of these trips was to gather stories and information that was to be used in a claim over the traditional lands.

The process of travelling through the landscape underpinned the development of the painting. It gave the artists the grace of non-fractured time and space that allowed them to move their countries onto the canvas in a considered and careful way.

The following statement by Tommy May, one of the senior artists who works through Mangkaja Arts, gives an explanation of the process of working collaboratively:

“In Mangkaja we are trying to all come to one on canvas, that’s why people work together. All the ideas come from one place, from the desert, from both sides of the Canning Stock Route and now the martuwarrina too, river people. That’s how we made it (the Ngurrara Canvas) so strong, we had a good idea and all of us were willing. This is like law time, pijirmarnu law, when all of the old people come together, willing, not ngurrjarra ngurrjarra, self self. This idea of working by yourself can’t work.

You have to be willing, to be happy to work. You have to bring your business to one place, to the centre and work it out. People (in Mangkaja) have been doing large works for a long time, sometimes in galleries, then for Ngurrara and now Martuwarrina and Jila. This makes that ngurrjarra ngurrjarra strong.

because we all come together, to make it strong. We still paint our own areas—that law is still there. We can’t jump over to any one else’s country.”

The old people also have a saturated understanding of the state of their country and the importance of travelling back to country and of passing on stories to their children and grandchildren as they themselves have learnt. The depth of the connection and the fragility of the hold that people have over activity in their lands are poignantly stated here by Peter Skipper:

“This word is from Ngarrangkarni (Dreamtime) about the rocks that grew up behind when Aboriginal people were walking, when they were travelling in the Ngarrangkarni. Those rocks grew up there behind. They grew up where the people were traveling a long time ago.

Alright, from a long way they were traveling those people. They were carrying law business, the law which belonged to them. They left those things behind there in that country. Those rocks are there now, behind. They rubbed themselves with fat when they went too. They rubbed their bodies with goanna fat.

Alright, now those kartiya (white people) look around for rock (minerals) and fat (oil). They look around those rocks. They want to get them. The yellow rock and the black rock and the goanna fat are law. The kartiya are looking around, they want to take the rock and the fat.”

Tommy May also reveals the strength of the older artists in deciphering material that is for public viewing, what is free to be given away and what needs to be held:

“There are two ways for the old people from jila’ side. The first is not easy law, we do not touch that in our painting. The second is easy, like our Kurtal ceremony that we take to the city. We are happy to show kartiya some things these days. We show people our country for mining and that sort of thing.


2 Jila are the permanent waterholes that provided the main living areas in the desert. Many have snakes living in the water as ancestral spirits and some individuals are believed to travel back to the jila to live.
We need to hold on tight to our story. We can’t show white people everything. If you tell everybody, it is like selling your country. You have no law there behind. You can give a little bit, but not too much. Kartiya can take away the stories, the pirlurr (one’s spirit), the power for your country and leave you with nothing.”

“We worked together for these paintings, we didn’t worry about money. Sometimes people worry too much, they might be thinking about buying a car, or for diesel and food that they want to buy, so they think about money. We make good paintings to sell too. That word from Kurrapa, ngirramanu, is what we are doing in our painting, we are making them good, strong with colour.”

Mona Chuguna describes specifically the development of the Ngurrara canvases:

“We didn’t get any money for the Ngurrara canvas. That is not why we painted it. The Government wanted evidence. We decided to paint our evidence.

We started the first painting without talking first, we just started painting. We finished it in about five days but Kurrapa (Peter Skipper, Chuguna’s husband) and I were not satisfied. It was too rough, not the painting itself but the boundaries. Some places are in the wrong positions. We didn’t plan it properly the first time, so it is not aligned correctly.

When we started the (second) big painting we planned properly before starting. We worked it out with everyone and we talked all morning before we stretched out the canvas. This is not a new way of painting for us. We have made banners for our exhibition at Tandanya, Melbourne and in Perth, Brisbane and here in Mangkaja. We worked together on those paintings. The Ngurrara canvases are the biggest paintings we have made. We had around sixty painters working on them.”

The renewed connection to places where people lived as children and young adults clearly made the process of painting the collaborative works relevant and immediate. As Chuguna states clearly above and below, there was no sense of huge monetary returns, however the irony here is that the Ngurrara canvas and the trademark act of working collaboratively have brought increased attention to these artists. The other major effect was that it made the individual works of the artists infinitely richer as well.

“We worked together for these paintings, we didn’t worry about money. Sometimes people worry too much, they might be thinking about buying a car, or for diesel and food that they want to buy, so they think about money. We make good paintings to sell too. That word from Kurrapa, ngirramanu, is what we are doing in our painting, we are making them good, strong with colour.”

The younger artists are maintaining their connection with the countries of their parents and grandparents through these same processes. Painting is an invaluable contemporary vehicle for this transfer, and in tandem with access to country, these younger artists are in strong positions to forge their own artistic careers that may ultimately bring them economic independence.

Jukuna Mona Chuguna is a senior Walmajarri woman, artist and Mangkaja Arts committee member. Pijaji Peter Skipper is a senior Walmajarri man, artist and Mangkaja Arts committee member. Ngarralyja Tommy May is a senior Walmajarri man, artist and Chair of Mangkaja Arts Centre. Karen Dayman is coordinator of Mangkaja Arts Centre.

3 The artists made two canvases. The first, in 1996, was deemed too small and not quite correct so the decision was made to develop the larger work, painted in 1997.
I was born and grew up in Broome. My mother was Nyul Nyul and my father a Yawuru man. I learnt about the bush and the sea from them. Forty years ago when they took me across Roebuck Bay to fish, we might see only one other car there. Today, when I take my son, there are twenty-five cars. I have seen the impact of this on our culture. Our fishing places have been developed, houses have been built over the bush. Now there are restrictions on fishing because there is not the abundance of the past.

How do we maintain a connection to our heritage?

When I was young, an old Karajarri man called Tommy Edgar did something that had a big influence on me, and the way I identify with and know where I come from, and how I think about my heritage. It was after the 1967 referendum, when Aboriginal people were asked to sign a paper to say that we were now citizens of Australia and that we no longer fell under the ‘Dog Act’. Mr Edgar refused to sign the citizenship form because he said he was already an Australian. We knew who we were and where we came from.

People sometimes don’t understand what we mean by ‘heritage’. My understanding is that it is what comes from your descendants, all the things that are passed down. The old people have left for us this knowledge about using and looking after the country. It is our responsibility to pass our way of life on to our children. It is unique.

Minyirr Park was created from this—to maintain and protect our traditions. Minyirr means birthplace. Old people fought for the protection of this area. In 1986, it was established as a conservation reserve to be co-managed by Rubibi on behalf of the Yawuru people, the Traditional Owners, and the Shire of Broome.

The whole of the Broome Peninsula sits on two song lines that originated in the Dreamtime, the Bugarrigarra. One travels south all the way from One Arm Point to La Grange, and the other travels east-west, from here to the east coast of Australia. Minyirr sits on the song lines.

The song lines and song cycles cannot be broken. We need to maintain and protect and keep our connections with them. But the pressure from development along the coast and around Broome is enormous. The population is growing very fast and development has brought new land management problems. Fourteen years ago, there were plans to build hotels, high-rise buildings and a golf course where Minyirr Park is. Today, four hundred houses are being built right on the eastern boundary of Minyirr Park. A big highway for trucks is being built close by.

All our activities are aimed at protecting the heritage and culture of the Yawuru people. Minyirr gives people access to information about country and culture. We work to provide an understanding of this place from an Indigenous point of view, the way that we see it and the way that it has always been looked after.

If we are going to meet the needs of people in the Broome community then they need to be aware of the natural environment and of the Indigenous people and their way of life.

It is important that there are opportunities to bring about awareness for the younger people through cultural education on country. Kids from our community come to Minyirr Park to do the ‘Reading the Country’ program, an eight-week practical program for young men and women to learn and build their confidence about the natural environment, to identify and record native plants and animals, and learn about their culture. They learn how to build structures and to make furniture. From this course, youth have gone on to apprenticeships in local industries such as pearling and building.

We are also trying to work as part of a coordinated approach to youth, and sit with a number of other organisations and agencies on a youth planning committee.

Older people have seen what happened to our culture when outside influences arrived and changed things. We are giving kids an understanding of how difficult it has been to hold onto our culture and what we are facing from the United States, with their culture coming in.

The State Planning Minister came to the park a few years ago. She was due to spend forty-five minutes learning about what we were doing, about our culture and heritage. When
she arrived she was shocked by what she saw, by the ‘living country’. No lawns and rose bushes. She stayed for three and a half hours to tour the dunes and to listen and talk, and then she left. As a result of this visit, where she developed a better understanding of what was happening here, the Minister established a planning committee for Broome. More people from government need to come and see what is happening. We can work together to be more constructive in a whole lot of ways, including creating jobs.

Minyirr Park wants to see people being trained and employed, and that employment maintained. We have been training people in coastal conservation management activities for the past seven years. Our members have received Landcare traineeships, training in conservation through Greencorps, and training in cultural tourism and occupational health and safety through TAFE. We are working towards being independent. One way has been through building partnerships with other organisations and agencies.

Employment has increased over the past seven years. There are four paid positions and Yawuru people fill three of these, the coastal Landcare coordinator and two on-ground supervisors. The workforce includes local prisoners from the WA Department of Justice, and Skillshare and CDEP participants. Many people have worked here as volunteers, some through the Australian Greening Conservation Volunteers.

We are frustrated with the lack of resources committed to the management and protection of the area. We compare it to the allocations that are made to the town's parks and ovals. Minyirr receives $56,000 a year for the whole area and survives on a few other grants. We'd like to see people here getting proper wages and working in full-time jobs instead of three days a week.

Micklo Corpus is a Yawuru Traditional Owner and Co-ordinator of Minyirr Park.
Culture and Art: Discussions and Recommendations

Bessen, Bevan
Bessen Consulting Services

Participants
Sarah Yu was the facilitator for this workshop. Participants included Richard Hunter, Miklo Corpus, Joe Brown, Ngarralyja Tommy May, Hughie Bent, Pijaji Peter Skipper, Ronnie Jimbidie, Jukuna Mona Chuguna, Daisy Andrews, Tina Hobbs, Annie Kogolo, Rosie Mulligan, Lucy Walgarie, Tom Lawford, Terry Murray, Karen Dayman, Amanda Martin, John Silver and Ian Gill.

What Works for Appropriate Development
The group identified the following as key aspects of appropriate development for culture and art:
- Recognition of culture as the source of everything—people's roots, attachments, identity, family and their knowledge of the country and how they represent this through art. This is true for all water places, the river and the jila of the desert;
- Recognition of Aboriginal names for places and species by scientists and other researchers is good—protection of special places;
- Involving kids in activities to do with the management of country as much as possible—educating people about the country and people's relationships to country, both in the community and to visitors.
- Painting the country is good, painting the history of place is good;
- An understanding of where you come from, what is local;
- Forming partnerships with other agencies or groups to develop programs that involve young people working with old people;
- Recording the histories of people and their relationship to the country, and documenting their knowledge of changes to the environment; and
- Getting on country regularly, just for ourselves, or for work or with tourists—walking the country is good; makes people reconnect and slow down (for example, Minyirr Park, Lurujarri Trail).

What Doesn't Work for Appropriate Development
The group identified the following as factors that aren't currently working:
- Concern that the country is not being cared for;
- Need to access country for education, training and painting;
- Need for recognition of traditional rules and laws, looking after the river in the cultural way; need to restore the balances that used to be in place and learn what you can and cannot do; learning control and responsibility from following the cultural way;
- Need to find more ways to pass on knowledge and experience to young people and involve them more; time is critical as more and more old people pass away; because of their history of walking and working the land, they can document changes to the environment;
- The impact of feral species on the river;
- The impact of foreign culture (for example, American violence) on the younger community;
- Need to give more recognition to Indigenous knowledge and understand its roots;
- No control on numbers of people (the population) in the environment; visitors and tourists are going everywhere, without showing respect to the Indigenous community; and
- Concern that the government is not listening to the Aboriginal voice.

Principles for Appropriate Development
The group identified the following principles for appropriate development:
- Respect for Aboriginal culture and the people who hold the knowledge;
- Encouraging the senior people in the transmission of knowledge to young people, to create sustainability;
- Being on the land with the right people; and
- If the culture is strong, then the economic, social and ecological benefits will flow.
Most Important Concrete Actions
In the second session, the group made the following recommendations:

Respect
• Need to develop and publicise the cultural map of the Fitzroy River and surrounding country.

Access to country
• Set up permissions process for people to get access, to recognise Traditional Owners;
• Seek agreements with pastoralists to get access for cultural activities.

Education
• Develop the cultural map of the Fitzroy River;
• Develop more language, song and dance programs;
• Develop cross-cultural training programs.

Kids
• Find ways to get them out on country as much as possible, for example holiday culture camps;
• Involve kids in painting programs.

Cultural enterprise
• Need to find ways of earning money from cultural work and to combine it with cultural activities, for example cultural tourism.
Top: Dimond Gorge; Left: Kalila George-Wilson, Ronnie Jimbidie, Leah George-Wilson; Right: Wil Philippiadis, Patrick Sullivan

The Fitzroy River at Willare Bridge

Left: Butcher Wise, Scott Goodson, Sam Lovell, Rosemary Hill; Right: Ian Lowe

INVITED PAPERS
Introduction

Indigenous Australians are gaining a greater share of northern Australia as land rights and Native Title legal mechanisms are allowing claim and purchase to return ancestral lands to their established Traditional Owners. While no exact figure exists, it is likely that more than twenty percent of the Australian continent is under Indigenous ownership or management, with most of this in northern Australia.

The Indigenous population on the Indigenous estate is relatively small and dispersed. It carries enormous responsibility and faces huge challenges to both ‘care for’ and manage this estate, while also making a sustainable livelihood from it. The former responsibility is for both current and future generations of Indigenous people, but also for national and international benefit, as much of the Indigenous estate is relatively environmentally intact and has significant biodiversity value. The latter challenge occurs because land management is dependent on land occupation. However, making a living on country has proved extremely difficult. In this paper an attempt is made to link the issue of land management with economic development; the argument, at the outset, is that a new way of thinking about Indigenous livelihoods is needed to ensure recognition of Indigenous contributions by both the private sector (or the market), and by the public sector (or the State). Such recognition might facilitate a ramping up of such activities with appropriate resourcing.

In 2005, much policy debate in Indigenous affairs is focused on two of the issues addressed here, land tenure and Indigenous economic development. Using the lenses of the mainstream, the dominant and conservative political voice in this debate is presenting the last thirty years of Indigenous policy as a failure, primarily because Indigenous socioeconomic status or well being has not improved sufficiently. This is especially so in remote and very remote regions, the very regions where most Indigenous-owned land is located. There is no question that the low health, housing, employment and income status of Indigenous Australians is of concern to all, but there are very different views about what has caused this situation. One interpretation is that this is due to welfare dependence, sometimes referred to as passive welfare that Indigenous people receive as Australian citizens. Another is that governments have not invested sufficiently in services for Indigenous people, especially on a needs basis and given historic shortfalls. Another, again, is that there has been insufficient attention paid to investing in Indigenous development and in providing support for the corporate structures that match Indigenous governance with western corporate (or business) governance.

In reality, there are many explanations for Indigenous poverty and underdevelopment including the challenges of trying to live off the land in very remote regions at a time when fewer and fewer Australians are able to do so in a commercially viable manner.

Causes of Indigenous Underdevelopment

Understanding the causes of Indigenous underdevelopment is very important if one is to ensure appropriate policy responses. But understanding both the causes of underdevelopment and the current situation is also highly dependent on accurate information that reflects on-the-ground, lived, reality.

Such information is generally missing in Indigenous policy development. Or else it is highly contestable because it reflects the values and priorities of the dominant power culture, the non-Indigenous Australian majority, and variations within that as particular views and sections of society hold political ascendancy. Some information is relatively incontestable, for example, that Indigenous life expectancy is unacceptably low, whatever one’s ideological or political viewpoint. Other information is much more contestable, for example what is appropriate employment or income or education or housing, with most measures just using western ‘social indicator’ constructs that do not recognise customary or Indigenous ‘minority’ perspectives on such issues.

Using a particular set of indictors, mainly from the five-yearly census, but also from the special National Aboriginal and Torres Strait Islander surveys conducted in 1994 and 2002, one can tell different stories. One story that tends to dominate policy discussions is how badly Indigenous people in remote and very remote areas do in terms of getting mainstream jobs and in establishing mainstream or commercial businesses. Arguably, this can be explained in part by remoteness from labour markets and commercial opportunity, but also by an absence of development finance and commercial training, and
the primacy often given to group solidarity over individual entrepreneurship and financial success among Aboriginal people. This story has resulted in two recent policy discussions, both of which appear negative to us. The first is to blame land rights and Native Title laws for Indigenous underdevelopment, with a part of this argument suggesting that things were in fact better in the 1960s and 1970s under the old policy of assimilation. The second is to blame the communal or group ownership of most Aboriginal land for the inability of Aboriginal people to raise finance from this important asset. It is unclear if this view will result in dilution of land rights and Native Title or in the individuation or division of land.

The Importance of the Customary Economy

Another story can also be told with official statistics, most recently from the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) completed in 2002. Results from this important survey tell us that in remote and very remote Australia at discrete communities mainly on Aboriginal-owned land more than eighty percent of Indigenous adults participated in hunting and fishing in a group. NATSISS 2002 also tells us that those who lived on homelands, on country, are most likely to participate in such customary or non-market activities and that being employed under the Community Development Employment Program (CDEP) scheme facilitated such participation. NATSISS also collected information about Indigenous people’s participation in cultural activities and found that nearly twenty percent of adults participated in art and craft and ten percent in music, dance and theatre, with over half of those who participated in arts and crafts being paid. People in remote and very remote areas were also well positioned to meet their cultural responsibilities, especially again when employed in CDEP activities (94%), but also if employed in the public or private sectors. People living in remote and very remote areas were most likely to be paid for participating in cultural activities.

The NATSISS did not measure some important things like whether gathering of food was important (compared to hunting and fishing) or whether people engaged in land and sea management and biodiversity conservation—caring for land and sea country. NATSISS also tended to define such activities that resulted in the production of food and the earning of income as cultural rather than economic activity, reinforcing the mainstream view that does not clearly recognise Indigenous economic contributions if different from mainstream contributions. Nevertheless, NATSISS did show clearly perhaps for the first time in the Native Title era (since 1993) that people exercise common law rights to harvest food and that people use their distinct Indigenous skills to produce cultural products, especially art, for sale across remote and very remote Australia. This in turn means two things in policy terms. First, that there is a positive aspect to land rights and Native Title that is rarely heard in public debates about Aboriginal economic development. Associated with this, there is opportunity for economic participation on the estate, but this is rarely recognised or acknowledged in discussions in Canberra that tend to be fixated on mainstream solutions that are just not available in the bush where many Indigenous people live. Second, it showed that some existing programs like the CDEP scheme could actually facilitate such activities, but obviously not enough to ensure economic equality.

