



SUMMARY OF OBJECTIVES & RECOMMENDED ACTIONS

Summary of
Objectives &
Recommended
Actions





Vision:

Our vision is of an independent and resilient Tiwi society built on the orderly and well managed utilisation of our natural resources. Inherent in this is the maintenance and protection of our unique cultural and natural resource values for the enjoyment and benefit of future generations of Tiwi.

PLANNING AND REGIONAL MANAGEMENT

Objectives	Recommended Actions
1. Collect, collate and manage natural resource information.	<ul style="list-style-type: none"> 1.1 Finalise current studies on biodiversity, water resources and land capability. 1.2 Commence a programme for identifying and filling priority gaps in resource knowledge. Invite and manage research effort in areas of shared interest. 1.3 Finalise development of the Tiwi Geographic Information System (GIS). 1.4 Purchase appropriate computer hardware and software dedicated to natural resource management, and develop a central library for natural resource information. 1.5 Source and obtain data sets held within other organisations. 1.6 Develop protocols for updating the Tiwi GIS, including data format protocols for information sourced from external agencies. 1.7 Ensure agreements for research and study include the provision of data in an appropriate format. 1.8 Regularly review and update this Strategy and the Tiwi GIS to include improvements in the knowledge base.
2. Include all stakeholders in decision-making processes.	<ul style="list-style-type: none"> 2.1 Provide advice to government on issues relating to natural resource management on the Tiwi Islands. 2.2 Encourage and promote the formation of co-management bodies to negotiate instances of competition in natural resource allocation, and to ensure that differences in views are adequately addressed in the decision-making process.
3. Preserve and protect areas and resources of high value to Tiwi people.	<ul style="list-style-type: none"> 3.1 Through consultation, confirm areas of cultural significance and update the Tiwi GIS where appropriate. 3.2 Identify areas of cultural significance that require management/rehabilitation plans; develop and implement where required. 3.3 Develop Codes of Practice for consultation with landowners through the appropriate authority prior to land and sea access and disturbance. 3.4 Prepare and distribute maps of land ownership and authority. 3.5 Provide regular orientation workshops for non-Tiwi staff and residents.



4. Develop and implement processes that preserve and protect areas and resources of high scientific and contemporary conservation value.

