

KALBARRI NATIONAL PARK—MANAGEMENT PLAN 2014 GAZETTAL DATE: XX/XXX/20XX

		YEAR 1 (20XX)				Notes
Key Values	Cultural					
	1	A long history of Nanda's use of the area and many Aboriginal heritage sites including artefacts, mythological places, paintings, a quarry and midden sites.				
	2	Permanent river pools of the Murchison River which are significant to Nanda culture and history, highlighted by the concentration of cultural sites along the river.				
	3	A range of sites associated with historic development between Perth and Carnarvon.				
	Recreation and tourism					
	1	Spectacular and varied landscapes that provide opportunities for a diverse range of nature-based and geo tourism experiences.				
	2	Underpinning the local area's tourism dependent economy.				
	Community					
	1	A strong inter-relationship between the Kalbarri community and Kalbarri National Park, with a long history of extensive community involvement in nature conservation and visitor service activities and experiences.				
	2					
	3	A successful partnership with Kalbarri District High school.				
	4	Co-operative arrangements with emergency groups.				
	5	Protection of part of the Kalbarri Water Reserve Public Drinking Water Resource Area.				
	6	Opportunities for education about and interpretation of natural and cultural values.				
	7	A study site for tertiary and other educational institutions.				
	Natural					
	1	Unique geological features and sites of geoheritage significance.				
	2	Botanical significance.				
	3	Populations of threatened flora.				
	4	A variety of landscapes.				
	5	A transition zone for south-west and arid zone species of flora and fauna.				
	6	A large diversity of reptiles.				
	7	A translocation site for fauna and the potential to re-introduce other species formerly known in Kalbarri National Park.				
8	An area free of <i>Phytophthora cinnamomi</i> .					
9	Permanent river pools of the Murchison River and the only river in the south-west land division with no known introduced fish species.					
10	An area located on the boundary of two significant biogeographic regions.					
Economic						
1	The main attraction for tourists to Kalbarri, who visit the park to appreciate its natural cultural and recreational values					
2	The potential to develop new opportunities in the park.					
Key Threats	1	Damage to natural values by introduced animals.				
	2	Damage to important cultural and heritage sites by weeds, introduced animals, visitor and management activities, fire and mining.				
	3	Impacts from upstream activities in the Murchison River Catchment.				
	4	Threat to life and community assets from bushfire.				
	5	Inappropriate fire regimes which may alter species composition and threaten fauna habitats.				
	6	Changing climate.				
	7	Environmental impacts from inappropriate and/or poorly managed recreation facilities and activities.				
	8	A lack of infrastructure to support sustainable recreation and tourism use.				
		MANAGEMENT ARRANGEMENTS WITH ABORIGINAL PEOPLE				
Desired Outcome	Nanda are involved in the management of land in the planning area.					
Management Actions	1	Determine the level of interest in and feasibility of pursuing an ILUA and joint management arrangements with Nanda for the planning area.				
	2	Work with Nanda to promote their participation in commercial activities, employment and training opportunities.				
	3	Ensure consultation with Nanda for activities that may impact on cultural and heritage values.				
		CONSIDERATION OF ADJACENT LANDS				
Desired Outcome	The adjacent lands of conservation significance are considered for reservation.					
Management Actions	1	Implement the proposed tenure changes outlined in Tables 3 to 5 in Appendix 1, subject to consultation and negotiation associated with the reserve creation process.				
	2	Liaise with relevant stakeholders in planning and managing activities on adjacent lands considered for reservation.				
	3	Manage land identified in Tables 3 to 5 in Appendix 1 in accordance with this management plan if they become vested in a responsible body and if necessary amend the plan to apply to them.				
		NEIGHBOURING LAND USE				
Desired Outcome	Improved cooperative working arrangements between the department and neighbouring landowners.					
Management Actions	1	Continue to work cooperatively with neighbouring land managers to ensure complementary management of lands adjoining the planning area.				
	2	Undertake surveys and consultation in cases where boundary fences do not align with cadastral boundaries, and seek to make required changes through the Department of Lands.				
		MANAGING CULTURAL HERITAGE				