The Hybrid Economy: Market, State and Customary

In my opinion, the NATSISS data provide another way of looking at the Indigenous economy where there is Aboriginal tenure of land. This way recognises and values Indigenous activity that might be in the non-market or customary sector of the economy and hence invisible from a mainstream perspective. It also recognises that other Indigenous contributions might begin in or be dependent on the customary but end up in the market economy (as when art is sold) or in the state sector (as when one is paid CDEP wages to undertake land management activities). Elsewhere, this different model of the economy has been called the hybrid, community or diverse economy. It is fundamentally different from the mainstream economy because it has three sectors (the customary, market and State) not the usual two, and because there are many intersections between sectors of the economy that capture the strong links between economy and custom for Indigenous people. Elsewhere it has been suggested that this form of economy rather than the market is the ‘real’ economy for Indigenous people living on their country.

To give some examples of this form of economy for the deliberations at this roundtable, consider the following:

• Hunting and fishing and collection of bush foods is clearly in the customary sector if consumed locally, but some products can be commercialised and so enter the market economy;

• Tourism on country might include cultural components, the meaning of places and customary use of resources. In this case the commercial might be dependent on the customary;

• Art and culture when marketed is similarly frequently linked to connection to country, to raw materials from country and to State-funded marketing, thus combining the customary, market and state;

• Agriculture and pastoralism when undertaken by Indigenous communities is likely to be underwritten by State support (like CDEP, training and capital grants), but might also take a form that includes self provisioning, e.g. via killer; and

• Land and water management and conservation might occur in many ways, via fire management or weed eradication or feral animal culling. Such activities might be targeted or occur when other activities are undertaken—they might be supported by the private sector, the State, non-government organisations or philanthropies as with the the Kimberley Regional Fire Management Project (see Philippiadi, Lawford and Sullivan, this volume).

Many of these activities generate what economists call positive spin-offs or externalities. There are public conservation benefits
from such activities, but it is hard to find any individual beneficiary or agency to pay for the true wider value of such work. This in turn suggests that while such activity is clearly being undertaken, sometimes formally via Caring for Country ranger programs, sometimes informally as a part of pastoral or hunting activity on country, there is a need to gain recognition of its land and resource management benefits. This is not easy because conservation benefits can take years to achieve and hence demonstrate, while at a property, Project, catchment or bioregional level they can be hard to prove. Remote monitoring via satellites is often at too broad a scale while property level activity is often too isolated to clearly show difference. Sometimes land management activity is gauged by inputs (or activity, labour) and outputs (river frontage fenced, feral animals hunted) rather than by outcomes. This is a problem for the State’s conservation agencies as well as for Indigenous land managers.

An emerging research challenge for Indigenous interests is to document the benefits of participation in such diverse activities to Indigenous people and communities, as well as to broader private and public interests. There are other challenges to address to ensure that the appropriate institutional framework is in place to support livelihood options on country. For example, the CDEP scheme that has been integral to Caring for Country projects, often in association with Natural Heritage Trust, is currently being reoriented to focus on mainstream employment, away from non-market harvesting or conservation work on country. And many Indigenous organisations and projects need assistance with developing business plans and training in corporate governance to ensure that projects operate in business-like ways, with measurable outputs, if not outcomes, and accountability to all stakeholders. There is also a need to ensure that all land management projects in a region operate to goals commonly agreed with all stakeholders, a need that can be difficult to negotiate in situations where there is a diversity of stakeholders (e.g. Douglas-Daly region; Ord-Bonaparte region).

Ultimately, a number of factors suggest that Indigenous people will become more heavily involved in the provision of ecosystem services for land and resource management in remote and very remote Australia. These include the following:

- The growing Indigenous estate and the demographic reality that the Indigenous population is both located on or near this estate and is growing;
- Growing evidence that Indigenous people are choosing to engage in the hybrid economy and that this will provide them with sustainable economic development or livelihood futures; and
- The common law property rights that Indigenous people enjoy in customary resources (including water) that suggests that these will need to be recognised and accommodated in any efficient resource management regime.

The critical policy challenge is to demonstrate with sound argument and empirical evidence that Indigenous land tenure is linked to land management and economic development. This is a fundamentally different equation to the one being currently touted that views land rights and Native Title and communal ownership as counter to land management and Indigenous economic interests. Such demonstration should provide the evidence to ramp up Indigenous land management activities when beneficial and enhance resourcing to ensure sustainability.

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References


Hughes, H. and J. Warin. (2005) A new deal for Aborigines and Torres Strait Islanders in remote communities, Issues Analysis No. 54, The Centre for Independent Studies, St. Leonards, NSW.


Sustainable Employment in the Hybrid Economies of Dispersed Kimberley Aboriginal Settlements

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Introduction
The Kimberley is not a pristine wilderness. Much of it is degraded through the poor stock management practices of the past. Free-range cattle trampled the banks of creeks, and then the rivers’ annual floods eroded them, undermining the tall trees that held them together. Now there are wetland swamps where once there were free-flowing rivers. The Kimberley is home to many introduced animals, previously domesticated, now feral—pigs, donkeys, goats, and camels. Many of these thrive where even cattle could not and, without natural predators, selectively overgraze native grasses and small trees. Cats cull native animals. Introduced weeds find a foothold in this changed landscape and even native species, particularly wattle, flourish in plague proportions where once they were constrained. With these negative introductions there has been one important removal. The natural landscape of the Kimberley has become run down by the lack of its most instrumental natural management factor, its humans. Now concentrated in towns and settlements, they have taken with them their knowledge systems, their practices of selective burning and harvesting of food sources. It is only a short intuitive step, then, to proposing that the most fundamental sustainable economic activity for Aboriginal people in the Kimberley is in environmental management. This brief paper will argue that this is real economic activity in both the broad sense of adding value to the life of the nation, and in the narrow sense of its potential to generate income. It is an important part of a hybrid economy for the region, and Aboriginal people in their widely placed settlements, bearing unique local knowledge, are ideally placed to do it.

The Hybrid Economies of Dispersed Kimberley Aboriginal Settlements
The Aboriginal people of the Kimberley now number about 15,000—almost half of the total population—though they are in much higher proportion than this outside of the six major towns.

If we could think of them as members of a single corporation, it would be by far the biggest landowner of the Kimberley’s forty-two million hectares. Aboriginal people own some thirty pastoral stations totalling about eight million hectares; more than thirty percent of Kimberley pastoral land. They control a further five million hectares of Aboriginal reserve land. The potential for the Native Title regime to add ownership rights to Vacant Crown Land is great, as the consent determinations of the Tjurabalan and Karajarri cases have shown. Importantly, many Aboriginal people live in settlements excised from non-Aboriginal land, sometimes bordering conservation reserves. This potentially gives them local access by agreement to lands that they do not technically own. At the last estimate, Aboriginal people lived in some two hundred settlements, most of them small and dispersed across the region, and they comprised between seventy and one hundred percent of the population outside of the towns, depending on the locality. Aboriginal people own much of the Kimberley and potentially have access to much of the rest (see Sullivan 2002).

Yet, in virtually all of these out-of-town settlements, they have no economic opportunity apart from the welfare based work-for-the-dole scheme called Community Development Employment Program (CDEP). There are three important exceptions to this broad statement that I want to deal with here, though none make much impact upon it. They are cattle enterprises, the ownership of other large economic infrastructure, and income substitution or generation from traditional activities. Income substitution happens when bush activities substitute for something that would otherwise require an income, such as bush food for store-bought food (Altman 1987). Income generation can come from the same or similar activities, such as selling bush food or producing art for the market. Potential for environmentally sustainable growth in these areas is great, and I will return to this. To date, economic advancement programmes have concentrated on the other two areas, which I will look at now.

Superimposing a map of Aboriginal-owned cattle stations onto a map of the productive potential of Kimberley land shows in stark terms that Aboriginal people own the poorest land (see Figure 2). For the most part it is classified as marginal or unproductive (with the exception of Roebuck Plains at Broome). It is not surprising then that most communally owned cattle stations are actually run as small family enterprises, and generate little benefit for most of the people on whose traditional lands they lie. The same can be
said for other large- to medium-scale economic infrastructure. In Fitzroy Crossing, for example, the Bunuba people own the supermarket, and have substantial equity in, or own outright, one of the two service stations and the two hotels as well as town housing. In recent years the Wunan Corporation in Kununurra has been pursuing a strategy similar to Bunuba for its local population. At Turkey Creek, the Kija people own the roadhouse, the only re-fuelling point between Halls Creek and Kununurra. Kupungarrri owns a roadhouse on the Gibb River road. Bardi community owns a tourist resort at Kooljamun. These are significant assets but they generate little income for their owners. It is remarkable also that they barely employ any Aboriginal people.

The reasons for this are not well known, but it is likely they are cultural as well as economic. They offer only low paid jobs, and welfare payments provide a disincentive to move into low paid work (this is recognised as a national problem). There may also be cultural reasons that make wage labour difficult for Aboriginal people to take up, though this does not seem to be a difficulty in the welfare service industries of towns such as Broome, Halls Creek and Kununurra. In any case, both these factors are largely irrelevant since these enterprises suffer from the same drawback as the pastoral enterprises. Even if successful, they cannot be expected to generate enough profit to significantly meet the development needs of the large Aboriginal communities that own them. They could probably support one or two families at a standard acceptable elsewhere in Australia. The anthropologist Nic Peterson has convincingly argued that economic advancement for Aboriginal people lies not in owning commercial assets, but, as it does for most of the rest of us, in wage labour. But, he says, adjustments must be made for individuals and families to enjoy the benefits of their labour without spreading it too thinly among the rest of the community. This, he says, usually involves relocation and marrying a non-Indigenous person (Peterson 2003).

This is one of the reasons that the economic anthropologist Jon Altman has argued for the importance of the hybrid economy in remote Aboriginal areas (Altman 2003, 2005). There are few wage labour opportunities here, and ties of kinship cannot be attenuated without substantial social dislocation. The hybrid economy brings the benefits of wage labour in a manner congenial to the culture, leveraging local knowledge and benefiting the land. It has several sectors in Altman’s model. The primary three sectors are State, market and customary. Combinations of these lead us to a further four hybrids. In this paper I will argue for the importance of sector 7 (see Figure 1), which is a combination of State involvement, market services and commodities, and customary activity.

**Environmental Management: A Key To Sustainable Employment in These Hybrid Economies**

There are a number of ways that wages can be introduced into small settlement communities. Significant improvements could be made if the State Government would pay for the upkeep of municipal services such as power, water, sewerage and rubbish removal. These are presently subsidised by the Commonwealth through CDEP, which is fundamentally a welfare measure. There are some jobs in store management or as teaching or nursing aides. Yet one of the most potentially productive areas presently goes untapped—environmental monitoring, management and rehabilitation—which brings us to the subject of the needs of this degraded land that began this paper.

Environmental monitoring, management and rehabilitation are activities that can be carried out by local teams with culturally congenial forms of governance. These activities employ local knowledge and they assist in the transmission of knowledge through the generations. They have the potential to involve men and women, youth and elders. They can be combined with income substitution (bush foods), income generation (bush foods, art materials, fee-for-service management) and cultural activities, which have an economic dimension since they protect against the waste associated with social breakdown. A good example of hybrid economic activity is the Kimberley Region Fire Management Project (KRFMP) (see Figure 3 and also Philippiadis and Lawford, this volume).

Activities with these characteristics include monitoring the local environment for soil erosion, overstocking or over grazing by feral species, the effects of climate change, the spread of noxious weeds or harmful plant species such as mimosa, and the profile of endangered species. Management activities can include fencing natural water sources against stock, the placing of bores or pumps instead, and the maintenance of these. Capping artesian ‘running bores’ that have wasted gigalitres of water since the early days of settlement is also an urgent and neglected activity. Culling out feral animals and controlling noxious plant species through selective burning, applying herbicides, and encouraging the return of native animals are also culturally congenial activities that can be organised in socially acceptable ways. Income substitution or generation activities that can occur in tandem with these monitoring and management activities are the harvesting of animal and plant species (either for consumption or sale for pet food, or to the emerging bush foods industry), gathering of ochres for art production, and the supplementary activities necessary for the production of this fundamentally religious art itself (see Watson 2003).
These are not ‘feel good’ proposals appealing only to an urban, non-Aboriginal elite. They are just as much part of the ‘real economy’ as driving a truck. Most fundamentally, they produce a public good in the rehabilitation of a degraded environment. They provide significant benefits by limiting highly threatening activities. Un-managed lands produce bush fires that wipe out hectares of productive land. They are home to feral animals such as donkeys that encroach and compete with productive stock. They harbour the wind-borne seeds of noxious weeds. They waste non-replaceable artesian water. They tend to the danger of encroaching desertification. They reduce tourist values.

If this were not enough of an economic benefit, there are others. Recognising these dangers, the State Agricultural Protection Board and, to a lesser extent, the Department of Conservation and Land Management have from time to time instituted remedial programmes. These are very expensive. They use university-trained expertise, itself a significant cost. They often require the temporary relocation of expensive personnel from settled areas to the bush, at penalty rates. This cost is multiplied when, as usually happens, they work in teams. They require the mobilisation of expensive technology such as light planes, helicopters and hired four-wheel drive vehicles. In some areas of Australia, Aboriginal patterns of burning have been reproduced by firebombing from the air, based on reconstructed information from satellite photos of the 1960s. Very commonly in the Kimberley, marksmen in helicopters cull donkeys. Suitably trained local people can provide these services more consistently and cheaply. They can therefore be extended to larger areas for the same cost, producing a greater benefit both to industry and to the population at large.

Employing Aboriginal people to carry out these services can improve their economic lives in two ways. Firstly, they can be paid standard wages, which will go further among the personnel than when paid to non-Indigenous experts—they are cheaper to employ. There will be a multiplier effect, as the wages will be spent locally. Secondly, they can provide these activities to pastoral enterprises with the capacity to pay for them on a fee-for-service basis. The KRFMP, based at Jarlmadangah, is currently planning such a programme with a seed grant from the Myer Foundation (see Figure 3).

It is true, of course, that using presently wasted human resources, already subsidised through welfare to live in the bush, cannot begin without significant preparation. Local knowledge needs to be supplemented with targeted training in the use and maintenance of equipment as well as modern management techniques. Business planning and governance training is essential. Appropriate work programmes must be devised. Cooperation and coordination across localities and regions requires high-level strategic planning skills. Further, sophisticated cross-funding arrangements need to be agreed to by bureaucracies that are currently ill experienced and often unskilled to do so. Business start-up subsidies, the Indigenous Land Corporation’s funds for land management, and recognition by the welfare system of benefit from lifting a significant drain on its budget, all should go into the mix.

Environmental monitoring, management and rehabilitation are economic activities uniquely suited to the present administration’s new arrangements for whole-of-government coordination in Indigenous affairs. The Indigenous Coordination Centres of the Office of Indigenous Policy Coordination should take up this challenge.

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References
Figure 1: The Hybrid Economy. Source: Altman et al. (2005)

Figure 2: Productive potential of Kimberley land overlayed on Aboriginal-held land. Source: Sullivan (2002)
Figure 3: Hybrid economic activities of the Kimberley Regional Fire Management Project. Source: Kimberley Regional Fire Management Project, presentation to Kimberley Roundtable, Fitzroy Crossing.
Indigenous Community Organisations: Appropriate Vehicles for Appropriate Development?

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In this paper, I wish to raise a few fundamental questions that deserve consideration in any discussion about economic development in the context of remote Indigenous communities in the Kimberley. These are not questions about the ‘what’ of appropriate development, but the ‘how’. I pose these questions in the context of a national policy environment that is changing rapidly. This is reflected in a shift in mainstream views about Indigenous Australians, and of the government’s obligations to them. I don’t wish to dwell here on these views, only to set this discussion in context; these are unsettling times for Indigenous people and for the grassroots organisations that represent their interests.

The first question I want to explore is, ‘what do we mean by ‘economic development’?’ The East Kimberley, for example, arguably has a strong economy by any conventional measure; tourism, mining and agricultural industries are all booming. Yet the local Indigenous population has been excluded from much of this apparent ‘progress’, a situation only recently starting to shift due to leverage afforded them under the Future Acts regime of the Native Title Act 1993 (Commonwealth). Such exclusion is also apparent on a national level. Altman and Hunter (2003) used the coincidence of the change in Federal Government in 1996 with the conducting the national Census in the same year. Specifically, they examine indicators relating to employment, income, housing, education and health, and determine that according to these measures, the socioeconomic status of Indigenous Australians has not improved under the policy of practical reconciliation relative to that of other Australians. Such intractability is of concern they state, “...in part because it is evident during a time when the Australian macro-economy is growing rapidly.” (Altman and Hunter 2003, 16)

Exclusion then from mainstream economic growth seems to be a widespread reality. For Indigenous people, such ‘economic development’ is not only inappropriate, it is irrelevant. It is in this context that I ask, what might be appropriate vehicles for more appropriate, realistic and inclusive forms of development—ones which occur at a measured pace, and which are grounded in the aspirations of Indigenous people?

One possible answer may lie in community-based, or non-government organisations (NGOs); it is increasingly apparent however that the capacity of such organisations to continue in this role are under threat.

In the Fitzroy Valley, such organisations include:
• KALACC (Kimberley Aboriginal Law and Culture Centre);
• KLRC (Kimberley Language Resource Centre);
• Mangkaja Arts;
• Karrayili Adult Education Centre; and
• Marninwarntikura (Women’s Resource Centre).

These five organisations already have a long history of working in and around Fitzroy Crossing, all employ locals and all are managed by executive committees of Indigenous people. All have been successful in developing skills, or engaging in activities that are deemed relevant by local people. All have expertise, corporate knowledge and local networks that have taken years to establish. I would suggest that organisations such as these have already been successfully supporting ‘environmentally and culturally appropriate development’ if we take development to mean something like increasing opportunities for people to achieve the outcomes they value.

The same can be said of the remaining four CDEP-grantee organisations in the Fitzroy Valley: Marra Worra Worra, Bunuba Inc, Kurungal Inc and Yungora Inc. These organisations provide an extremely broad and varied range of services to their constituents, including:
• CDEP programs;
• Community Development Employment Programs (CDEPs);
• Managing community housing;
• Running training programs;
• Negotiating Shared Responsibility Agreements;
• Providing municipal services;
• Leveraging funds from government, non-government, philanthropic and corporate sectors;
• Negotiations relating to Native Title (Indigenous Land Use Agreements, etc.);
• Managing business interests;
• Providing financial services for individual community members;
• Providing employment to community members;
• Supporting the establishment of small businesses; and
• Advocating on behalf of constituents in variety of forums.

The demise of the Aboriginal and Torres Strait Islander Commission (ATSIC) and of regional Councils has dramatically increased pressure on these grassroots organisations, without a concomitant increase in resources. This is evidenced by the fact that eleven CDEP grantee organisations have ‘disappeared’ in the last year, with their functions being absorbed by the remaining four. Under the new arrangements, these four organisations have had to take on some of the functions once managed by ATSIC, including complying with convoluted reporting regimes, interpreting federal and state government policy and related funding guidelines, and providing input into program and policy development.