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| <p>4.1 Promote early and full inclusion of Tiwi stakeholders in the determination of biodiversity values. Include stakeholder views in recommendations for management.</p> <p>4.2 Develop and implement consultative mechanisms for the preparation of species recovery plans for threatened species within the region.</p> <p>4.3 Progress sea-closures and other protective measures for the north coast of Melville Island as a high priority (see also Coastal Management).</p> <p>4.4 Initiate and manage ongoing research on turtle and dugong population and habitat status, including recommendations for management.</p> <p>4.5 Progress biodiversity management and monitoring protocols for aquaculture and forestry through an inclusive negotiation process involving landowners, industry and government. Revise and update prior commitments where relevant.</p> <p>4.6 Implement existing commitments for biodiversity management under the <i>Environment Protection and Biodiversity Conservation Act</i>.</p> <p>4.7 Record on the Tiwi GIS as protected from significant changes in land use:</p> <ul style="list-style-type: none">• Seagull Island.• The mouths and landward waters of Shark Bay, Snake Bay, Goose Creek, Lethbridge Bay, Brenton Bay and adjacent areas significant for turtle breeding, sea grass and seaweed.• Known locations of listed threatened species, and associated buffers.• Environments listed as threatened.• Rainforest areas.• Riparian zones.• Wetlands.• Other significant habitats for animals listed under international treaties. <p>4.8 Flag on the Tiwi GIS as requiring further investigation when considering changes in land use:</p> <ul style="list-style-type: none">• The northern coastline of Melville Island.• Treeless plains.• Data deficient species, with the priority on endemic species. <p>4.9 Continue discussions for areas set aside as reserves, with a focus on the provision of adequate resources for their ongoing management.</p> | <p>4.1 Promote early and full inclusion of Tiwi stakeholders in the determination of biodiversity values. Include stakeholder views in recommendations for management.</p> <p>4.2 Develop and implement consultative mechanisms for the preparation of species recovery plans for threatened species within the region.</p> <p>4.3 Progress sea-closures and other protective measures for the north coast of Melville Island as a high priority (see also Coastal Management).</p> <p>4.4 Initiate and manage ongoing research on turtle and dugong population and habitat status, including recommendations for management.</p> <p>4.5 Progress biodiversity management and monitoring protocols for aquaculture and forestry through an inclusive negotiation process involving landowners, industry and government. Revise and update prior commitments where relevant.</p> <p>4.6 Implement existing commitments for biodiversity management under the <i>Environment Protection and Biodiversity Conservation Act</i>.</p> <p>4.7 Record on the Tiwi GIS as protected from significant changes in land use:</p> <ul style="list-style-type: none">• Seagull Island.• The mouths and landward waters of Shark Bay, Snake Bay, Goose Creek, Lethbridge Bay, Brenton Bay and adjacent areas significant for turtle breeding, sea grass and seaweed.• Known locations of listed threatened species, and associated buffers.• Environments listed as threatened.• Rainforest areas.• Riparian zones.• Wetlands.• Other significant habitats for animals listed under international treaties. <p>4.8 Flag on the Tiwi GIS as requiring further investigation when considering changes in land use:</p> <ul style="list-style-type: none">• The northern coastline of Melville Island.• Treeless plains.• Data deficient species, with the priority on endemic species. <p>4.9 Continue discussions for areas set aside as reserves, with a focus on the provision of adequate resources for their ongoing management.</p> |
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<p>5. Develop and implement processes that balance freshwater flow volumes and flow quality between the maintenance of biological systems, quality of life for residents and consumptive needs.</p>	<ul style="list-style-type: none"> 5.1 Develop and implement a groundwater monitoring programme for Nguu and Milikapiti bore fields. 5.2 Designate and exclude from development the potential bore field that has been identified for Pirlangimpi. 5.3 Implement contamination protection measures for Blue Water Creek. 5.4 Develop and implement an education and awareness programme on domestic water use. 5.5 Provide a sustainable water supply for Paru outstation. 5.6 Investigate the feasibility of 'Waterwatch' type programmes to monitor surface water quality at local swimming holes. 5.7 Develop Codes of Practice for tour operators and recreational users wishing to regularly access waterways and wetlands, and include in licence provisions. 5.8 Implement freshwater management and monitoring commitments for the plantation forestry project. 5.9 Initiate and manage research on environmental flow, spring flow, and deep aquifer production capability and recharge. 5.10 Recommission the NT Government surface water gauging stations at Blue Water Creek, Taracumbi Creek and Takamprimili Creek. 5.11 Include assessments of freshwater resource requirements for large scale development projects where relevant.
<p>6. Assess and manage current impacts on the coastal zone, and develop and implement processes to manage future impacts.</p>	<ul style="list-style-type: none"> 6.1 Record important marine and coastal hunting areas as protected from significant disturbance on the Tiwi GIS. 6.2 Continue representation on government and other marine and coastal bodies. 6.3 Through the Tiwi Coastal Waters Consultative Committee and Aquatic Resource User Group Forum, lobby for FTO's to be recognised as commercial operators. 6.4 Develop and implement a programme to carry out permit checks for recreational camping twice yearly. Locations and times to be determined on advice from AFANT. 6.5 Through AFANT, initiate log book projects for recreational fishers. 6.6 Through the Tiwi Coastal Waters Consultative Committee, initiate and manage research on the impacts of both the commercial and recreational fishing industry in the region. 6.7 Relocate the Port Hurd closure line to the mouth of Port Hurd. 6.8 Erect 'No Trespassing' signs around the Marine Harvest aquaculture lease. 6.9 Expand the Tiwi Marine Ranger Programme to two vessels and four ranger staff. 6.10 Provide ongoing training opportunities for Marine Rangers.