Instead of being properly resourced, these supposed ‘vehicles for self-determination’ are now being routinely overworked and burdened to collapse by the new post-ATSIC funding arrangements. Organisations now have to apply to a multitude of funding agencies, all with different reporting and acquittal requirements and funding cycles. The resource burden on these community organisations is significant—one senior staff member estimated the time required to manage compliance had expanded fourfold. Those organisations that survive are those that manage to toe the funder’s line arguably, I am suggesting, at the expense of the real aspirations of their constituents.

This new approach seems to be approaching something akin to ‘self-assimilation’. That is, governments are still prepared to fund Indigenous organisations to carry out service delivery and programs, as long as they strictly follow the agenda of the government itself. The rhetoric has notably shifted in the last decade from self-determination to compliance (the latter being a crucial, underlying element of the new discourse around ‘governance’).

While the absorption of smaller bodies into larger ‘umbrella’ style ones may have resulted in greater ‘efficiency’, and less duplication, this efficiency has occurred at the expense of autonomy of groups, and of communities. So that while at a Federal level of rhetoric, Indigenous people are being encouraged to take responsibility for their communities, the real impact of the ‘new arrangements’ is to undermine the very organisations that might enable them to do so.

It is not a stated objective of government policy to encourage the demise of grassroots community-based organisations; perhaps it can be considered an unintended, and unimportant, consequence. I would argue however that the services provided by such organisations are vital, and in the context of this discussion, particularly in terms of providing representative forums which can legitimately articulate the views and aspirations of constituents. Whether it be from government or private interests, or philanthropic bodies or other NGOs, it is interesting to consider options for engagement with Indigenous communities in the absence of these small organisations, for example:

• How can government be accountable for spending taxpayer dollars, when, in the absence of the ATSIC, there is no formal structure that allows for the expression of Aboriginal people’s views and aspirations?
• If private investment is to take place, whom will the developer approach?
• What opportunities will exist for cooperation in the absence of organisations that represent people’s interests?
• What form of protection will be afforded Aboriginal interests?

In considering ‘culturally appropriate’ economic development, it is my view that a critical aspect is the existence of ‘culturally appropriate’ forums for the expression of Indigenous views and for advocacy on their behalf. To my own understanding, culture is about deeply held values and beliefs, and how these manifest in the choices people make in negotiating their way through the world—so that culturally appropriate ‘development’ is one in which protocols are respected, and Indigenous people are free to follow the paths most valued by them.

In 2005, Bob McMullen wrote, “The issue is not whether we need a truly representative Indigenous body, it is the reality that we will not get goals with real legitimacy or genuine accountability until we do have one.” This refers to the state of affairs nationally, but the same applies at a regional and community level: in the absence of appropriate forums for the expression of views, economic development of whatever kind risks further exclusion of Indigenous people.

Community-based organisations know their constituents, understand their protocols, and have enormous experience in mediating in an ‘inter-cultural’ zone, that is, between mainstream Australian interests and values, and those of their constituents. They are culturally legitimate expressions of Indigenous agency, and have until recently been critical actors in driving appropriate development in communities. The tightening of resources coupled with diminishing latitude granted them, however, puts their capacity to continue in this role under serious threat.

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Indigenous Community Organisations: Appropriate Vehicles for Appropriate Development?

References
McMullen, Bob (Member for Fraser, House of Representatives) (2005) “The case for establishing Australian Indigenous development goals”. (Downloaded on September 8 from: http://www.progressiveessays.org/?q=node/5.)
Cultural Studies of the Fitzroy River, WA¹

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Introduction

“The river. That’s our life. That’s the main one for everyone. It’s there for our young people. They take over.”

Concerned with proposals to dam the Fitzroy and pipe water to cotton fields in the southern Kimberley region, Traditional Owners engaged with scientists in several projects to record the cultural and ecological values of the river system². Their intent was to record cultural information for future generations so that they could continue to care for the river country and to ensure that developers and government would engage in consultative processes that respected their cultural knowledge, providing a foundation for future negotiations in development proposals intent on regulating and exploiting the river flow.

Research for these studies was conducted with the Nyikina, Mangala and Ngarinyin people, and in both research projects the Traditional Owners were committed to working collaboratively with scientists and involving young people in the research. Traditional Owners were able to streamline the research by taking scientists to appropriate water sources, and by describing environmental changes including identifying extinct and threatened species, and analysing the effects of not burning the country. This research methodology enabled cross-cultural interaction and both groups were able to learn more about the ecosystems and the interrelationships between species and climatic events. Together they were able to identify land management issues, determine future requirements, and establish the geoheritage and environmental significance of the river country (including the major tributary of Geegully Creek) according to national and international protocols (see Semeniuk 2004a and b).

The Fitzroy River, in the Kimberley region of northwestern Australia, travels through the traditional countries of many language groups, and the complexity of cultural relationships to the river country is further compounded by the historical relocation of desert groups on the station properties along the river. Whilst each group has distinct cultural responsibilities and articulates their relationship in varying ways, the groups are united through a system of Law that weaves together complex narratives and rituals required for the sustenance of the river country and its complex ecosystems. There is no single name for the river except marduwarra, which is a generic word for river. Rather, the Fitzroy River is conceptualised as series of linked narratives which arise from the many permanent pools along the riverbed, and which are subjected to the seasonal processes of flooding (warramba) and receding waters.

Physically, the Fitzroy River is a major unregulated system characterised by a braided main channel, anabranching and billabongs on the floodplain, and significant lowland floodplain storage. The river flows are highly unpredictable and ecological processes are typically described as “boom and bust”, corresponding broadly to “wet and dry” periods³. The country of the river and its tributaries is also dotted with natural spring systems that, as permanent water sources, are culturally significant. Usually these sources are discrete and separate but in some areas, such as Kalayanmayi pool on Geegully Creek, a spring is underneath a permanent pool.

River Country: A Cultural View

Indigenous people along the Fitzroy River and its tributaries have rich cultural beliefs about the creation of the river and its tributaries, the riverine environment and its seasonal cycles. Identification and discussion of cultural values of the Fitzroy...
river country, such as the narratives, rituals, ancestral beings, totemic tracks, paintings and other elements intrinsic to Indigenous notions of landscape, have no meaning without establishing their relationship to the fundamental concept of *Pukarrirkarl* *Bukarrarral* *Ngarranggani*, the creative epoch in which beings such as Wunyumbu and mythical serpents formed the river and its ecology. This concept defines the landscape and people's relationship with country, and in this sense the river valley basin can be defined as a cultural landscape to the Indigenous people, as much as it is a physical one, and continues to shape people's experiences with and relationship to the river country.

Despite universality in conceptual understandings of the river country, there nevertheless is great regional variation in cultural detail. There are differing narratives and traditions, with many subtexts and variations, through which each of the groups along the river system explain the origins and the continued cultural significance of the river and its ecosystem.

**Nyikina Side**

The lower Fitzroy Valley region is the traditional country of the Little Nyikina and Mangala speakers. It includes the vast floodplains surrounding the main river and creeks and the sprawling mudflats plains of the mouth of the river. There are a number of named tributaries running into the Fitzroy—Manguel Creek, Gegaully Creek, Uralla Creek, Nerrima Creek, to name a few. The eastern boundary of this research area is Mijirayikan, Broken Wagon Pool, a site considered by the Nyikina to be the origin of the Fitzroy River.

According to the Nyikina and Mangala peoples, the Fitzroy River was created by a snake/serpent that was speared by Wunyumbu at Mijirayikan, who was fishing in the pool using the poison from the *majala* tree. The serpent reared up with Wunyumbu's spear in his head and the track of his tail became the river and the mouth of the river. From Mijirayikan, Wunyumbu travelled on the serpent's head as the snake carved out the river as he travelled upstream. Although the Wunyumbu story continues, custodianship of the narrative past Mijirayikan lies with the Heavy Nyikina people, who were not consulted in this Project. Furthermore, it is apparent from research undertaken that the Wunyumbu story changes as one travels up the river. The Light Nyikina describe Wunyumbu as a man, not a bird. In Darby Nangkiriny's version of the story, Wunyumbu brings branches of the *majala* tree, a multi-purpose plant vital to subsistence along the river. The Wunyumbu story is celebrated regularly in the Walungari rituals of the river country, which mark the initiation of young boys. Darby Nangkiriny explains that:

"Every time we sing that song we teach the kids about the country, how it was made. How the fish got in the river."

**Ngarinyin Side**

The upper reaches of the Fitzroy Valley basin, where the Hann River flows into the Fitzroy, are a maze of small creeks running into the larger rivers cut in many places by deep gorges. As with the Lower Fitzroy, the rivers and creeks are marked by permanent pools, which support rich vegetation of trees and pandanus palms in the drier months. In the wet, the *warramba* flows in spurts of a week or so, and then the floodwater quickly drains and the cleansed pools remain.

The river pools, billabongs and springs are equally resource-rich in the high country. However, the larger migratory fish such as Barramundi are not found at the top of the Hann. Significant in the ranges landscape are the numerous caves that provide shelter and are home to resident Wanjina, the creators and protectors of the country. Such cave sites are the religious centres for each of the clan groupings (*dambun*) of the Ngarinyin people.

The Ngarinyin believe that the Hann River, a source of the Fitzroy River, was created by snakes, referred to as *unggud*. Pansy Nulgit explains:

"*Unggud* is for everybody... like a snake. She put the water everywhere. She make the rain, make storm get up."

Unggud, as metaphysical serpents, are believed to live permanently in deep pools, but can leave the water, make nests to lay their eggs and travel underground. As a polysemic term, *unggud* also refers to the conception spirits of humans who arise from these pools, and more generally the powerful, creative energy responsible for life. The waters created by *unggud* are also said to have healing powers for the countryman of the area.

The Ngarinyin believe that all permanent pools, whilst being inhabited by *unggud*, also have Wanjina who reside in and created caves next to each *unggud*. Their presence is revealed in the paintings believed to have been made by each Wanjina to mark his home. David Mowaljarlai explains that "there is never a cave, a painting site without unggud water" and his people, through their *dambun* (estate), are born with the responsibility to look after the country, both its cultural and physical dimensions.
Desert groups and the river

The river country of the lower Fitzroy River is now also populated by desert people, such as the Walmajarri and Mangala, who came or were brought in during the development of the pastoral industry.

Most of the Mangala who originate from the desert country south of the Edgar Ranges travelled along traditional routes to the river country before World War II to live and work on stations such as Mowla Bluff, Yeeda, Mount Anderson, Luluigu, Liveringa, Myroodah, Paradise, Noonkanbah and Nerrima or to the government post at Udialla, returning to the desert from time to time. When Udialla was disbanded after World War II, many Mangala people were transferred to La Grange Mission, though some returned to Looma when the community was established in the 1970s.

Today these groups now share cultural responsibility for the care of the river country with the Nyikina. Through connections such as the birth of their children, conception totemism, the death and burial of their elders and the responsibility in the Law, the people of desert are now acknowledged as custodians of the river country. This is particularly so in areas such as Myroodah where the numbers of Nyikina people traditionally connected to this area have declined. This process of transferring cultural responsibilities and custodianship is recognised among the Indigenous people as a legitimate traditional process.

Common Cultural Elements

Named Places

To the Nyikina, Mangala and Ngarinyin, the river is known as a single generic phenomenon, marduwarra, and also by the numerous named places along the river, signifying permanent pools, fishing places, Bukarrarra places, resource places and so on. Many of the European names for sites on the river reflect Indigenous origins although they are mispronunciations of the Indigenous names.

Attached to each of the named places are a myriad of connections ranging from the Bukarrarra narratives, the places of birth, death and conception of ancestral and living relatives, and other historical and environmental events. The river landscape is thus imbued with cultural meanings that are continually being reaffirmed, interpreted and transformed by each generation. In this way, the events and activities from Bukarrarra are not only a part of a distant past; they are the continuous present.

Living Water and unggud/yungurrungu

All of the groups refer in English, including riverine pools, springs and jila as ‘living waters’. To the Indigenous people, these waters are living entities ultimately considered to be a source of life.

Animating permanent water sources are unggud or yungurrungu, metaphysical serpent-like beings, who inhabit these water places. The life histories of the people living along the river are dotted with first-hand accounts of the activities of the yungurrungu/unggud, who are considered dangerous beings. Visitors to new country, particularly water sources inhabited by yungurrungu, are extremely cautious. People often relate eyewitness accounts of sightings of yungurrungu/unggud during fishing and camping trips. As in other areas of the Kimberley, the yungurrungu are considered to be responsible for rain and the replenishment of water in the region. Those inhabiting certain springs and jila were visited to perform rainmaking ceremonies. So intertwined are the phenomena of water sources and snakes that it is often impossible to distinguish between the two in Indigenous interpretations of their country.

Conception—jariny, wunggurr, unggud

Nyikina, Mangala and Ngarinyin people believe in an inseparable connection between water sources and the conception place of every individual, integral to one’s public identity. People believe that spirit-children, called rayi, often live in water, having been placed there by yungurrungu, and that one of the most important man-land relationships is the connection to one’s rayi place, referred to as jariny or unggud or wunggurr in Ngarinyin.

It is through rayi that each individual is connected to Bukarrarra, and it has created the necessary cultural connections for the desert people who now live in the river country. The Ngarinyin also believe that these permanent pools, also referred to as unggud, are literally a source of life. They believe that the spirits of children are made by unggud, which are then found by the children’s father, most often (but not always) in the father’s dambu (that is, his father’s country).

Hunting

Traditionally, people moved from camp to camp, utilising the riverine resources in seasonal patterns. In the station times, people would walk to the river whenever possible—after work or on Sundays—to go hunting. Similar patterns exist today as people continue to subsist on riverine resources, going hunting whenever possible to catch fish, crocodile, turtle, mussels, goanna and cherubin. These riverine resources remain a vital part of the Indigenous diet, especially for those living on the meagre incomes provided by CDEP and pensions.

Traditionally, people fished with spears or used a fish poison from the majala tree to stun fish in the permanent pools. The Wunyumbu story indicates how people were careful to build jarti-jarti (walls) to prevent contamination of the whole pools. This technique is used all along the river, and the majala tree (malawa in Ngarinyin) is revered by all. Another traditional technique was to use rolled up grasses as a form of dragnet to herd the fish into a shallow area of a pool to trap the fish. Today, people fish in the same patterns, adapting modern technologies of fishing lines and throw nets to traditional techniques.

River resources are also extremely important for those for those in mourning. Close relatives of the deceased undertake
a taboo—*jaginy*—of not eating red meat. At such times fish, goanna and cherubin are vital for maintaining a balanced diet, as some people will maintain *jaginy* for two or more years.

**Protecting the water sources**

The Indigenous groups of the river believe that it is their responsibility to ‘look after’ the river country so as to maintain the replenishment of seasonal resources upon which they are dependent. This is primarily achieved through ritual and song and “talking to the country”, but also through conservationist practices, such as never wasting fish, or leaving excess bait for crocodiles, and only taking enough to satisfy immediate sustenance needs.

Universally along the river, certain pools and rocks are associated with the increase of natural phenomenon. For example, one aspect of Wanjinna associated with the permanent pools (*unggud*) is the increase of all natural species of the river country. Mowaljarlai (1992,186) explains the importance of ‘increase stones’ and their relationship to Wanjinna, and the role of *dambun* to ensure the efficacy of the increase stones:

> “Each *dambun* contains different and very special increase stones, which are important for hunting, for ceremony, and as signal markers for travellers. These stones must be constantly maintained. They are knocked down by the rains and floods, or by kangaroos, donkeys and cattle.”

Significant in the context of considering the possibility of damming the river, is the assertion by Ngarinyin that the river(s) must ‘run free’ so that the spiritual force of the river is not interfered with or blocked, and so that the increase of all species is maintained.

**Documenting Environmental Change**

There is a marked contrast between the environmental state of the Upper Fitzroy and Hann River region compared to that of the lower Fitzroy, which has suffered from the development of the pastoral and agricultural industries. Years of overstocking of sheep and cattle and poor pastoral management has significantly degraded the river frontage and caused erosion. More recently, according to many of the older Kimberley Indigenous stockmen, who have lived on the country since birth, the Camballin irrigated agriculture Project of the 1960s and the building up of the Derby-Broome Road on the west side of Willare Bridge have caused irreparable damage and extensive erosion that has changed the shape and force of the river. These men are most qualified to comment on the changes to the river because of their first-hand knowledge of the land over a long period of time.

Ivan Watson (Marshall, 1988), a stockman from Mount Anderson, notes that introduced weeds have overtaken the native grasses, and laments how the recent construction of the Broome Derby Road created a damming effect which, during the 1986 floods, gouged out the river frontage and

tributaries and destroyed station infrastructure. The most dramatic changes to the river have occurred at Camballin as a consequence of the numerous failed attempts to develop large-scale irrigated agriculture on the floodplains of the Fitzroy River. Remnants of the Project, including extensive levy banks, dam walls, a barrage across the river and a variety of pump casings, culverts, roads, channels, etc., have not been dismantled, nor has any attempt been made to rehabilitate the country. Consequently this debris continues to detrimentally affect the course of the river and impacts on the annual flooding of the Lower Fitzroy.

At the mouth of the river the country is also radically changing. Lucy Marshall, who has lived in the river country all her life, explained that the mouth is getting bigger, flatter and wider. It is difficult or impossible to travel over some of the mud flats to get to named fishing places, and the salt water inundation is encroaching up the river. She says that in a number of places they “can’t find the living water [permanent pools] anymore”. Further up the river, Traditional Owners agree that the main river has continued to deteriorate as permanent pools are filling up with sediment, and overall the river is getting wider, shallower and the flood water moving faster.

**Planning for the Future**

> “We frightened longa that dam. We don’t want to loose our history. I never make ‘em up story myself. I get ‘em from old people.”

The river people share a holistic view of the river in which it is believed that large scale activities, such as dam building, on any part of the river will have a detrimental impact, both culturally and physically, to the river country and to the well-being of the Indigenous communities who live in the river country. In particular, they do not want their ‘stories’, associated with each part of the river to be ‘covered up’ and lost, as occurred with the building of the Lake Argyle dam. Previous experience of dam projects such as the Camballin Irrigations Scheme, and, by default, the upgrading of the Broome Highway, have also convinced Traditional Owners that large scale projects that significantly interfere with the natural flow of the floodwaters do not work.

This does not, however, presume that Indigenous people of the Fitzroy Valley are ‘anti-development’. They are keen to investigate ways in which they can ‘make a living’ from the river country, using their culture as a foundation, which Peter Yu, Chairman of NAILSMA, refers to as ‘culture based economies … which support the credibility and integrity of cultural transactions locally and across the north, and lead to innovative commercial opportunities’ (Armstrong, 2005). This position was formally adopted at the Kimberley Appropriate Economies Roundtable forum, where cultural maintenance was given priority in the discussion of management and development projects along the Fitzroy River. As the two projects discussed in this case study reveal, the Traditional

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10 Pansy Nulgit, Winjilangarri, 7 November 2000.
Owners wish to maintain the integrity of cultural management systems by linking customary and scientific approaches to land management strategies, and to develop on-going projects that engage and train their young people.

The experiences of these two research projects and many others in the Fitzroy Valley confirm issues raised by NAILSMA (Armstrong, 2005). One of the best ways for people to 'look after country' is to be able to 'work on country' through resource management and documentation projects, or through cultural enterprises such as cultural tourism or art projects. Developing partnerships between the relevant Indigenous people and researchers or developers, is one of the most sustainable ways to proceed. If such partnerships are to succeed, they must include respect for the cultural values and protocols of the Indigenous people, who see themselves as the original caretakers of the river, as a guiding principle for the management of the river resource.

Indigenous participants:

**Mangala (and Walmajarri)**
- Peter Clancy Dabiri
- Patsy Yumbo Ginya
- Sally Kanyan
- Margaret Kunjuka
- Nancy Broome Dalyu
- Sally Wawajaru
- Jimmy Nerrima
- Wiji Henry
- Margaret Kunjaga
- Peter Francis
- Joe Green Putuparri
- Frank Kidby
- Barnie Jilayi

**Nikina**
- Derby Nangarin
- John Watson Dadika
- Harry Watson Nangan
- George Wanbanan
- Annie Milgin
- Neil Buckle
- Daisy Lungunun
- Kimberley Watson
- William Watson
- Linda Nardea

**Karajari**
- Edna Hopiga Wabijawa
- Steven Possum
- Mervyn Mulardy Snr
- Wittidong Mulardy
- Lenny Hopiga

**Ngarininin**
- Pansy Nulgit
- Billy King
- Deborah Wilson
- Peter Thompson
- Phillip Duckhole
- Kitty Chungal
- Mandy Wungudiny
- Ruby Unoberry
- Chloe Nulgoot

**References**


Indigenous Economic Opportunities and Water Resource Planning

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Introduction
In the tropical savannahs, riparian environments and wetlands are key resource areas that are highly valued by many sectors. Community attitudes to water use and water resource management have changed considerably during the past one hundred years or so, and the recent national water reforms are accelerating the changes to the way that water is used, managed, priced and valued.

During the colonial era and many decades of the 20th Century, river regulation and improved water storage and distribution (e.g. dams) were viewed as essential precursors to economic development and European settlement schemes, particularly in northern Australia (Davidson 1965, Powell 2000). In the tropical north, monsoonal wet season flows account for over forty-five percent of the national annual river discharges and there are substantial supplies of groundwater (Bowman 2000). Early resource assessments saw an abundance and surplus of water; where much of the water flowing out to sea was perceived to have been wasted. Until recently, the objectives of water resource management were narrowly construed; the development imperative drove water policy (ibid).

Increasingly, people are recognising that Western Australia is not well endowed with water resources and that those resources it has are unevenly distributed across the State. The State currently derives most of its water supply from groundwater. Problems relating to loss of wetlands, nutrient enrichment of estuaries and contamination of ground water have put pressure on existing resources (Bartlett 1995). There is also growing concern over the effects of climate change on rainfall in southern Western Australia.

A range of values and imperatives are now influencing water resource management policy. Not least is the concern for the ecological impacts of the grand hydrological schemes that once excited the public’s imagination. In the north of the State the value of unregulated, free-flowing healthy rivers sustaining diverse environments is growing. These rivers and water bodies show great seasonal variation, and environmental awareness of the diversity, variation and vulnerability of riparian systems and water dependent environments is apparent, for example, in community-based initiatives to protect the Fitzroy River and in tourism trends (Stoeckl et al. in press).

Indigenous perspectives on the cultural landscape have also gained in importance. There is greater scrutiny given to a more comprehensive account of the economic costs and benefits of orthodox water resource development paths (Greiner and Johnson 2000). Multiple uses and multiple values must now be taken into account in more complex water management institutions that seek to integrate land and water use across catchments, reconcile competing interests and adapt to environmental and policy change.

Notwithstanding these changes in the way our society values water, water consumption rates continue to grow, placing renewed pressures on northern Australia. National demand for water has doubled over the past fifteen years (NCC 2004). This growth in demand can have a local impact on regions such as the Kimberley, irrespective of local rates of water use. Kimberley residents were recently asked to consider how local water resources, from either the Fitzroy or Ord systems, might be used to meet the growing demand from Perth for water transported by canal, ship or other means11. Future economic development of northern Australia is highly likely to involve the exploitation of its water resources, with irrigated agriculture and other water-based industries likely to expand (Hart 2004). The extent to which such developments might benefit Indigenous people is not yet clear.

National Water Reforms
Over the past ten years there have been significant changes to the way governments, industries and communities manage water across Australia. In 1994, the Council of Australian Governments (COAG) agreed on a ‘strategic framework to achieve an efficient and sustainable water industry’. The elements of that strategic framework included:
• Water pricing principles of consumption-based pricing, full cost recovery and removal or disclosure of subsidies;

11 Following economic analysis, the most recent government inquiry into various options for transferring water from the catchments of the Kimberley to Perth rejected them all.
• The implementation of comprehensive systems of water allocation incorporating express environmental provisions of water and the creation of property rights in water separate from land titles;
• The institution of trade in water rights;
• Institutional reform to:
  o Separate the administration of water resource management and water services provision, and
  o Implement integrated natural resources management;
• Programs of public consultation and education; and
• Support for the development of the National Water Quality Management Strategy (Gardner 1998).

The implementation of this National Water Policy was tied to the National Competition Policy. In 2004, the Commonwealth sought to further the reforms and so negotiated an inter-governmental agreement on the National Water Initiative with most Australian States. The WA Government has recently become a signatory to the National Water Initiative. A National Water Commission has been established to oversee the implementation of the Initiative. Its aim is to continue to reform water management systems so as to increase the productivity and efficiency of Australia’s water use, the need to service rural and urban communities, and to ensure the health of river and groundwater systems by establishing clear pathways to return all systems to environmentally sustainable levels of extraction (Intergovernmental Agreement on a National Water Initiative 2004).

The key outcomes for the Initiative are further development of water access entitlements, water markets and trading, best practice water pricing, integrated management of water for environmental and other public benefit outcomes, water resource accounting, and urban water reform. The National Water Initiative also places some emphasis on knowledge and capacity-building and community partnerships. A fund has been established for community-based water management projects.

Indigenous Interests in Water

Aboriginal people comprise a significant sector of northern Australian society, with a large stake in water resource management arising from the distinct cultural perspective on the environment, customary land and resource rights, long traditions of water resource management and knowledge, and an extensive and growing land base (Langton 2002, Jackson et al. 2004). In the Kimberley region, the Water and Rivers Commission has initiated a number of detailed studies of Indigenous knowledge of water places and values associated with the meaning of water (Yu 2000, Barber and Rumley 2003, Toussaint et al. 2003). These studies reveal the central role that water plays in Kimberley Indigenous societies; for example, in the Ord region, water is vital to Miriuwung and Gajerrong people’s ‘lives and various religious, legal, social and economic beliefs and practices’ (Barber and Rumley 2003, 3).

Until recently, Indigenous interests in water were not acknowledged in the national reform agenda (Jackson and O’Leary 2006, Altman and Cochrane 2003). Within the recently developed National Water Initiative there is now explicit mention of Indigenous interests. The Inter-governmental Agreement in a National Water Initiative is seeking to ensure that the water access entitlements and planning frameworks of each Australian jurisdiction will achieve a number of outcomes, including ‘recognise Indigenous needs in relation to water access and management’ (clause 25).

There are four specific clauses relating to Indigenous access:
• Inclusion of Indigenous representation in water planning;
• Water plans to incorporate Indigenous social, spiritual and customary objectives and strategies for achieving these objectives;
• Water planning to take into account the possible existence of Native Title rights to water in the catchment or aquifer area; and
• Water allocated to Native Title holders for traditional cultural purposes will be accounted for (Inter-governmental Agreement on a National Water Initiative, clause 52-54).

Commentators such as Altman and Cochrane (2003) have nominated the separation of land and water titles and the creation of and trade in new property rights as key issues for Indigenous people. A further consideration relates to matters of procedural justice; the need for effective Indigenous participation in the developing areas of integrated catchment management and water resource planning, including water quality management.

In 2002, the Aboriginal and Torres Strait Islander Commission (ATSIC) and the Broome-based Lingiari Foundation (2002a, 2002b) developed a set of discussion papers on Indigenous rights to water, both freshwater (onshore) and saltwater (offshore). At the time, ATSIC and other representative organisations were being asked by business, governments and community groups to say what Indigenous rights, responsibilities and interests in water should be. The discussion papers were designed to stimulate debate and to contribute to a set of national standards that might help Indigenous groups to really say what they are, to know how to put forward what they should be (Lingiari Foundation 2002a, 1). There have been few advances on that position although there is now much greater interest in many regions across Australia. In research that the the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and the North Australian Indigenous Land and Sea Management Alliance (NAILSMA) is conducting on Aboriginal interests in river use and management, it is evident that there is very low awareness of the national water reform agenda amongst Indigenous groups and communities. Very few people have had the opportunity to consider how the trade in water resources, for example, may affect their interests, nor to plan for their own community water use.
A key question arising from the re-evaluation of water resources is, ‘How are Aboriginal social, and especially spiritual, values and requirements to be addressed and protected by the evolving water resource frameworks?’ A number of resource management mechanisms have been adapted to recognise Indigenous values, most notably the concept of an environmental value or beneficial use under the National Water Quality Management Strategy. Others include the notion of a ‘cultural flow’ emerging from contributions to the Living Murray Initiative from the Murray Darling Basin’s Indigenous Nations. In that case, the various Nations are closely considering the economic implications of trading. In the Daly Region of the Northern Territory, Aboriginal language groups have established their own reference group to advise governments and a proposed catchment management group on how to protect Aboriginal values and involve Aboriginal people in water resource management (Jackson 2005; see also Scott, this volume).

How far Native Title rights and interests extend into the newly emerging system of water property rights and markets continues to remain uncertain (Lingiari Foundation 2002a, 7). No precedent has yet been established for granting an allocation of water to Aboriginal communities for commercial or community development purposes. The recent agreement reached with the WA Government and the Traditional Owners of the Ord River region over the expansion of the Ord Scheme are worth looking at more closely, given that land granted to Miriuwung and Gajerrong Native Title holders comes with some entitlement to water, and there is now provision for Aboriginal people to participate in water decision-making in that region (see Hill and Goodson and Vernes, this volume).

In other northern regions, where water use is likely to increase, the economic benefits for Indigenous people are less certain. When increased agricultural development was proposed for the Daly River region in the Northern Territory, equity between the existing Indigenous population and new water users arose as a consideration. At that stage (2004), Aboriginal communities were not in a position to offer suggestions as to how their economic interests might be protected, or advanced, under proposed water allocation scenarios (Jackson 2004). They are now considering this issue with the assistance of the Northern Land Council. There is an urgent need to create the space for Aboriginal communities, and arguably many other northern Australian people, to consider such water use and management changes and how they may affect their livelihoods.

**Western Australian Water Resource Management**

Western Australia, although a late signatory to the National Water Initiative, has been responding to the requirement to change its water policies, resource use and management institutions.[13]

The Coalition of Australian Governments (COAG) reforms commit governments to ensure that charges for rural water supply fully cover the cost of supplying water to users, including natural resource management costs, with any remaining subsidies being transparent. States are expected to separate water entitlements from land title and to allow for trading of water. Similarly the National Water Initiative commits governments to adopt nationally consistent approaches to pricing and attributing the costs of water management and planning. Although Western Australia has met this requirement with the introduction of the Rights in Water and Irrigation Act, other shortcomings have been identified by the National Competition Council (NCC) (2004) and the National Water Commission (NWC) (2005). Currently, the West Australian Government grants licenses to individuals and companies to use water resources. With some minor exceptions, these entitlements are granted without a charge[14], although responsibility for some resource management functions accompany licenses, for example groundwater management plans. According to the NCC, ‘water users probably face only a small proportion of the costs of water management’ (2004, 8).

The Water and Rivers Commission was funded from consolidated revenue and the WA Government has argued that this is equitable and appropriate given the complexities of charging. Further it argues that the COAG water reforms do not require full cost recovery for water resource management, only that these costs be transparent, and that this is achieved through publication of Commission annual reports (NCC 2004). In response, the NCC concluded that this argument ‘risks undermining the COAG objective of achieving an efficient and sustainable water industry’.

Other comments on the State’s experience with water reforms made by either the NCC or the NWC include:

- The State’s bulk water price setting process is not transparent and therefore it is unclear whether it is meeting the 1994 COAG water reform agreement (NCC 2004);
- The best available science had not always been applied to determining environmental allocations (NWC 2005); and
- The apparent lack of robust socio-economic evidence to explain trade-offs made between environmental and consumptive uses of water (NWC 2005)

Problems with Western Australia’s water regulation system were also raised by the WA Auditor General in 2003 (NCC 2004). The report found that only eleven percent of licenses were checked for compliance and that thousands were renewed with minimal assessment. It revealed that the Commission ‘did not have the information needed to accurately determine the sustainable level of groundwater and surface water use in many areas’ (NCC 2004, 15), and that in parts of thirteen of the State’s forty-four groundwater management areas,
licensed water use exceeded the estimated sustainable yield. It also found that funding for core water resource management operations of investigation, assessment, planning, licensing and regulation had declined by one third since 1998.

In response to these criticisms, the WA Government acknowledged the deterioration in water resource management and undertook to investigate specific solutions. The former Water and Rivers Commission has reviewed the State’s water planning priorities and has been progressively reviewing allocation limits. It has also amalgamated its water resource management and environment protection functions through the creation of the WA Department of Environment, which subsumed the Water and Rivers Commission. A new Bill was introduced proposing to establish a water resources council to advice the Department and Minister for the Environment on water resources management.

Reforms to water planning consistent with national objectives were considered to be ‘on-track’ in 2004 (NCC 2004). Water management plans were, in 2004, in place for around a quarter of the State’s forty-one water-planning areas. In 2005 or soon after, Western Australia expects to complete plans for another twenty-two areas. However, the NCC was doubtful that the State could meet its COAG water planning obligations within a reasonable time. The NCC notes that the 2003 Auditor General’s report also questioned ‘whether Western Australia devotes sufficient resources to enable it to properly meet its water planning responsibilities’ (2004, 20).

Suggested Issues for Consideration at the Roundtable Workshop

• How can Indigenous people’s special relationship to the land and waters of the Kimberley be recognised, protected and enhanced in water resource decision and water management processes, especially as markets for water are created?
• Do Aboriginal people want to participate and benefit from a trade in water?
• What weight will be given to the values that can’t be easily measured, whether they are values held by Aboriginal people or others?
• How can the National Water Initiative benefit all Kimberley people?
• What part can a region like the Kimberley play in setting the State on a path of reducing water consumption?
• What pricing mechanisms and trading arrangements would result in greater efficiency in Kimberley water use?
• Is sufficient effort being devoted to water resource management and planning in the Kimberley, especially to base-line studies of ecological systems, groundwater surface water connections, social and cultural values, and monitoring of existing use?
• NAILSMA is interested in developing the capacity of northern Indigenous communities to work on water policy. More information about the possible changes to water use and management could assist Indigenous communities to prepare their own water use plans— how can Kimberley people contribute to that process?

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References


Intergovernmental Agreement on a National Water Initiative (2004) Between the Commonwealth of Australia and the Governments of New South Wales, Victoria, Queensland, South Australia, the Australian Capital Territory and the Northern Territory.


Lingiari Foundation (2002a) Onshore water rights discussion booklet one. Lingiari Foundation, Broome. Also available: http://www.atsic.gov.au

Lingiari Foundation (2002b) Background briefing papers Indigenous rights to waters. Lingiari Foundation, Broome. Also available: http://www.atsic.gov.au


Stoeckl, N., Stanley, O., Jackson, S and A. Straton (in press) An assessment of the social and economic values of Australia’s tropical rivers, a scoping study prepared for Land Water Australia’s Tropical Rivers Program. CSIRO and JCU, Darwin and Townsville.


Introduction
The Daly River in the top end of the Northern Territory (NT) is one of Australia’s most ecologically important tropical rivers. With a dry season flow five times greater than any other river in the NT due to discharge from underlying groundwater systems, the Daly River Catchment (including tributaries such as the Katherine and King Rivers) supports a myriad of nationally and internationally valuable ecosystems and habitats. These include numerous floodplains and wetlands; unusual karst systems; extensive savannah woodlands; precious monsoon rainforest and riparian vegetation; the tidal estuarine zone, so crucial to migratory shorebirds; and the river itself, home to threatened species such as the Pig-nosed Turtle and Freshwater Sawfish (Daly Region Community Reference Group 2004, Blanch, Rea and Scott 2005).

For tens of thousands of years, the natural habitats and resources of the Daly River Catchment have underpinned and supported the traditional economic and cultural practices of more than ten Aboriginal tribal/language groups. Non-Aboriginal people have also established a foothold in the region over the last one hundred years or so, initially centered on agricultural and mining activity, but now increasingly based on tourism and the service economy of Katherine. The Daly River is renowned as one of the best recreational fishing rivers in Australia, particularly for the prized Barramundi.

Increasingly, however, the natural and cultural values of the Daly River Catchment have come under threat. Already, over 200,000 hectares of the total catchment has been cleared of native vegetation. According to NT Government presentations to the Daly Region Community Reference Group (CRG) in March 2004, a further 110,400 hectares could be cleared over the next decade or so in the Douglas/Daly region, mostly for more intensive cattle production using exotic pastures and some irrigated agriculture/horticulture. Moreover, levels of extraction of surface water and ground water resources could increase threefold over the next decade if current licensing applications are approved. Pervasive environmental threats, such as weeds, feral animals, alterations in fire regimes and climate change, will also continue to undermine the values of the Daly River catchment if not tackled strongly and soon.

Options for Conservation
The following conservation principles and actions should be prioritised in the Daly River Catchment:

• The Commonwealth and NT Governments, in accordance with their respective international and national obligations and commitments to biodiversity conservation, Indigenous rights and Ecologically Sustainable Development (ESD), and in conjunction with land owner and other stakeholder interests, should aim for the highest possible level of protection for the Daly River Catchment.

• The top priority and the primary mechanism to secure the long-term protection of the Daly is for the NT Government to act on its 2005 election commitment by declaring the Daly River Catchment as a Living River, by the end of 2007.

• This will require the passing of a Living Rivers Act, which should, where necessary to maintain biodiversity and cultural values, override provisions in other NT legislation and set bottom-line rules and standards that will prohibit ecologically and culturally damaging activities. The
Act should also provide triggers for a higher level of environmental assessment for proposed development activities.