<p>7. Develop and implement processes that provide for a range of sustainable economic resource development options that are consistent with other natural resource management objectives.</p>	<p>7.1 Progress the development and expansion of land and sea based aquaculture in line with existing suitability studies.</p> <p>7.2 Progress the development and expansion of forestry enterprise in line with existing land capability studies and biodiversity planning.</p> <p>7.3 Finalise biodiversity studies in order to provide certainty to landowners and investors, and to avoid a 'shifting of the goal posts' approach.</p> <p>7.4 Investigate the development and implementation of 'development zones' and 'conservation zones' within a regional context.</p> <p>7.5 Update suitability and capability ratings as relevant information becomes available, and use as a basis for regional planning.</p> <p>7.6 Continue to seek opportunities for high-end eco-tourism ventures.</p> <p>7.7 Identify and protect areas of value to eco-tourism, including local swimming holes, tracts of wilderness and raw materials for art and craft (for example ochre deposits, wood suitable for carving).</p> <p>7.8 Support and encourage considered approaches for commercial wildlife utilisation opportunities.</p> <p>7.9 Identify and assess wild catch fishery resources, and Tiwi access to commercial opportunities.</p>
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MANAGING THE RISKS

<p>8. Develop and implement improved planning processes for community and outstation development.</p>	<p>8.1 Through a process of early and thorough consultation, develop 5 to 10 year land use structure plans for Nguu, Milikapiti and Pirlangimpi communities.</p> <p>8.2 Continue coastal monitoring in high risk areas, and develop estimates of erosion rates.</p> <p>8.3 Implement a policy of assessing all developments within 100m of the coastline before allowing development activities.</p> <p>8.4 Undertake a consultative review of stormwater drainage design standards for communities and outstations.</p>
<p>9. Address priority natural resource management issues in communities and outstations.</p>	<p>9.1 Identify priority areas, and actively explore options for prioritised stormwater drainage upgrades in all communities.</p> <p>9.2 Rehabilitate the old waste disposal site at Nguu, and discourage informal use.</p> <p>9.3 Upgrade sewerage disposal facilities at Munupi Lodge, Pirlangimpi.</p>
<p>10. Develop and implement improved planning processes for construction activities and infrastructure development.</p>	<p>10.1 Identify suitable sites for the extraction of sand, topsoil and gravel, and enter onto the Tiwi GIS.</p> <p>10.2 Actively encourage the implementation of guidelines for borrow pit operation and rehabilitation through community education and inclusion in external contract conditions.</p> <p>10.3 Develop and disseminate best practice guidelines for the construction and maintenance of unsealed roads. Include in external contract conditions.</p> <p>10.4 Develop and disseminate Codes of Practice for external contractors and service agencies, focusing on issues associated with moving vehicles and equipment within the region.</p> <p>10.5 Include rehabilitation and revegetation in work scopes for all new developments at the initial planning stage.</p>

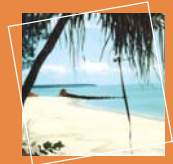
<p>11. Identify and record land degradation processes resulting from construction and infrastructure activity, and develop prioritised plans for rehabilitation.</p>	<p>11.1 Develop and implement a rehabilitation plan for spent extractive areas prioritised on the level of active degradation.</p> <p>11.2 Prepare and cost a plan for the progressive upgrading and/or rehabilitation of roads and tracks that are actively contributing to land degradation.</p> <p>11.3 Continue erosion control works at Port Hurd airstrip.</p>
<p>12. Implement and regularly review planning and management procedures for natural resource based economic development projects.</p>	<p>12.1 Regularly update, review and implement the Port Hurd Aquaculture Environmental Management Plan.</p> <p>12.2 Regularly update, review and implement the Tiwi Islands Plantation Forestry Strategic Plan.</p> <p>12.3 Prepare and implement management and monitoring protocols for marine pest management associated with timber export.</p> <p>12.4 Actively encourage the ongoing management of land degradation issues associated with Maxwell Creek and Pickertaramoor bases.</p> <p>12.5 Implement a collaborative approach to infrastructure development, with a focus on providing sustainable resource development, and optimum opportunities for investment within the region.</p>
<p>13. Develop and implement long term weed management strategies.</p>	<p>13.1 Develop and enforce policies and by-laws specific for regional weed issues, including complementary education and awareness programmes.</p> <p>13.2 Develop and implement a Weed Management Plan for the Tiwi Islands under the Weeds Management Act 2001.</p> <p>13.3 Support and encourage local weed management activities within a regional context.</p>
<p>14. Develop and implement prioritised feral animal management strategies.</p>	<p>14.1 Develop and implement a feral pig eradication programme for Rangini (Melville Island).</p> <p>14.2 Assess and record the extent of degradation from feral pigs and buffalo.</p> <p>14.3 Investigate options for pig and cat control in priority areas under Commonwealth Government species recovery plans and threat abatement plans.</p> <p>14.4 Investigate and encourage economic opportunities for the utilisation of buffalo and pigs.</p> <p>14.5 Carry out a prioritised feral ant eradication programme.</p> <p>14.6 Develop and enforce policies and by-laws specific for regional feral animal issues, including complementary education and awareness programmes.</p>