- As discussed in Jackson (2004), a catchment-wide regional agreement between the NT and Commonwealth Governments and the region’s Indigenous people should be pursued to resolve Native Title and other outstanding Indigenous issues.
- There should be a thorough examination of the merits of National Heritage listing for all or part of the Catchment.
- A statutory Daly Water Allocation Plan and development of an Integrated Land Use Plan are required. Prior to a Water Allocation Plan being finalised, amendments are needed to the NT Water Act to improve transparency; ecological sustainability and cultural obligations; public notification and participation processes; and enforcement provisions.
- Legislative reform is necessary to prohibit large-scale land clearing in the NT, whether from one-off cases or from incremental clearing.
- Extension of the protected areas system in the catchment, as proposed in the Draft NT Parks and Conservation Masterplan (DNRETA 2005), through the establishment of new national parks and Indigenous Protected Areas (IPAs), should be pursued in partnership with Indigenous landowners and Native Title claimants. The Environment Centre NT is also supportive of the concept of freshwater and marine protected areas and advises further investigation of the suitability of these options.
- Ramsar nomination for internationally significant wetlands in the lower Daly.
- Outside the dedicated conservation reserve system—i.e. on pastoral leasehold and freehold land, including Aboriginal freehold land where there is no jointly managed national park or an IPA—land use, property and sustainable development plans should be encouraged. Sufficient resources and funds must be available to landowners and managers to enable these to be drawn up and implemented.

All of the options for long-term protection and sustainable development involve challenges that would need to be tackled before they can become a reality, not least of which is the lack of prior consultation with Indigenous people in the Daly River Catchment on conservation and development options and benefits.

Any catchment-wide resolution of stakeholder interests through a Living Rivers initiative will need to be underpinned by a strong and ongoing commitment from the NT and Commonwealth Governments to prevent degradation of the Daly through further large-scale water extraction, dam construction, unsustainable levels of land clearing, and pollution from mining operations in the Daly River Catchment. The current NT Government ban on commercial cotton growing should also remain in place.

Towards an Appropriate Economy

An appropriate economy can be thought of as one that supports economic activity that is ecologically, culturally and socially sustainable (Hill and Turton 2004). There are a number of appropriate economic opportunities in the Daly River Catchment that require greater attention and support from stakeholders and government decision-makers:

- Ecological and cultural tourism is likely to be of increasing importance for the future of the region. Conservation of the Daly River Catchment and the enhancement of tourism opportunities should go hand in hand. For example the declaration of the Daly as a Living River, or the establishment of new national parks, can provide valuable tourism marketing opportunities.
- Bush food industries based upon cultivation of native crops could particularly benefit local Aboriginal people. Greater business skills training and assistance with local and overseas marketing will be required (see Whitehead et al. 2002).
- Organic, native species and ecologically sustainable agricultural practices should be promoted by the NT Government through research activities at the existing Douglas-Daly and Katherine Research Field Stations. At present, research at these facilities is far too heavily weighted towards exotic pasture and crop species, irrigation, and chemically dependent agricultural practices.
- Sustainable wildlife utilisation possibilities, such as producing pet meat from feral animal populations, should be further encouraged where they are proven to be of environmental and local economic benefit.
- A Daly Water Trust to administer funds collected from any future water use charges in the catchment could prove a useful tool to promote sustainable resource management in the region. Water use in the catchment is currently free of charge.
- Greater recognition of the value of ecosystem services should mean that land and sea management groups in the region, such as Indigenous Rangers, are better resourced, and have increased capacity, to participate in sustainable economic enterprises. Some Aboriginal organisations are also set to play a greater role in social service provision throughout the Catchment.
- Agroforestry and biofuel industries should be investigated where they do not involve native vegetation clearing or excessive and ecologically unsustainable levels of water extraction or application of agri-chemicals.

A crucial opportunity now exists for all stakeholders to promote small-scale industries based on indigenous products and services in the Daly River Catchment. Only development activities that will not harm the important values of the Daly should be allowed. Overall progress towards creating an appropriate economy has been slow however, and future progress will require a much greater level of government leadership and financial and in-kind support. Moreover, given
the economically and socially disadvantaged status of the region's Indigenous people, creating better opportunities for Indigenous participation in both environmental management and sustainable enterprise is an immediate imperative, as it is elsewhere in the Northern Territory.

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**References**


Cross-cultural Legal Frameworks on Water Management in the Canning and Fitzroy Basins

Seidel, Peter
Arnold Bloch Leibler, Melbourne

Memorandum of Understanding
A potential instrument for achieving effective cross-cultural management of water is a Memorandum of Understanding (MOU) between State bodies, representative and peak bodies (for example, Kimberley Land Council (KLC), Environ Kimberley (EK), the Australian Conservation Foundation (ACF)) and Indigenous owners of country in the Fitzroy and Canning Basins. The general purposes of such an MOU would be:

• To set out principles, strategies, general frameworks and processes for dealing with common issues at hand;
• To develop better communication and greater collaborations between the State bodies and the Indigenous country owners;
• To promote the meaningful involvement of the Indigenous country owners in the water management of the Fitzroy and Canning Basins; and
• To ensure decisions are made from an “Indigenous perspective”, and that respect for the aims and traditions of the Indigenous country owners are included in legislation, policy and all agreements.

The MOU would state that the parties commit to building structures for the Indigenous country owners to develop understandings and agreements with State bodies on:

- Representation, participation and engagement in water management;
- Cultural heritage and water issues;
- Native Title and water issues;
- Social and economic outcomes and water issues; and
- Any other identified issues.

The MOU would detail the responsibilities of all parties. For example, the roles of KLC could be to support Indigenous country owners to present their views to the Government bodies as they speak for country, and to provide the resources to allow them to do so. Government bodies’ responsibilities under the MOU would also be detailed, which could be to create opportunities for the Indigenous country owners to discuss, protect and enjoy their water management rights, and to provide the resources to allow them to do so.

Framework Agreement Incorporating a Proforma General Area Agreement (GAA)
Another potential instrument for achieving effective cross-cultural management of water is a Framework Agreement incorporating a proforma General Area Agreement (GAA). The general purposes of the Framework Agreement would be to:

• Set up agreed mechanisms by which GAAs can be reached “on the ground” between the State bodies, the Indigenous country owners and other stakeholders within Fitzroy and Canning Basins; and
• Point to the processes to be put into each GAA to give space to the parties to explore water management outcomes in the short to medium term and to develop capacity for longer-term governance arrangements.

The Framework Agreement would achieve these processes through the creation of a proforma GAA to be tailored for use between State bodies, representative and peak bodies and the Indigenous owners of each area of country within the Fitzroy and Canning Basins (see below). In addition, the Framework Agreement would summarise relevant negotiation principles to be applied in each of the GAA negotiations, e.g. acknowledgement, good faith, location, timeliness, momentum, context and fair process principles.

Specifics of proforma GAAs
The proforma GAA would provide general clauses to address the following: Government bodies would acknowledge that the Indigenous country owners18 signing each GAA are the Traditional Owners of the country that is the subject of the GAA;

• Government bodies would commit to ongoing talks with the Indigenous country owners signing each tailored GAA, during the pre-planning, planning, construction, and post-construction stages of all projects within area of GAA;

18 A GAA could include more than one Indigenous country owner group if different groups share responsibilities in the same country or there are disputed claims to country.
• Peak and representative bodies to give resources, support to and advice on request for the Indigenous country owners signing each GAA;

• Relevant procedures to be tailored in each of the GAAs, including for:
  o Indigenous country owners concerned to receive, at the earliest possible stage, all Project plans, including detail on how any such Project relates to any broader scheme (not the “last box to be ticked”);
  o Following the tabling of any and all scheme and Project plans, Indigenous country owners, KLC, etc. to talk with government bodies on any concerns, including “caring for country”, cultural heritage and environmental issues;
  o Cultural and environmental heritage awareness training for government bodies and assessment and clearing by Indigenous country owners of any proposed Project area; Indigenous owners to obtain technical support from KLC, EK, ACF, etc. and make suggestions on the proposed Project after clearance work;
  o Indigenous country owners to become equal partners with State bodies on water management within Kimberley and Canning Basins, with ongoing support from KLC, EK, ACF etc.;
  o Indigenous country owners to check all works during construction and post-construction, to avoid damaging their water rights in country; and
  o Any and all projects to immediately stop on say so of Indigenous owners if damage to country happens or could happen and will only start again on say so from the Indigenous owners concerned:
    • Recognition;
    • Payment; Royalties;
    • Funding, training and socio/economic services; and
    • Dispute resolution.

Project specific agreements

The GAAs create a framework for Project-specific agreements between the Government bodies, the Indigenous country owners and other stakeholders potentially impacted upon by projects within each of the GAA areas, if the scope of Project is beyond the GAA. Project-specific agreements can also be used to set out details of complex, fact-specific water projects/activities that involve private interests. Government bodies would agree beforehand in Framework Agreement to not issue permits, etc. to third party unless Project agreement reached with Indigenous country owners.

Potential Outcomes of These Processes

These potential processes offer “ground up” (not “top down”) structures for empowering Indigenous peoples’ roles in water management. A truly “two-way” approach can be built that recognises and builds on the strengths of both Indigenous and non-Indigenous cultures and approaches.

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Natural Heritage Values
A Way To Assess Environmental Impacts

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Introduction
One of the difficulties in developing a truly sustainable economy in Northern Australia is thoroughly assessing the likely impacts of a proposed change to the region. Assessments of the natural heritage values (natural rivers, threatened species, areas of great beauty, unusual areas of geology) are often not based on clear sets of criteria. In particular, they often fail to assess the ecological processes and connections that maintain important parts of country such as wildlife. This can lead to incomplete assessments of the values of areas. In turn this can then lead to poor assessments of proposed changes to a region, which could be environmentally damaging.

We present here a set of criteria for documenting, from a scientific perspective, the natural heritage values of a region. These criteria draw upon those used for assessing World Heritage natural values, Australian Heritage natural values, plus criteria that are based on the latest research on ecology in Australia.

These criteria can be used as a framework for organising existing scientific knowledge. This helps provide a more complete and thorough understanding of a region’s natural values. The criteria have been designed to use information gained from scientific research. However, with some modification they may also be of help in organising traditional ecological knowledge to assess the values of a region, in ways that can be easily understood by the broader community.

The set of seven criteria are listed in Box 1. Ecological processes and connections that maintain many natural values are listed in Box 2. These are especially relevant to criteria 4, 5 and 6 in Box 1 (‘Biodiversity’, ‘Natural Integrity’ and ‘Ongoing Natural Processes’).

The criteria can be used to identify the different aspects of the natural environment we seek to maintain. They can also be used as a checklist when evaluating the potential impact of development proposals on the natural environment.

For each criterion it is possible to evaluate if a specific economic development is appropriate, inappropriate, or could be made appropriate given design or management prescriptions. The test of appropriateness is whether the specified economic activity is likely to result in significant destruction or degradation of the region’s natural heritage values.

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Box 1: Natural Heritage Criteria

1.0 Geo-Evolution
Outstanding examples representing major stages of Earth’s evolutionary history, including significant geological processes which have contributed to the development of landforms, or significant geomorphic or physiographic features.

2.0 Geodiversity
The most important and significant lands for on site conservation of geodiversity, including those containing rare or threatened features of outstanding (universal/regional/continental/local) value from the point of view of science or conservation.

3.0 Bio-evolution
Outstanding examples representing major stages of Earth’s biological evolutionary history, including the record of life.

4.0 Biodiversity
The most important and significant natural habitats for on site conservation of biological diversity, including those containing rare or threatened species, communities or ecosystems of outstanding (universal/regional/continental/local) value from the point of view of science or conservation.

5.0 Natural Integrity
Ecosystems and landscapes which exhibit outstanding ecological and geophysical integrity.

6.0 On-going Natural Processes
Geophysical, evolutionary, and ecological processes, including local and global-scaled life support systems.

7.0 Contribution To Knowledge
Examples of geomorphic or physiographic features, ecosystems, plant and animal communities or natural processes or phenomena, the study of which has, or is continuing to, contribute significantly to an understanding of natural history beyond that place.

8.0 Aesthetics
Superlative natural phenomena or areas of exceptional natural beauty or aesthetic importance.

Box 2: Major ecological processes relevant to criteria 4, 5 and 6 in Box 1.

1. Strongly Interactive Species
Species that have a major impact on the habitat in which they live. For example, dingoes control grazing animals such as kangaroos. Other animals, such as cassowaries and fruit-bats, pollinate flowers and disperse seeds.

2. Hydroecology
The links between water, vegetation and wildlife, including water flows below and above the ground. For example, landclearing in Northern Australia can affect the water flows into the underground aquifers that maintain water holes in rivers during the long Dry season thus affecting wildlife a long distance from the actual area of clearing.

3. Long-distance Biological Movement
Animals that migrate over long distances (nomads) spend different parts of their life in different places. Australia’s patchy rainfall means that around half of Australia’s birds, for example, are non-residents and move over the landscape seeking resources. Conserving these species may require the protection of very large areas.

4. Disturbance Regimes
Natural disturbance regimes maintain diversity in many habitats. For example, changed fire regimes can disrupt processes and connections and cause local and regional extinctions, such as the regional extinctions of birds like the Gouldian Finch in Northern Australia.

5. Climate Change And Variability
Natural and human induced climate change affects species, their distributions, and their habitats. A better understanding of the likely continental-wide changes that follow climate change will allow us to plan for how best to respond.

6. Coastal Zone Fluxes
How catchments transport water and nutrients from inland to coastal ecosystems. For example, some fisheries produce more after Wet seasons with high rainfall. The freshwater and the nutrients flushed from the land stimulate fish breeding and growth.

7. Maintaining Evolutionary Processes
Long term biological conservation must protect landscape to allow for long term changes in the range of species, and the movements of genes across land and seascapes. For example some small areas in protected valleys in Tasmania and Victoria remained as temperate rainforest all through the cold, dry times of the repeated Ice Ages. The rainforest expanded out of these valleys during warmer, wetter times, and may contract again in the future. Destruction or fragmentation of habitat, could prevent such processes.
The Wilderness Society’s Wildcountry Project in Northern Australia

Traill, Barry
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The lands and seas of tropical northern Australia are widely recognised for their natural and cultural significance.

Northern Australia is probably the largest and most intact savannah remaining on Earth. It has the largest lowland rainforest, largest wetlands, and the largest mangrove forests in Australia. It includes the best part of the world’s largest coral reef. Many plants and animals are found nowhere else. Unlike southern Australia, wildlife and nature remain in abundance. Many areas have great beauty, attractive to people from all around the world.

Traditional Owners have always actively managed the North, but this was disrupted in many areas when people were moved off country. To maintain all of its diversity, people need to be on country looking after land and seas.

The wildlife, rivers, fish and trees are maintained by ecological ‘processes’ and ecological connections that often work over very large areas. These connections are often identified in similar ways by both Western conservation science and Indigenous knowledge; connections such as:

• The natural flow of water under the ground. This keeps many rivers and waterholes healthy during the dry season;
• Bats and birds moving long distances to spread the seeds of rainforest trees; and
• Animals such as turtles and magpie geese moving over large areas. Each animal needs different areas at different times of the year to feed and breed.

However, conservation in Australia has usually not recognised these long distance connections. The approach has often been to just put small pieces of country in National Parks. This will not properly look after nature in Northern Australia. We have to protect all of the connections across country to keep it healthy.

The Wilderness Society has started work identifying these connections across the North. We are using Western conservation science and hope to also work with holders of Indigenous knowledge. This way, we will work out what these connections are and how we can protect them.

This Project has already started, and aims to produce a written report on the significance and ecological connections of the North early next year. This will be the first time such a study has been done for the whole of Northern Australia (Kimberley, Top End, Gulf Country and Cape York Peninsula). This will provide information and knowledge for the use of everyone interested in looking after country in Northern Australia.

The Wilderness Society wants to use this knowledge to work with others to further conservation in the North. Specifically, we believe that the following is needed to look after people and nature:

• A planning system that uses the best available science and Indigenous ecological knowledge;
• A large-scale system of conservation areas, with funding for management, including Indigenous conservation areas;
• Use of land, water and sea outside of conservation areas that doesn't damage the environment;
• Development of a ‘conservation economy’—getting jobs and wealth in ways that don't damage country; and
• Local community involvement (Indigenous and non-Indigenous) in land and sea management.

We would be very happy to provide more information on this Project.

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Role of the Indigenous Land Corporation in Supporting Indigenous Economic Development

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The Indigenous Land Corporation’s ‘Economic Development’ Programs

The Indigenous Land Corporation (ILC) is legally mandated to provide sustainable benefits—cultural, social, environmental and economic—for Indigenous Australians. Guidelines under the National Indigenous Land Strategy 2002-2006 articulate options for Indigenous people to apply under the Economic application program in relation to both land acquisition and/or land management opportunities. Under this stream, partnerships/joint ventures with other agencies and/or corporations are possible (and encouraged) in order to achieve the identified primary purpose (economic) and related cultural, social and environmental objectives/aspirations of the applicant and partners. The Guidelines 2002-2006 Land Acquisition and Land Management Programs Guide are available on request or at www.ilc.gov.au. They include terms of reference for both Property Management Plans and Business Plans.

The ILC Guidelines include detailed packages explaining how to complete the relevant application form, with a key inquiry made of the applicant as to whether the proposed land use or land management activity is ‘sustainable’. That is, will this area of land being applied for, or the activity for which assistance is being sought, be able to meet needs, now and in the future, without the need for more assistance? The focus on sustainability invokes environmental outcomes so that the conditions of lands and/or waters involved are improved over time. Thus applicants under the economic program, for either land acquisition or land management, are asked to demonstrate unequivocally that people know how to manage and use the property, and that the land has the capacity to provide the benefits being sought.

Applications for both land acquisition and land management under the economic program require that the accompanying business plan demonstrate that the primary purpose and associated land uses can be achieved in a sustainable manner. (In this context, ‘sustainability’ applies to both environmental and economic viability functions). The WA Government’s sustainability website is a useful reference (www.sustainability.dpc.wa.gov.au), as is the site for the Government’s Draft Indigenous Tourism Development Strategy,¹⁵ which focuses on business development, cultural maintenance and employment issues. The Strategy is intended to provide a blueprint for the sector through guidance for Aboriginal stakeholders and the numerous State and Australian government agencies that are engaged to foster a sustainable Indigenous tourism sector.

Applicants for a property are required to detail how they will ensure ongoing funding, either through their own activity or by securing funds from other agencies/partners. There is recognition that people might have deficits in land management expertise, and might require further equipment and materials in order to achieve sustainability outcomes. The ILC is able to provide capacity development and equipment in order to ensure that the necessary knowledge and equipment (or materials) can be acquired within a reasonable period of time where deficits exist.

Land management applications can be made against three different, but complementary, types of assistance, being group-based planning, enterprise development and regional development. In brief, the first provides for assistance with strategic planning toward the development of a clear vision for a property; the second assists an applicant group to develop viable (no recurrent funding necessary) and sustainable enterprises; while the third has the ILC assisting in the resolution of broader, regional land management issues such as developing markets and services, identifying alternative land uses, and coordinating Indigenous land uses on a regional basis.

Partnerships/Joint Arrangements

There is explicit recognition and indeed encouragement, for applicants to seek partnerships or joint arrangements in relation to land acquisition and land management. Under the economic stream, partnerships/joint ventures with other agencies and/or private enterprise are one of the tools available in order to achieve the identified primary purpose (economic) and stated economic objectives/aspirations of the applicant.