<p>15. Develop and implement processes that prevent the introduction of new exotic pest species, and the re-introduction of exotic pest species already present within the region.</p>	<p>15.1 Support and encourage the expansion of existing AQIS programmes within the region, including training local people in monitoring activities.</p> <p>15.2 Seek and obtain funding support for expanded quarantine infrastructure at Tiwi Barge Service premises on the mainland.</p> <p>15.3 Regularly review and update the Cane Toad Action Plan.</p> <p>15.4 Include quarantine requirements in all tenders let within the region that involve transport of machinery and freight.</p> <p>15.5 Maintain quarantine public awareness and education activities both within the region and on the mainland.</p> <p>15.6 Actively explore opportunities for intra- territory quarantine legislative controls as an urgent priority.</p> <p>15.7 Develop and implement a Quarantine Management Plan for the region.</p>
<p>16. Encourage best practice clearing operations within the region.</p>	<p>16.1 Develop generic clearing guidelines; distribute locally and to external contractors.</p>
<p>17. Develop and implement processes and procedures that minimise erosion hazard.</p>	<p>17.1 Extend land capability mapping to identify areas of inherent erosion risk, and use as a basis for land use planning</p> <p>17.2 Identify key land use activities that contribute to soil erosion, and develop and disseminate sector specific guidelines/ awareness material for erosion minimisation.</p> <p>17.3 Carry out an erosion survey of the region, and enter results onto the Tiwi GIS.</p> <p>17.4 Prepare and cost a plan for erosion control works based on the level and extent of active soil erosion.</p>
<p>18. Develop and implement processes and procedures that minimise the risk of wildfire within communities and plantation lease areas.</p>	<p>18.1 Support and maintain existing community and forestry fire management training.</p> <p>18.2 Carry out an annual awareness and education campaign for the protection of plantation forestry lease areas from wildfire.</p>
<p>CAPACITY BUILDING</p>	
<p>19. Develop and implement processes and procedures that build community capacity in natural resource management.</p>	<p>19.1 Investigate and implement methods of including natural resource information into existing community information technology communication links.</p> <p>19.2 Encourage, support and facilitate school based natural resource management activities and projects.</p> <p>19.3 Develop and implement staff training in natural resource management information and techniques, including field days.</p> <p>19.4 Facilitate Tiwi involvement in mainstream natural resource management training and educational programmes.</p> <p>19.5 Develop and resource a natural resource management team consisting of Environment Officer, Trainee Environment Officer and small on ground teams.</p> <p>19.6 Form a regional natural resource management committee from representatives of relevant Tiwi organisations, and develop formalised communication links between organisations.</p> <p>19.7 Develop and maintain communication links between the Tiwi regional natural resource management committee and government.</p> <p>19.8 Continue to access short term grant funding for on-ground projects within a regional context.</p>



POLICY FRAMEWORK





In 2001 the Tiwi Land Council developed an Environmental Policy that identified nine key areas for natural resource management. The objectives identified in this Strategy support the Tiwi Environmental Policy in the following ways:

Tiwi Environmental Policy – Key Areas	Natural Resource Management Strategy – Objectives
Develop and implement a Regional Natural Resource Management Strategy for the Tiwi Islands that will provide a framework for the integration of development, environment protection and conservation.	
Record and catalogue baseline data on topography, soils, flora, fauna and water resources.	1. Collect, collate and manage natural resource information.
Identify and quantify potential resource development options that are consistent with the maintenance and protection of cultural and natural resource values.	7. Develop and implement processes that provide for a range of sustainable economic resource development options that are consistent with other natural resource management objectives.
Preserve and protect areas of significance to our people, and areas of high contemporary scientific conservation significance.	3. Preserve and protect areas and resources of high value to Tiwi people. 4. Develop and implement processes that preserve and protect areas and resources of high scientific nature conservation value. 18. Develop and implement processes and procedures that minimises the risk of wildfire within communities and plantation lease areas.
Identify and manage processes that threaten our natural resource values.	6. Assess and manage current impacts on the coastal zone, and develop and implement processes to manage future impacts. 8. Develop and implement improved planning processes for community and outstation development. 10. Develop and implement improved planning processes for construction activities and infrastructure development. 13. Develop and implement long term weed management strategies. 14. Develop and implement prioritised feral animal management strategies. 15. Develop and implement processes that prevent the introduction of new exotic pest species, and the re-introduction of exotic pest species already present within the region. 16. Encourage best practice clearing operations within the region. 17. Develop and implement processes and procedures that minimise erosion hazard.