¹⁵ http://www.westernaustralia.com/en/industry/call+for+public+comment/draft+aboriginal+tourism+development+strategy.htm

Kimberley Appropriate Economies Roundtable Forum Proceedings
and partners. Such partnerships, whether sought through the land acquisition or land management route, are possible with any or all of state and federal agencies, local government, tertiary institutions, organisations representing Indigenous peoples in relation to land, and private enterprise.

The ‘new’ policy and practice era under the Office of Indigenous Policy Coordination (www.oipc.gov.au) of Shared Responsibility Agreements and Regional Partnership Agreements is especially relevant here, since these relationships—captured formally through legal agreements—by definition include inputs from a range of Australian Government and/or State Government programs, via the regionally-based Indigenous Coordination Centres (Kununurra, Derby and Broome). The WA Government’s developing Indigenous economic development strategy (contact the Office of Aboriginal Economic Development within the Department of Industry and Resources, refer www.doir.wa.gov.au) is also highly relevant since it is essentially based on this new relationship and commitment between the various levels of government, who must work together to optimise outcomes for Indigenous Western Australians. The ILC land management application form asks if the intended land management activity is recognised as a regional issue, and states in the corresponding explanation that ‘Many land management problems require regional solutions and co-ordinated responses from a number of agencies’.

It is the experience of the ILC that many potential partners in land management will come on board once they become aware that the ILC is itself a serious contributor in cash or in-kind to some Project proposal. Thus, inputs—intellectual, financial, physical—can be anticipated and leveraged from potential partners and neighbours. Such partnerships can be expected to contribute to and generate sustainable benefits for all stakeholders working together in a regional setting, including:

• Durable, productive, ‘exchange-based’ relationships;
• Enhanced knowledge and skills in respect of farming and/or natural resource management practice;
• Sustainable economic outcomes including the identification and development of new enterprises;
• Environmental returns for land and water systems;
• New employment and training opportunities for Aboriginal people and their families; and
• Sustainable benefits more broadly within regional and catchment settings.

Roundtable Themes

Broadly speaking, the themes of this Roundtable encompass sustainable development in relation to culturally and environmentally appropriate economies for the Kimberley’s Fitzroy River and Canning Basin, with key outcomes to include the identification of key principles for future development in the Fitzroy and Canning basins in relation to Indigenous governance, environment, culture, business and land tenure. The topics of the small workshop sessions—land management, tourism, art and culture, partnerships in conservation, agriculture on the Ord, and pastoralism and water management—are all relevant to the business of the ILC and potential funding, on application, for land acquisition and/or land management projects.

The controlled, agreed and managed ‘exploitation’ of bush foods and medicines by Traditional Owners, working ‘shoulder-to-shoulder’ in partnership with experienced and successful business partners and with enterprise development funds from the ILC—and/or Indigenous Business Australia, private enterprise and others—is an example of how new enterprises which respect environmental and cultural values, might be established in the Fitzroy Valley and Canning Basin. Clearly there are significant roles for a range of agencies and private enterprise in applying a coordinated regional effort in respect of natural resource management/land management practice. The inclusion of Indigenous people and especially Indigenous landholders by way of emerging State and Federal policy in relation to land management—driven as it is by a need for reform and the attainment of economic independence—is very timely in this context.

The ILC does not insist that all enterprises must be for profit, but we do insist on (and make no apology for) significant and demonstrated levels of willingness /commitment; high levels of capacity or a willingness to engage in capacity development; engagement in the development of property management plans; and an openness to the development of active partnerships with people and agencies other than the ILC. Clearly, this includes neighbours and an emphasis on catchment, subregional or regional participation, and associated mentoring/coaching. In brief, the following situations are examples of how and where the ILC could assist Traditional Owners of the Fitzroy River and Canning Basin to achieve culturally and environmentally sustainable, economic development options:

1. Kimberley Aboriginal people, on their land, being willing and active participants in developing their knowledge of modern pastoral lease management including engagement in the live export trade as capacity (of people and of properties) becomes more developed;

2. People developing initiative and capacity through both formal and informal partnerships, and sharing their traditional ecological knowledge (while respecting property rights and seeking an economic value or price for these) in the development of new regional and subregional economies;

3. State and Federal agencies and others (as appropriate) improving their practical knowledge and effort in better comprehending and internalising the highly diverse needs of Kimberley Aboriginal people, and therefore demonstrating greater adaptability, flexibility and innovation in their ways of doing business with people;

4. Closer degrees of cooperation and higher levels of joint resolution of issues in relation to Aboriginal-held pastoral leases and other lands and waters in the Kimberley;
5. A willingness from both Aboriginal pastoralists and the WA Government and its agencies to pursue alternative tenures over pastoral leases held by Aboriginal people in the Kimberley, where other tenures are preferred by people (it might be that a form of Aboriginal freehold is more conducive to the development of cultural tourism than if a pastoral lease remains the underlying tenure and/or land use, provided that a pastoral business is not likely to be successful);

6. Continued assistance of the kind being conducted with Kimberley Aboriginal pastoral lessees by Department of Agriculture officers funded under the Kimberley Indigenous Management Support Service, a joint partnership between the Department of Agriculture and the ILC, where clearly measurable, significant economic and social benefits are being achieved by Aboriginal landholders in the management of their land, their books, their business, and in a context where on-ground, practical benefits are clearly discernible;

7. A commitment by everyone to the long term, and therefore to matters of governance, planning, adaptability and succession; and

8. A shared belief and strong intention, that all of the above and more, is not only desirable, but necessary and more importantly, achievable.

The ILC’s New Emphasis on Tourism

Earlier this year, the ILC Board agreed that a significant priority for the ILC over the next three years would be in tourism, as well as in pastoralism. The ILC is primarily looking to develop training and employment outcomes for Indigenous people as a result of our involvement in these industries and thus a substantial economic opportunity exists where enterprises can be developed while respecting at least and possibly focusing on, those enterprises where cultural and environmental appropriateness are the key themes of both the underlying reason for developing a business activity, and for protecting the rights and interests of the Traditional Owners involved.

Tourism benefits

The ILC sees many benefits in Indigenous tourism including that it:

- Is a largely decentralised industry, with employment and training opportunities in rural and remote Australia;
- Has less impact on natural resources and the environment than many other industries;
- Is based on enjoyment and appreciation of local culture, heritage, and the natural environment; and
- Provides an economic incentive to conserve the natural environment and Indigenous culture.

The demand in tourism extends beyond traditional tourism companies, into ‘upstream’ suppliers such as building and construction or food producers, and into ‘downstream’ service providers for travellers, like retail shops. Many mainstream tourism products and services are supplied by different operators, usually small or medium sized businesses in local ownership. This makes tourism an attractive industry for many Indigenous people.

Potential tourism activity

Traditional Owners (Native Title holders) might seek to develop commercial tourism enterprises, which rely on the protection of cultural property for the development of a unique enterprise development niche, where tourists pay people who conduct tours to areas of cultural significance. Traditional Owners would provide authority, knowledge and the tour experience itself, therefore increasing respect for and understanding of Aboriginal culture and in turn, generating ongoing economic returns to isolated and ‘job poor’ communities. In such a development, for example, over a Native Title determination area, such economic activity could demonstrate, in a practical way, the transformation of determined Native Title rights and interests into ongoing business opportunities and the protection and preservation of culture and environment/landscape. The ILC is currently building the tourism business at Home Valley Station, and is seeking engagement with Balanggarra Traditional Owners in a range of employment and training opportunities.

National activity on tourism

The ILC has provided funding to Aboriginal Tourism Australia (www.ataust.org.au) and the ‘Respecting Our Culture’ (ROC) program. The ROC partnership provides for the employment of coordinators to assist existing and emerging tourism operators with business development, mentoring and support. The ROC is formally accredited by the Australian Tourism Accreditation Association and plays an important role in building capacity to deliver quality Indigenous products, and thus in building quality Indigenous businesses. Through the program, organisations can gain accreditation to national standards for:

- Cultural Protocols—which addresses authenticity and integrity criteria;
- Caring for Country—which addresses environmental management and impact assessment criteria; and
- Business Management—which addresses business and marketing planning, operational aspects, customer service and risk management.

To a greater degree than most activities, tourism depends on a wide range of infrastructure services, including airports, air navigation, roads, railheads and ports, as well as the basic

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15 The WA Department of Agriculture officers involved in this Project are Peter Price in Derby, Kim Carter in Broome and Bob McConachie in Kununurra.

infrastructure needs required by hotels, restaurants, shops and recreation facilities, for example telecommunications and utilities (electricity, water, waste management). This has been confirmed by a number of scoping studies conducted by the ILC on the potential for Indigenous tourism, where infrastructure and capacity issues have been identified to be among the most important needs expressed by people. Once again, the ILC is keen to assist.

Conclusion
There needs to be a clear understanding of the actual and potential involvement in tourism of Indigenous people and how their organisations can develop, including through individual and organisational capacity development. There needs to be a stronger emphasis on training that leads to jobs and the creation and maintenance of secure, meaningful and ongoing employment, with a particular focus on retention. In particular, what is required is a whole-of-business consideration, including finance, bookkeeping, labour supply, risk management, human resource management, succession planning, wholesalers, media relations, mentoring, business management and promotion of products so that new enterprises are set up for ongoing success. The ILC looks forward to playing a significant role in the development of culturally and environmentally appropriate economies in the Fitzroy River and Canning Basin in Western Australia’s Kimberley region.

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Top: The Fitzroy River in the wet season; Left: Tanya Vernes, Tim Fowler, David Chesson, Rosemary Hill, Justin McCaul; Right: Laurie Shaw, Neville Sharpe

Left: Bronwyn Herbert, Louise Matthiesson, Nadine Schiller, Vicki Laurie; Right: Joy Nugget, Grazia Borrini-Feyerabend, Mark Dickham, Danielle Eyre, Max Haste, Craig Phillips, Rosemary Hill, Ismahl Croft
Plenary Sessions and Recommendations
Draft Statement
of Principles

Bessen, Bevan
Bessen Consulting Services

The following principles were developed from the small group workshops:

1. Appropriate development needs to have a basis in healthy country and strong culture.
2. For Indigenous people, culture guides economic activity and appropriate activities show respect of culture and people.
3. Economic, environmental, social and cultural activities are not separate from each other.
4. Development at a scale and system of management that does not undermine local ecology.
5. Conservation and Indigenous cultural maintenance are valued as important contributions to society.
6. Diversity of challenges, natural resources, tenure, title and enterprises is to be expected.
7. Freedom for Traditional Owners groups to negotiate different agreements, according to their values.
8. Participatory planning with the people in the region to ensure the consent of the region’s communities.
9. Government respect and support for the outcomes of participatory planning by the community.
10. A legal framework for consultation that is focused on agreements rather than decisions.
11. Ownership of and benefit from cultural information must go to the appropriate people.
12. Enterprise planning that is responsive, consistent and has a long-term focus.
13. Good management and governance systems are critical to success.
14. Skills and knowledge are needed through training that is specific, transferable and appropriate to the region.
15. Commitment, control over country and cooperation with others are essential components for success.
16. Senior Indigenous people have an important role in the transmission of knowledge and confidence to young people.
17. Access to a wide range of funding options is essential.
18. Aboriginal land ownership systems need to be recognised.
19. The local economy of hunting, fishing, looking after people, culture and country needs to be recognised.
20. Conservation areas need to be set up properly to recognise the rights of Traditional Owners.
Discussions of Draft Statement

Bessen, Bevan
Bessen Consulting Services

Plenary Working Sessions

In a plenary working session, participants worked in twelve small groups at the table level to discuss the initial list of principles and identify recommended changes. The following comments were given as writing instructions for the finalisation of the Statement of Principles.

Most common responses:
- Fewer points, too many, reduce the overlap;
- Use stronger language;
- Not specific or concrete enough;
- Use simple words and language; and
- Some points fit into the first points (should be sub-points).

Other responses:
- Give prominence to culture and protocol statements;
- Equity needs to be the underpinning theme of the statement;
- Aboriginal access to land needs to be strengthened;
- Native Title needs to offer more secure land tenure, more recognition and respect for Traditional Owners;
- Towards a strong, positive vision for lots of communities;
- Kimberley-focused development from the people of the region, not from government;
- Developing a new economic system specific to the region;
- A legal framework around the protection of the Fitzroy;
- Building capacity for young people;
- Simplify language—use plain English and Kimberley Kriol;
- Involvement of Traditional Owners with the end product of this statement;
- Speak to the right people, build relationships and trust;
- Agreement needs to be fair;
- Want business that protects environment, land and culture and teaches youth, not destroy significant areas;
- Want businesses that are owned and run by Traditional Owners; Traditional Owners have the system to run businesses not just work for someone else;
- Should be compulsory for any business to sit down (consult and negotiate) before development;
- Business for the community should benefit the community and business for individuals should benefit individuals but promote, respect and assist the community; business that is based on community land or culture should pay some benefit to the community.
- “Caring for Country” to become a recognised State government program; and
- Investigate the option to turn words into a living picture or poster which illustrates “Caring for Country”, as shown on pg 162.

These suggestions, and other detailed comments on the Draft Principles, were incorporated into the Final Principles on the next page.
Refer to the last dotpoint on page 161.
Final Statement of Principles

Bessen, Bevan
Bessen Consulting Services

Following the feedback from participants in the Plenary Session, the following statement of principles was developed. This Statement sets out what participants thought should be the main ideas behind planning for development in the Kimberley. These Principles focus attention on what Kimberley people want, what would be suitable for the environment, and what would respect and care for people and culture.

Appropriate development is based on:

1. Recognition of the Kimberley region as a place of special cultural and environmental values with national and international significance.
2. Acknowledgement that culture guides economic activity for Indigenous people and appropriate development is based on healthy country and strong culture.
3. Recognition and respect for Traditional Owners and their rights to make decisions on their country.
4. Aboriginal access to land and equity of land tenure.
5. Conservation and cultural management as valuable and important contributions to society:
   • The local economies of hunting, fishing, looking after people, culture and country need to be valued and supported;
   • Conservation areas that are set up must recognise the rights of the Traditional Owners.
   • Senior Indigenous people must be supported in the transmission of knowledge and confidence to young people;
   • Benefits from cultural information must be returned to the holders of that information.
6. Participatory planning with the people of the region, supported by government respect for the outcomes of planning.
7. A legal framework that protects the Fitzroy River, groundwaters and conservation areas.
8. Development of a new economic system based on a diversity of enterprises that support the aspirations of Kimberley people.
9. Enterprise planning and management built upon skills and knowledge transfer that is tailored to the needs of the local area.
10. Region-wide co-operative networks that support successful enterprises.
11. Ongoing and sufficient funding as a critical component of appropriate development.
Consolidated List of Recommended Actions

Fox, Joe
Kimberley Land Council, Broome

All of the “most important concrete actions” from each of the six workshops have been brought together to form the following consolidated list of actions, many of which could be applied across a number of different enterprises.

Guidelines for Sustainable Development
Action 1: Develop an enforceable Statement of Guidelines for sustainable development in the Kimberley.

Participants of the Roundtable felt that there should be a set of rules written up so that they can look at any ideas for development, and think about whether the idea is sustainable, good for the region and its people, and fits within the Statement of Principles. These guidelines would be developed with the priorities set by communities for development in their area. They would closely follow the State Sustainability Strategy. The WA State Government would be asked to publicly commit to the Guidelines (possibly through a framework agreement).

Research
Action 2: Develop a long term, integrated, and co-operative research program that includes the provision of results to the Kimberley community.

People at the Roundtable felt that research in the region should focus on the big picture and the long term, and should involve local people at all levels, including research planning and reporting. Research should be driven by the communities in the region and respond to their needs. Research projects should be undertaken in partnership with local people or organisations wherever possible. Results should be available to everyone, and local people should have control over the information they provide for research. Cooperative Research Centres (CRCs) could play a big role in research.

Action 3: Conduct a survey of local community interest in sustainable agriculture or other development.

Participants of the Roundtable thought that local communities should be asked if they are interested in developing sustainable enterprises, including agriculture. Their ideas would help in planning for infrastructure and support. The WA State Government’s New Opportunities for Tropical Pastoralism and Agriculture (NOTPA) program could provide a basis for this research.

Support and Integration
Action 4: Establish systems and structures to promote, assist and support new and existing sustainable and appropriate enterprises.

People at the Roundtable thought it would be useful to develop ways for local people to support each other in their businesses and enterprises. There were many ideas about how this could work. Communities engaged in sustainable agriculture could start up co-operatives to help sell their products and to provide information and support. New ideas and projects could be lined up with successful community development programs that are already up and running, so that people can share information and work side by side. Successful business people could be encouraged and supported to help others set up and run their businesses. People or organisations could work together in a coordinated research approach, driven by communities, which would benefit everyone. Tour operators from the Fitzroy Valley could form a steering committee to make decisions and recommendations about tourism development, and to help people get new projects off the ground. Resources from a number of places could be combined. This would increase co-operation among projects, help show the need for local and regional networking and allow for good planning and management of new areas of enterprise. All of these things would put trust in the capacity of people to manage their own affairs.

Conservation Areas
Action 5: Develop processes that promote and support culturally appropriate conservation areas.

Participants of the Roundtable felt it would be good to see if some land can be registered as conservation agreement areas under the CALM Act. This would allow people to try and secure funding to support new cultural enterprises. Key groups could be established to promote strong, long term support for conservation and environmental and cultural maintenance.
Action 6: Put in place real and effective arrangements for the co-management of the conservation estate by Indigenous people.

People at the Roundtable saw a strong role for Indigenous people in managing and running the conservation estate. This would be an outstanding opportunity for people to combine their traditional knowledge with an important mainstream task. Participants called for legislation that fully recognises Traditional Owners’ rights in the conservation estate, and that incorporates those rights into co-management arrangements, both for existing National Parks, and for other conservation agreements. People called on the Kimberley Land Council, Environments Kimberley, and the Australian Conservation Foundation to take a strong role in encouraging and supporting all stakeholders (including the mining and pastoral industries, and the Department of Conservation and Land Management) to recognise that Traditional Owners have a major role in decision-making and management in relation to conservation.

Planning

Action 7: Investigate, develop and implement a planning process that includes Kimberley people as the main stakeholders and decision makers.

Participants placed a high priority on planning for the Kimberley region, and were strong about making sure local people were included at all levels of planning.

On the Ground Initiatives and Activities

Action 8: Promote and support on ground initiatives managed and operated by local people.

People at the Roundtable felt it was important to the whole region to know about, assist with, promote and support on-ground initiatives that are already operating. People who are running successful projects could visit other groups to share information, learn about new ideas, and see what others are achieving. This would help to develop confidence and pride in these valuable initiatives, provide a kick-start for pilot projects, and show good examples to people starting up new projects. Kimberley people and organisations could push for changes to some on the ground projects to make sure that they are managed and operated by local people, and that the work is done by local people.

Action 9: Develop ‘quality and integrity’ control systems for tourism activities, which include the Roundtable’s ‘Statement of Principles’ for Kimberley development.

Participants of the Roundtable felt it was important that Kimberley enterprises operated to a good standard, especially in following the Statement of Principles for sustainable development. One way to do this in tourism would be to develop a system of licensing or accreditation for tour operators in the Fitzroy Valley. This would be helped by running interpretation workshops with Traditional Owners to make sure operators accessing important sites know all the important protocols and rules. Tour operators from the Fitzroy Valley could form a steering committee to make decisions and recommendations about licensing and accreditation.

Action 10: Develop and support enterprises built on cultural knowledge and expertise.

Participants of the Roundtable placed a very high value on cultural and traditional knowledge and expertise, and thought this was a great opportunity to develop sustainable enterprises. Research and development could be done into finding ways of earning money from cultural work, and of combining that work with cultural activities (cultural tourism). This would include training for young people to learn traditional knowledge and guiding skills. It could also include organising interpretation workshops with Traditional Owners for both tourists and tourism operators.

Intellectual and Cultural Knowledge and Education

Action 11: Develop and support processes to protect and enhance cultural knowledge, and ensure that it is passed to future generations.

Because Roundtable participants placed such high value on cultural and traditional knowledge and expertise, they wanted to take actions to protect and pass it on to their young people. Ways of getting young people interested include using visual means like DVDs (people would need training in media editing, camera, photography, etc.). People wanted young people to be brought together with others who are really motivated to increase their interest in cultural matters. Part of the process would include recognising the work of elders, and paying them properly for training up young people. It would be good to build up cultural information by recording knowledge and stories on computers, and linking it up to mapping systems and other information (because young people are interested in using computers). A cultural map of the Fitzroy River and surrounding country could be developed and publicised, to show the value of this information, and to share it with others. Cross-cultural training and awareness programs could be developed and used. These might include initiatives such as holiday culture camps, to get kids out on country as much as possible.

Action 12: Provide legal recognition and protection of intellectual knowledge as the property of Traditional Owners.

Participants of the Roundtable felt very strongly that Traditional Owners must have the rights to their intellectual knowledge, and that Indigenous people should benefit from that knowledge. All levels of Government should be encouraged to recognise that cultural information and knowledge is the intellectual property of Traditional Owners.
Action 13: Develop and support processes to facilitate the teaching of Indigenous culture, knowledge and language in schools and other training places.

Participants of the Roundtable felt that one of the strengths of the region, and a key to sustainable development enterprises, was the strength of culture. They said it was necessary to make sure that culture is preserved and passed on to new generations, and made more widely known and accessible. Including land and language cultural programs in the education curriculum was seen as a positive step, especially where this took place on country. People wanted to provide opportunities for younger people to have closer contact with older people so that they could learn from them. Appropriate agencies and organisations should be encouraged and assisted to promote opportunities through local schooling and other educational means. Courses in traditional cultural knowledge could be combined with tourism guide training to provide employment opportunities for young people. These could go together with language, song and dance programs, and cross-cultural training programs. Young people could be encouraged to spend more time learning ‘on country’ through holiday culture camps.

Funding

Action 14: Develop a streamlined and regionally-controlled funding system that allows ready access to funds that support appropriate development initiatives.

Access to funding was seen by people at the Roundtable as a key part of developing a sustainable economy in the Kimberley. Participants wanted a funding program that is easier to work with. Funding applications, forms, and processes should be simplified (such as putting in a short expression of interest before developing a full proposal). Continuing support should be provided to groups that receive funding. One big pot of funding (such as a Caring for Country fund), with regional control, would mean people would only have to go to one place with all of their funding proposals. It would also make sure funding was directed to the proper places, and that people could share information and resources. Long-term funding was seen as essential for setting up successful enterprises. People wanted to remove obstacles to funding (such as limitations caused by different types of land tenure), and the opportunity to develop partnerships with Australia-wide conservation projects. They were also interested in developing activities in local communities, such as Community Conservation Areas.

Projects or enterprises that achieve good results in conservation and cultural revival should receive added incentives. Governments could set up a single body where people can go to find out about funding opportunities. This should explain which departments provide funding for enterprises, and should allow people to deal with one person throughout the whole process. Funding decisions and processes should be made by the local community—by people who already operate successful enterprises, projects or partnerships. They could help to provide a kick-start for pilot projects.

Land Tenure, Land Access and Land Management

Action 15: Develop and implement a process to efficiently and quickly deliver land title or access to land where appropriate.

Participants of the Roundtable were frustrated at delays or failures caused by problems related to land tenure. They felt that sustainable development would move more quickly if agencies such as the Indigenous Land Corporation were able to settle transfer of leases and other tenure matters more effectively. This would allow Traditional Owners to get control of title sooner. Government agencies should consider, promote and develop other forms of land tenure to suit a range of activities, people, resources or governance structures. Access agreements for pastoral land should be negotiated more quickly, and mixed land use and ownership models should be developed, so that a wide range of people are able to make sustainable livings from country.

Action 16: Provide effective means for control of and access to land where Native Title exists.

People at the Roundtable wanted to take actions to assist people with Native Title to their country to get the benefits from that title. This includes recognition of Traditional Owners and control over access to land. Access by non-Indigenous enterprises or individuals could be through a permissions process. Agreements should be quickly negotiated with pastoralists for access to pastoral land, for enterprises and for cultural activities.
Next Steps and Closing Comments

Bessen, Bevan
Bessen Consulting Services

Next Steps

During the Roundtable itself, and in the evaluation survey that participants completed at the end of the forum (see Appendix A), people identified as a key problem the many past meetings at which there had been much talking but little or no action.

The organisers of the Roundtable were asked to ensure that results were delivered promptly in two main areas:
• Clear reports and information made available to the participants, and to other interested people.
• Steps taken to begin turning talk into action.

Forum participants agreed on some key actions to ensure ongoing implementation, some of which have now been completed, with others requiring continuing attention:
• A 'Statement of Principles', developed from the workshops and the main sessions (now completed).
• A 'List of Actions' developed from the workshops and the main sessions (now completed).
• An interim report containing a summary of the Roundtable proceedings to be distributed promptly (distributed in early 2006).
• A final report including all the presentations and papers, to be distributed within six months (this report).
• All the presentations and papers to be made available on the internet (which can be found at http://www.klc.org.au/rndtable_docs.html).

It was also agreed that information from the Roundtable be taken directly back to the community through visits and information sessions, and that a short DVD be produced for communities. A substantial program of community visits has been undertaken during 2006, during which the Interim Report was taken back to the Indigenous communities and participants of the Roundtable to ensure people were aware of the recommendations and had an opportunity to comment on them. The production of a DVD is nearing completion.

Wayne Bergmann Closing Comments

A very strong partnership is forming, with powerful energy and common purpose.

We are starting the road to talk about sustainable (appropriate) business enterprises along the Fitzroy.

It is clear that there are other ways to build an economy.

This whole process is one big outcome: people power from people coming together.

What's important, where's the new edge coming from?

We'll look to establish an Ecotrust: first in the Fitzroy area, then for the rest of the Kimberley.

The Kimberley is alive and incredibly valuable.

The Conference Statement and Report of this will set clear objectives;

I would like to acknowledge the energy of people who care and are looking at new ways.
Desmond Hill Closing Comments

Joe Ross, right at the beginning, asked, “Why would you bother?” We need to think about why we are here, what this Roundtable is for.

The main answer is that we are here today for ourselves and our future.

Some speakers have talked about “people power” and about who is “driving the bus”.

We have to drive the bus ourselves. We’ve had bad experiences where outside people have taken control, like Ord Stage 1.

We’ve also shown that we are strong enough to stand up for ourselves.

We chased the cotton growers away.

We’ve also heard about a lot of small things that people are doing on their country.

We’ve heard how important culture and environment are. Now we’re writing all those things down.

We are making a map. If we are going to drive the bus, then we need to know where we are going. This map we are making now will help us to remember where we are going. It will help us to show other people where we are going.

This is our journey. We are taking control.

Mervyn Mulardy Jnr Closing Comments

Our words are strong; the cotton company with millions of dollars has gone away because we stood up to them. Small things for a group of people mean a lot to those people.

We have a relationship with the environment and our culture.

Preserving both is critical.
Kimberley Appropriate Economies Roundtable Forum Proceedings
Boabs and termite mounds are two of the most distinctive features of the west Kimberley.

Left: Steve Kinnane, Anthony Watson; Right: Tom Birch, Neville Sharpe

Left: Rosie Eaton; Centre Right: Wayne Bergmann; Bottom Right: A west Kimberley wetland.
APPENDICES
Appendix A
Reflections and Evaluation

Reflections
At the conclusion of the workshop, participants were asked to reflect on the forum at their tables and provide a word or phrase to describe the Roundtable.

The response reflected a real sense of upliftment and empowerment present at the end of the meeting:

- Taking advantage of natural, cultural and financial capital in the Fitzroy Valley;
- Great cross-cultural communication conference;
- Illuminating; culture and nature; exciting;
- Fascinating; inspiring; intense; challenging; learning together; breaking new ground; solidarity;
- Brought people together with common issues, across cultures;
- Meeting was very powerful, needs action;
- “Thangandi binyirdi” (‘word strong’); it’s time for action at Government level; hope that many more community conserved areas will come out of this meeting;
- Hope; inspirational; visions;
- Strength and alliance;
- It’s time for the people of the Kimberley to show the way forward; partnerships are the way forward, a way forward to the future!
- “mirri mun wangi walyu” (“a strong response is needed”);
- Caring for Country means... (see list of refined principles).

Evaluation
Roundtable participants were asked to fill out an evaluation, which included the following questions:

1. Did you find the Roundtable valuable? (circle)
   
   Not Valuable | Very Valuable
   1 | 2 | 3 | 4 | 5

2. What were the most valuable aspects and why?
3. What were the least valuable aspects and why?
4. What did you learn that might be useful to your work?
5. Was there anything missing that you think should have been included?
6. Other Comments?

From the responses received, the following general conclusions were drawn:

- The response rate was around forty percent of the Roundtable attendees on the second day, which is satisfactory, given that the evaluation form required proficiency in reading and writing skills;
- Of the respondents, the overwhelming majority judged the Roundtable to be valuable or very valuable, results of which are shown in the graph:

![Graph showing response rates]

Not Valuable | Very Valuable
---|---
17 | 2
12 | 4
3 | 5
4 | 1

- The most valuable components of the Roundtable included people coming together and sharing information; the international perspectives provided; the participation of Traditional Owners; and the workshops.
- The least valuable components of the Roundtable included insufficient time to negotiate final actions; and work was a bit rushed.
- Things learned included similarities of issues and problems; ideas and options from the international sphere; formation of partnerships outside of Government; and contacts with individuals and groups for future projects.
- Missing components included more presentations on locally successful businesses or enterprises; and representation from funding Agencies, Governments and the Kimberley Development Commission.

Other comments were that the Roundtable was very well organised, and that there must be actions and outcomes following the Roundtable.
Appendix B
KLC/EK/ACF Letter of Agreement

The Kimberley Land Council, Environ Kimberley, and the Australian Conservation Foundation, through this Letter of Agreement, agree to work together whenever they can to protect Kimberley peoples’ culture and to look after the land, with all its plants and animals.

The Kimberley Land Council (KLC) looks after rights and interests of Indigenous people in the Kimberley region. The Australian Conservation Foundation (ACF) looks out for the environment across Australia. Environ Kimberley (EK) is the main environmental group looking after the Kimberley environment.

This agreement comes into action when it is approved and signed by KLC, EK and ACF.

**THINGS KLC, EK AND ACF BELIEVE:**

- Aboriginal Traditional Owners of the Kimberley have the right to keep up their tradition of looking after land and sea country in the Kimberley.

- It is important for the culture of Kimberley people, and for the land and sea with all the plants and animals, that Aboriginal people go on living in their country and looking after the land and sea. They can do this in traditional and modern ways.

- The Kimberley is important to the whole world because of its people and their culture, and because of the land and sea, and the plant and animal life. It is the job of traditional owners and other landholders, as well as of the State and Federal Governments, to make sure this special place is looked after and cared for.

- Kimberley communities must decide what developments should come to the region, and make sure they are managed properly. Developments that bring changes to the region must fit in with the local culture, land and plants and animals, without causing them harm.

- Farming, especially cotton farming, over a wide area using a lot of water would be harmful to the culture and to the land and plants and animals of the region.

**KLC, EK and ACF AGREE:**

- Aboriginal people should be owners and co-managers of national parks and conservation reserves. Laws should be made to make this happen, and money should be provided so that it can be done in the best way possible. Governments have a responsibility to bring about these changes.

- Some Kimberley national parks and conservation parks (Mitchell River National Park, Lawley River National Park, Camp Creek Conservation Park, Laterite Conservation Park, and King Leopold Ranges Conservation Park) have not been set up properly. These places should stop being used as parks until Traditional Owners are given a say in how they are run.

- Indigenous Protected Area programs should be supported with resources from State and Federal Governments to allow effective management and operation by Indigenous people.
The KLC, EK and ACF will support Traditional Owners in the development and carrying out of management plans for traditional land and sea country. Governments will be encouraged to support this process.

Agreements between the State and private companies or individuals to develop large areas of the Kimberley should come to an end, and no new agreements should be made.

Local people should be the ones who make plans about how to manage the land and water, and who come up with ideas for good businesses which suit the local culture, the land and its wildlife, and which are of benefit to Traditional Owners.

Proposals for broad scale irrigated cotton growing should be scrapped.

Control of water resources should be retained within the Kimberley community, and water management should ensure sustainable environmental, cultural, and social benefits.

Regional plans for land and sea country must be developed by and for Kimberley people. These plans must:

- Protect the nature and culture of the Kimberley.
- Ensure national parks and conservation reserves are jointly managed by Traditional Owners and the State of WA.
- Say clearly what must be done to look after country and how these things will be made to happen.
- Have environmental targets backed by law.
- Have appropriate resources from Governments to ensure they are successfully put into action.
- Ensure that impacts on Kimberley Traditional Owners are not negative.

The KLC, EK and ACF will continue talking about the best way to go, and about putting more things into this agreement later on.

SIGNED on 24 June 2004

Tom Birch
Chairman
KLC

Penelope Figgis AM
Vice-President
ACF

Andy Chapman
Chairperson
EK

Wayne Bergman
Executive Director
KLC

Don Henry
Executive Director
ACF

Maria Mann
Coordinator
EK
Appendix C

Media Reports

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Forum to address the region’s future

By MIKE DOYLE

A LANDMARK meeting held in Fitzroy Crossing from October 11 to 13 will attract experts from around the world for three days of discussion.

At least 90 people are expected to attend the Kimberley Appropriate Economies Roundtable Forum to examine the future sustainability of the Kimberley region.

The forum will be held at the Kimberley Land Council, the Kimberley Conservation Foundation and Kimberley Conservation and will also include representatives from local government, industry leaders and other stakeholders.

The forum will include workshops, seminars, discussions and presentations on topics including conservation, tourism, and agriculture in the Kimberley.

A major highlight of the forum will be the release of the Kimberley Appropriate Economies Roundtable Forum proceedings, which will provide a comprehensive overview of the discussions and recommendations.

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Work continues for BRAC ovals

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All Creatures Pet Care

with Dr John Beadle

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Expo raises student awareness of drugs

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Kimberley Appropriate Economies Roundtable Forum Proceedings
FOR IMMEDIATE RELEASE

13th September 2005

ATTENTION: News Editors, Political, Resource and Environment Reporters

Fitzroy Crossing Forum to examine Sustainable Future for Kimberley

A landmark roundtable meeting between Traditional Owners, indigenous organisations, conservationists, scientists, investors and economists will take place in Fitzroy Crossing next month, October 11 to 13.

The Kimberley Appropriate Economies Roundtable will include international and interstate speakers as well as local business and cultural leaders, and primary producers.

Around 90 people are expected to take part in the three day Roundtable, which is being organised by the Kimberley Land Council (KLC), Australian Conservation Foundation (ACF) and Environs Kimberley (EK).

ACF spokesperson Dr Rosemary Hill said the event has generated great interest to date and demonstrated the commitment of local people to socially, culturally and environmentally appropriate economic development in the Kimberley.

“The most impressive aspect of this event is that it will involve community people working together to find long term solutions for the sustainable development of the Kimberley region,” Dr Hill said.

Coordinator of EK Maria Mann said the Roundtable would chart ecologically, culturally, socially and economically sustainable development for the Fitzroy and Canning basins.

“It will bring together the vision and values of the peoples of the region,” Ms Mann said.

KLC Executive Director Wayne Bergmann said the Roundtable was an important first step in bringing a range of interest groups across the Kimberley together to discuss sustainable options for the future of the region.

“It is the first time that the Kimberley has seen a conference of this scale specifically designed to discuss options for sustainable development,” Mr Bergmann said.

Included in the line-up of speakers will be Ian Gill and Leah George-Wilson from Ecotrust, a Canadian based non-profit organisation that provides low interest loans of up to $500,000 to environmentally sustainable small businesses and development projects.

The World Conservation Union's Grazia Borrini-Feyerabend from Switzerland will address the Roundtable and provide an insight into global trends for linking Indigenous community conservation and joint management of protected areas to sustainable economies.

For further information: EK - Maria Mann 0427 935052, (08) 9192 1922
KLC – Joe Fox 0417 901 722, (08) 9193 6199
ACF– Dr Hill – 0428 335296.

MEDIA representatives are encouraged to attend the three day roundtable.
FOR IMMEDIATE RELEASE

October 10, 2005

ATTENTION: News Editors, Political, Resource and Environment Reporters

Appropriate Economies Roundtable Opens Tuesday October 11, Fitzroy Crossing

More than one hundred Traditional Owners, indigenous representatives, conservationists, scientists, academics and pastoralists will gather in Fitzroy Crossing tomorrow (Tuesday October 11) in preparation for a two day Kimberley Appropriate Economies Roundtable.

The event, organised by the Australian Conservation Foundation (ACF), Kimberley Land Council (KLC) and Environs Kimberley (EK) will focus on finding appropriate economic development options for the Fitzroy and Canning Basins.

KLC Executive Director Wayne Bergmann, who will deliver the keynote address, said the meeting represented a landmark in the development of the Kimberley and would provide a forum to discuss issues of vital importance to Indigenous people as well as other members of the community.

“It will look to a future that recognizes the value and importance of Aboriginal traditional knowledge and culture and the value and importance of the environment as a starting point to any development proposals for the Fitzroy River and Canning Basin,” Mr Bergmann said.

“The roundtable is the result of a desire by the Kimberley community to have a voice in decisions on the future of the region.”

ACF spokesperson Dr Rosemary Hill said the event was an exciting and important development for the region and would bring together at one table a range of interest groups.

“The roundtable will look at ways forward that take into account the strong cultural and natural values of the Kimberley,” Dr Hill said.

“It will provide a first step in a process that will see people from communities and interests from throughout the Kimberley coming together for the common purpose of building a sustainable future.”

Coordinator of EK Maria Mann said the event, which will include international speakers, would map a sustainable future for the region that took into account cultural, environmental, social and economic factors.