<p>Develop and implement Action Plans for weeds, feral animals, quarantine, water quality, soil erosion, revegetation and infrastructure management.</p>	<ul style="list-style-type: none"> 5. Develop and implement processes that balance freshwater flow volumes and flow quality between the maintenance of biological systems, quality of life for residents and consumptive needs. 9. Address priority natural resource management issues in communities and outstations. 13. Develop and implement long term weed management strategies. 14. Develop and implement prioritised feral animal management strategies. 15. Prevent the introduction of new exotic pest species, and the re-introduction of exotic pest species already present within the region. 17. Develop and implement processes and procedures that minimise erosion hazard.
<p>Monitor the health of the environment and take remedial action where necessary.</p>	<ul style="list-style-type: none"> 11. Identify and record land degradation processes resulting from construction and infrastructure activities, and develop priority plans for rehabilitation. 12. Implement and regularly review planning and management procedures for natural resource based economic development projects. 13. Develop and implement long term weed management strategies. 14. Develop and implement prioritised feral animal management strategies. 15. Prevent the introduction of new exotic pest species, and the re-introduction of exotic pest species already present within the region.
<p>Promote community involvement in natural resource management, and develop interesting and appropriate tools for the transfer of information and decision making.</p>	<ul style="list-style-type: none"> 2. Include all stakeholders in the decision making process 19. Develop and implement processes and procedures that build community capacity in natural resource management.
<p>Encourage and support educational and employment opportunities for Tiwi people in natural resource management.</p>	<ul style="list-style-type: none"> 19. Develop and implement processes and procedures that build community capacity in natural resource management.





IMPLEMENTATION & REVIEW

Implementation
& Review





Implementation

Implementation of the Strategy will be guided by the principles of:

- Coordinated and cooperative planning.
- Recognition of majority stakeholders.
- Achievement of economic, social and environmental outcomes.
- Full utilisation of existing structures and processes.
- Oversight at the regional level.
- Responsive monitoring and review.

Strategy implementation is largely the responsibility of Tiwi organisations, however it relies heavily on support from all stakeholders, including government and industry. The Action Plan that follows identifies key organisations and agencies with lead responsibility for implementing specific actions, as well as potential partner organisations.

In order to link management organisations and stakeholder groups to the outcomes identified in the Strategy, mechanisms for effective collaboration need to be developed and maintained. It is proposed that this be achieved initially through the identification of a natural resource management committee of made up of Tiwi organisations, and the subsequent development of formal communication links between partner organisations and agencies. It is possible that such a committee already exists and will naturally take on the role of implementation.

Specific roles for government in Strategy implementation include institutional actions such as policy development and review; communication, consultation and engagement strategies; urban and infrastructure planning and development, and funding support under the new natural resource management regional framework and other mechanisms. These will be more readily achieved through developing a close working relationship with the Tiwi natural resource management committee.

Industry roles include developing and presenting project proposals, and undertaking resource usage in ways that conform to the outcomes of the Strategy. They also include appropriate and accepted methods of operation within the region, and ongoing consultation and dissemination of information.

Local government and communities within the region will implement the Strategy by increasing involvement and capability in natural resource management, increasing community awareness and understanding of natural resource use implications, and undertaking specific actions guided by the natural resource management committee.

The Tiwi Land Council, under the authority of the *Aboriginal Land Rights (Northern Territory) Act*, will guide implementation to ensure that the interests of their people are being faithfully and responsibly represented. They will also undertake more specific roles such as engaging the Tiwi community, reviewing resource use proposals for conformity with desired outcomes, maintaining a strategic focus, and carrying out specific on-ground actions.