“The roundtable will act like a “think tank” and outline a possible future for the region that embodies the desires and visions of the people of the Kimberley,” Ms Mann said.

“It will conclude with a statement that will articulate a community driven future direction for development in the Fitzroy and Canning Basins.”

For further information: EK - Maria Mann 0427 935052
KLC – Joe Fox 0417 901 722, (08) 9193 6199
ACF - Dr Hill – 0428 335296.

MEDIA representatives are encouraged to attend the three day roundtable.
Hopes for title deals on water

Amanda Banks

NATIVELY title agreements may hold the key to developing a massive underground aquifer in Western Australia’s remote Kimberley region.

Reg Appleyard, head of the state government-appointed panel investigating tapping the aquifer under the Fitzroy River to help ease Perth’s water crisis, said a consultant would soon be appointed to deal directly with traditional owners.

He said the three options to transport water from the Kimberley to Perth would require a native title agreement similar to that signed last week to pave the way for the second stage of the Ord River Irrigation Scheme.

The options include a pipeline, a canal and ocean transport by a fleet of super tankers or giant plastic bags towed behind ships.

The Kimberley Land Council, which represents traditional owners in the region, has already stymied the panel’s attempts to access the aquifer by refusing to allow drilling and testing. Professor Appleyard said while the KLC understood the panel’s intentions, it would not support any proposal that tampered with the Kimberley’s resources.

He said the drilling was not crucial to the project as previous work had confirmed there was a huge amount of water in the aquifer — but would have clarified the extent and quality of the resource.

But Fitzroy River expert Peter Davies said there was very little known about the quality and quantity of water held in the aquifer and new drilling and testing was critical.

“...I think it probably is a major setback,” Professor Davies said. “I think we know very little about this aquifer and the connection between the surface water and the ground water.”

Before any plan to tap the aquifer was considered, there had to be an understanding of the impact such a move would have on the Fitzroy River, he said.

In addition to the Kimberley options, the Gallop Government is building a desalination plant and considering tapping a vast groundwater reserve in the state’s southwest.

Professor Appleyard said a consultant was expected to be appointed this week to conduct face-to-face interviews with about 20 stakeholder groups on the social, environmental and heritage issues surrounding the three Kimberley options.

It is understood the Kimberley Land Council and traditional owners are also concerned about any proposals that would open the way for broadscale agriculture.

Two engineering firms have been appointed to assess the cost, reliability and feasibility of the options for sending the water 2300km from the Kimberley to Perth.

The independent engineering and stakeholder reports will be presented by late January and the expert panel will deliver its final report to the state Government by March 31 next year.

Kimberley Appropriate Economies Roundtable Forum Proceedings
Forum focuses on Fitzroy development options

Traditional owners, scientists, academics and pastoralists have converged on Fitzroy Crossing for a forum discussing future development options in the region.

The Appropriate Economies Round Table is a joint initiative of Environs Kimberley, the Australian Conservation Foundation and the Kimberley Land Council.

Craig Philips, from Environs Kimberley, says delegates will focus on finding activities that could improve the Fitzroy River area.

“Just discussing the potential economic development that may take place in the Kimberley area to further employment opportunities for local people, but making sure that whatever does take place is going to be environmentally-friendly and respects culture,” he said.

The three-day conference began yesterday and ends tomorrow.

ABC NEWS ONLINE
Last Update: Wednesday, October 12, 2005, 2:18pm (AEST)

Forum to discuss Kimberley economy

More than 80 people are attending a forum at Western Australia's Fitzroy Crossing this week, to discuss ways of boosting the Kimberley's economy through Indigenous tourism and cattle stations.

Today green groups, Traditional Owners, scientists and government representatives begin a round-table discussion on economic development across the Kimberley.

There are now 26 pastoral leases run by Traditional Owners and the forum will focus on further developing cattle, tourism and fishing.

Also on the discussion board is the contentious issue of transporting Kimberley water 3,500 kilometres south to Perth.

The Fitzroy remains one of Australia's last wild rivers and many at the forum are dedicated to keeping it untouched.

ABC Message Stick extra 17 October 2005
WA: Roundtable sets path for Kimberley development
WA: Roundtable sets path for Kimberley development

Source: Kimberley Land Council

After two days of discussion, participants at the landmark Kimberley Appropriate Economies Roundtable held in Fitzroy Crossing have sent out a strong message that Kimberley people must be the ones to decide the future of the region.

Indigenous culture was identified as an important asset in a sustainable future for the region. “All participants, black and white, identified culture and country as the things that underpin the long term future of the Kimberley,” said Kimberley Land Council Chairman and senior Aboriginal figure, Tom Birch.

Declaring the Roundtable an outstanding success, Mr Birch said “Our people have a long and close relationship with country, and we don’t separate the health of country from the health of its people. It has been really encouraging to see that so many non-Indigenous people share and support this view,” said Mr Birch.

Craig Phillips, Chairman of Environs Kimberley, said that the Roundtable was a watershed event in the Kimberley. “On this occasion, environmentalists have joined Traditional Owners, and other interested parties, to develop a strategy to take the Kimberley into the future, whilst protecting the region’s environmental and cultural values. This Roundtable is the first of hopefully many opportunities to advance the Kimberley community, in ways decided by Kimberley people,” said Mr Phillips.

ACF’s Executive Director Don Henry said that participants at the Roundtable felt confident in meeting the many challenges facing the Kimberley community. “Planning that is consistent and responsive to the people who live here was identified as essential. People agreed that healthy country and strong culture are central to appropriate development, and that it is not possible to separate the economy from the environment or from social and cultural activities,” said Mr Henry.

“As our guests from Ecotrust Canada highlighted, there exists a great opportunity to develop a broad based economy that looks after the region’s environment and people together. We heard that there are many appropriate projects already quietly going about there business in the Kimberley, operated by talented people committed to doing the right thing by country and culture,” said Mr Henry.

Organised by the Kimberley Land Council, Australian Conservation Foundation (ACF), and Environs Kimberley, the Roundtable is the first time Traditional Owners and senior Aboriginal people, along with conservation groups, pastoralists, agriculturalists, tourism operators, and scientists have come together in such a forum. The organisers, with the support of all participants, will soon deliver a statement detailing principles and actions to guide appropriate development in the Kimberley region.

The Roundtable concluded with a rare unwrapping of the famous Ngurrara painting, with its strong depiction by local artists of their country and its importance to their lives. The Kimberley Appropriate Economies Roundtable began painting a bright picture of the region’s future.
FOR IMMEDIATE RELEASE 17th October 2005

ROUNDTABLE SETS PATH FOR APPROPRIATE KIMBERLEY DEVELOPMENT

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For further information:
EK - Maria Mann 0427 935052
KLC – Joe Fox 0417 901 722, (08) 9193 6199
ACF- Dr Hill – 0428 335296.
Appendix D
List of Participants

Representatives from Kimberley Indigenous Communities and Organisations

Neville Sharp  Gooniyandi, Fitzroy Valley  Michael Ramsey  Kija / Manager, Bow River Station, East Kimberley
Mervyn Mulardy  Karajarr / Yiriman Project / KLC Executive, Bidyadanga  Neville Poelina  KLC Executive, Udialla Springs
Tom Lawford  KALACC, Fitzroy Crossing  Rosemary Nugget  Gooniyandi, Mimbi Community, Fitzroy Valley
Patrick Green  Bunuba Inc, Fitzroy Crossing  Vivian Gordon  Gooniyandi, Fitzroy Valley
Lennie Hopiga  Karajarri, Bidyadanga  Joy Nugget  Walmajarri, Fitzroy Valley
Ivan McPhee  Walmajarri / KLC Executive, Fitzroy Valley  Ronnie Jimbidie  Walmajarri/ Interpreter, KIS Fitzroy Valley
Christine McPhee  Walmajarri, Fitzroy Valley  Doodie Lawford  Bohemia Downs Station, Fitzroy Valley / Kimberley Aboriginal Pastoralists Association
Shirley Brown  Tjurabal / Paraku IPA / Wunan Foundation  Dillon Andrews  Biridu Community / Tourism Enterprise / Bunuba Inc
Butcher Wise  KALACC, Fitzroy Valley  Tom Birch  KLC Chairperson / Tourism Foundation, Wyndham
Lucy Walgarie  KALACC, Fitzroy Valley  Wayne Bergmann  KLC Executive Director, Broome
Rosie Mulligan  Chair, KALACC, Fitzroy Valley  Anne Kogolo  Walmajarri / Interpreter / Radio Wangki, Fitzroy Crossing
Joe Ross  Bunuba Inc, Fitzroy Crossing  Hughie Bent  Walmajarri / Mangkaja Arts, Fitzroy Crossing
Joanne Nulgit  Nyarinyin, Derby  Daisy Andrews  Walmajarri / Mangkaja Arts, Fitzroy Crossing
Kelly Shadforth  Nyarinyin, Derby  Laurie Shaw  Gooniyandi tourism enterprise, Fitzroy Valley
Edna Cherel  Chair, Radio Wangki, Fitzroy Crossing  Paul Butters  Kija / Purnululu Aboriginal Corporation, Frog Hollow
Johnny Watson  Nyikina – Mangala / Yiriman Project / KLC Special Advisor, Fitzroy Valley  Rosie Shaw  Gooniyandi tourism enterprise, Fitzroy Valley
Isamah Croft  Walmajarri / KLC / KALACC Project Officer, Fitzroy Valley  Mark Ditcham  KLC Project Officer, Mulan near Halls Creek
Anthony Watson  Nyikina – Mangala / Yiriman Project / KLC executive, Fitzroy Valley  Will Philippiadis  Kimberley Regional Fire Management Project, Broome
Joe Brown  Chair, Kimberley Aboriginal Law and Culture Centre / Yiriman Project, Fitzroy Valley  Hugh Wallace-Smith  Yiriman Project, Derby
Peter Skipper  Mangkaja Arts, Fitzroy Valley  Michelle Coles  Yiriman Project, Derby
Dickie Bedford  Bunuba Inc, Fitzroy Crossing  Dee Lightfoot  Kimberley Interpreting Service
Mon Chugana  Mangkaja Arts, Fitzroy Valley  Gary Taylor  Mamabunjunjin Tours, Broome
Desmond Hill  Mirriwung – Gajerrong, Kununurra / KLC Executive  Jo Camilleri  Udialla Springs
Tommy May  Walmajarri / Chair, Mangkaja Arts, Fitzroy Valley
Terry Murray  Walmajarri, Fitzroy Valley
Miklo Corpus  Yawuru / Minyirr Park, Broome
Richard Hunter  Yawuru / Minyirr Park, Broome
Sam Lovell  West Australian Indigenous Tourism Operators Committee; Office of Aboriginal Economic Development, Derby
Other participants

Professor Ian Lowe  Chair, ACF, Melbourne
Don Henry  Executive Director, ACF, Melbourne
Pat Lowe  Enviros Kimberley, Broome
Gary Scott  Environment Centre of NT
Tanya Verner  Kimberley Wetlands Projects Officer, WWF Australia
Stuart Blanch  Freshwater Manager, WWF Australia
Louise Matthiesson  The Wilderness Society
Nadine Schiller  Department of Agriculture, Kununurra
Max Haste  WA Department of Conservation & Land Management, Broome
Scott Goodson  Department of Environment, Kununurra
Peter Price  District Manager, West Kimberley, Department of Agriculture
John Silver  Kimberley Development Commission, Derby
Robyn Tredwell  Birdwood Downs Station near Derby
Tanvier and Jason Fowler
Dr Andrew Storey  Dept of Animal Biology, University of Western Australia, Perth
Dr Dave Morgan  Centre for Fish & Fisheries Research, Murdoch University, Perth
Kathryn Thorburn  Centre for Aboriginal Economic and Policy Research, ANU
Craig Phillips  Chairperson, Enviros Kimberley, Broome
Sarah Yu  Perth
Jarrod Coote  Department of Indigenous Affairs, Broome
Associate Professor  Centre for Anthropology, University of Western Australia, Perth
Sandy Toussaint  AIATSIS, Canberra
Dr Patrick Sullivan  AIATSIS, Canberra
Steve Kinnane  Kimberley College of TAFE, Broome
Petrie McCrohan  Chief of the Tuleil-Waututh Nation / Board Member Ecotrust - Canada
Leah George-Wilson  Tuleil-Waututh Nation
Kalila George-Wilson  Tuleil-Waututh Nation
Ian Gill  President, Ecotrust - Canada

Peter Seidel  Arnold Bloch Leibler, Melbourne
Grazia Borrini – Feyerabend  Vice Chair of the Commission of Economic, Environment and Social Policy and the World Commission on Protected Areas of the World Conservation Union-IUCN, Centre for Sustainable Development and Environment
Dr Sarah Legge  Kimberley Regional Manager Australian Wildlife Conservancy, Mornington Station, East Kimberley
Danielle Eyre  Kimberley Natural Resource Management Process, hosted by Department of Agriculture, Derby
Amanda Martin  Poola Foundation, Melbourne
Reg Appleyard  Chair, Kimberley Water Source Expert Panel
Gabrielle O’Dwyer  WA Department of Premier and Cabinet
Vicki Laurie  The Australian, Perth
Browyn Herbert  ABC Radio, Kununurra

Organising Committee and Staff

Dr Rosemary Hill  Northern Australia Program Manager, ACF, Cairns
Sue Hayes  Program Assistant, ACF, Cairns
Justin McCaul  Community Outreach Officer, ACF, Cairns
Maria Mann  Coordinator, EK, Broome
Ari Gorring  Committee member, EK, Broome
Anna Mardling  Acting Manager Land + Sea Management Unit, KLC, Broome
Kate Golson  Roundtable Project Manager, Broome
Joe Fox  Communications Officer, KLC, Broome
Rosie Eaton  Roundtable staff, Broome
Janelle White  KLC Project Officer, Kununurra
Charles Prouse  Indigenous Land Manager Facilitator, Kimberley, Derby
Judd Kilkenny  KLC, Broome
Bevan Bessen  Facilitator, Perth
Appendix E
Roundtable Forum Program

Kimberley Appropriate Economies Roundtable

11 – 13 October 2005
Fitzroy Crossing
Program

Facilitated by . . .
Appendix E Roundtable Forum Program

Day One

Wednesday 12 October

8.30 - 9.00 am
Registration

9.00 – 9.30 am
Welcome: Mr Joe Ross, Bunuba Traditional Owner

9.30 – 10.00 am
Opening address: Mr Wayne Bergmann, Executive Director, Kimberley Land Council

10.00 – 10.30 am
Purpose of Roundtable: Prof. Ian Lowe - ACF President, Mr. Tom Birch - Kimberley Land Council Chairman, and Ms. Pat Lowe - Enviros Kimberley founding member

10.45 – 11.15 am  Morning Tea

11.15 – 11.45 am
Environmental Values of Kimberley Rivers: Dr Andrew Storey, Senior Lecturer, School of Animal Biology, University of WA

11.45 am – 12.30 pm
• Fish Projects in the Kimberley: Dr Dave Morgan, with Traditional Owners
• Impacts of Development on the Ord: Mr Ben Ward and Mr Des Hill, Miriuwung Gajerrong Traditional Owners, and Ms Tanya Vernes, WWF Australia

12.30 – 1.15 pm  LUNCH

1.15 – 1.45 pm
Introduction to workshop Sessions: Bevan Bessen

1.45 – 2.45 pm  Concurrent Workshop Sessions

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2.45 - 3.15 pm
Afternoon tea

3.15 – 4.15 pm  Return to Workshop Sessions
Guided discussions on key principles for Appropriate Economic Development

4.15 – 4.30 pm  Wrap-up Day One: Bevan Bessen

6.30 pm Conference BBQ
Day Two

Thursday 13 October

8.30 – 8.40 am
Overview of Day Two: Bevan Bessen

8.40 am – 9.40 am
Reports from workshop sessions: Workshop facilitators

9.30 – 10.30 am
Principles emerging from international experiences in appropriate development:
I. Dr Grazia Borrini-Feyerabend, Vice Chair - IUCN’s Commission on Environmental, Economic, and Social Policy: Sharing power in natural resource management
II. Mr Ian Gill and Ms Leah George-Wilson, Ecotrust Canada: Building a sustainable economy in remote Canada

10.30 - 11.00 am Morning Tea

11.00 am – 11.10 am
Introduction to Workshop Sessions: Bevan Bessen

11.10 – 12.30 pm
Concurrent workshop sessions to develop key tasks and actions, and to discuss a Fitzroy/Canning Basin Statement

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1.00 – 2.00 pm LUNCH

12.30pm – 1.00pm
Return to main group: Reports from workshop sessions: Bevan Bessen

2.00 – 3.00 pm
Finalise Fitzroy/Canning Basin Statement: Bevan Bessen
Resolutions
Action Plans

3.00 – 3.30pm
Closing statements

3.30 – 4.00pm Afternoon Tea

Home
Papers from the Roundtable

Papers from the Roundtable and other information can be downloaded from

www.klc.org.au under ‘Looking After Country’, or contact the facilitating organisations listed below.

Our Partners

[IUCN, Kimberley Development Commission, ecotrust Canada, Department of the Premier and Cabinet]

The Roundtable thanks these partners for their generous financial support:

The Christensen Fund: a private, independent foundation dedicated to assisting organizations in the visual arts, conservation science and education.

Poola Foundation (Tom Kantor Fund): we express appreciation to the Kantor family for their inspired gift in Tom Kantor’s memory. This exceptional gift has enabled an expanded conservation program through innovative partnerships with traditional landowners, environment groups, scientists and others to protect Northern Australia’s natural and cultural heritage values.

Northern Australia Small Grants Program funded by the Poola Foundation (Tom Kantor Fund), Australian Conservation Foundation, and The Wilderness Society.

The WA Government’s Department of Premier and Cabinet.

We would also like to gratefully acknowledge the support of:

Mr Ian Gill, President of Ecotrust Canada
Ms Leah George Wilson, Chief of Tslieil-Waututh Nation and Ecotrust Canada Board member.
Dr Grazia Borrini-Feyerabend, author and Vice Chair of the IUCN’s Commission on Environmental, Economic and Social Policy.

Contacts

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Australian Conservation Foundation - Dr Rosemary Hill
Level 1, 96-98 Lake St Cairns QLD 4870 - ph (07) 4051 3892 mob - 0428 335 296 - r.hill@acfonline.org.au
## Appendix F
### Table of Workshop Session Presenters

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<th>Culture and Art</th>
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<td>• Joe Brown, Chairman, Kimberley Aboriginal Law and Culture Centre</td>
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<td>• Ismahl Croft and Joy Nugget, Great Sandy Desert Indigenous Protected Area</td>
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<tr>
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<td>• Laurie Shaw, Gooniyandi Tour Operator</td>
<td>• Max Haste, District Manager, CALM</td>
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<td>• Robyn Tredwell, Birdswood Downs station</td>
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<td>• Allan Lawford, Bohemia Downs station</td>
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<td>• Nadine Schiller, Dept of Agriculture, Kununurra</td>
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