Desired Outcome	Work with Nanda to protect and conserve the cultural and heritage values of Aboriginal people.			
	Assist Aboriginal people in conducting customary activities.			
	Protect other cultural heritage values.			
	Improved cross-cultural awareness for Parks and Wildlife staff and other groups using Kalbarri			
Management Actions	1 Continue to work with Nanda to facilitate the practice of customary activities.			
	2 Support the improvement of cross-cultural awareness through Parks and Wildlife staff training and visitor information.			
	3 Carry out management actions in a manner which is sensitive to the cultural and heritage values of Nanda.			
	4 Minimise any adverse effects of management activities on Aboriginal and other cultural and heritage values.			
Key Performance Indicator	Performance Measure	Target	Reporting Requirements	
	Protection of known Aboriginal or other cultural heritage sites	No adverse impacts on known Aboriginal or other cultural heritage sites because of	Every five years	
MANAGING VISITOR USE				
Desired Outcome	The range of suitable nature-based recreation opportunities is maintained and enhanced.			
	Risks to visitors are minimised and appropriate visitor behaviour is encouraged.			
	Community awareness, understanding and appreciation of values are improved through the provision of interpretation and			
Management Actions	1 Provide for recreation and tourism opportunities consistent with this management plan.			
	2 Undertake annual visitor risk assessments to identify and manage risks associated with all recreation use, using specialist advice if necessary (for example, geotechnical specialists).			
	3 Provide visitor information regarding appropriate behaviour and risk minimisation.			
	4 Fulfil the department's obligations under the Local Emergency Management Committee's local emergency management arrangements.			
	5 Investigate options for improving emergency communications in Kalbarri National Park and implement appropriate solutions.			
	6 Update and implement the information and interpretation plan for the Kalbarri National Park to improve visitor experiences and safety			
	7 Involve Nanda in the communication of cultural and heritage values, including using Nanda language in interpretation materials and the names of places and trails, where appropriate.			
Key Performance Indicator	Performance Measure	Target	Reporting Requirements	
	Number of incidents reported to the department	The number of serious incidents reported remains stable or decreases	Annual	
VISITOR ACCESS				
Desired Outcome	To provide safe access that facilitates visitor appreciation of natural, cultural and recreation values without having significant adverse impacts on those values, where possible.			
Management Actions	1 Complete the sealing of road access (including car parks) to The Loop, West Loop and Z Bend.			
	2 Work cooperatively with Main Roads Western Australia and the Shire of Northampton regarding roads that provide access to			
	3 Continue to provide access that considers the needs of people with disability.			
	4 Close and rehabilitate tracks that are not required, or that have an unacceptable impact on key values.			
VISITOR ACTIVITIES				
Desired Outcome	A range of activities and facilities that allow visitors to enjoy key features and attractions with minimal adverse impacts on natural and cultural values.			
	Opportunity to experience remoteness and solitude is maintained.			
Management Actions	1 Maintain and progressively upgrade day-use sites as indicated in Table 1, as resources allow.			
	2 Maintain a registration system for visitors camping remotely, in association with long distance hiking and canoeing in the Murchison Gorge, and limit numbers as required, to maintain the quality of this experience and management of environmental and other impacts.			
	3 Develop information for overnight hikers and canoeists to help minimise safety risks and environmental impacts.			
	4 Progressively upgrade existing walk trails and consider the development of new trails (for walking/hiking cycling and mountain biking) as indicated in Table 2.			
	5 Manage water-based activities in a manner that minimises environmental impacts, safety risks, and conflict with other visitors.			
	6 Monitor impacts associated with visitor activities and manage these to minimise unacceptable impacts.			
	7 Consider providing for vehicle-based camping in or around Kalbarri National Park.			
	8 Repair and manage areas of degraded land, including disturbance around Meanarra Hill.			
	9 Continue to record visitor numbers, conduct visitor surveys, encourage other social research and use the information collected to improve management.			
Key Performance	Performance Measure	Target	Reporting Requirements	

Key Performance Indicator	Community enjoyment of park facilities and services, wildlife and the natural environment	Greater than 85% visitor satisfaction levels	Year one, then every five years				
COMMERCIAL OPERATIONS AND TOURISM							
Desired Outcome	Commercial activities are complimentary to the department's facilities and services, and are provided in a way that enriches visitor experiences.						
Management Actions	1 Evaluate proposals for licences and commercial tourism leases and allow their establishment, if appropriate, according to departmental policy.						
	2 Monitor commercial tour operations and ensure compliance with licence and lease conditions.						
	3 Consider development of nature-based accommodation opportunities.						
COMMUNITY INVOLVEMENT AND SUPPORT							
Desired Outcome	Community involvement and support benefits park planning and management.						
Management Actions	1 Continue to provide and promote opportunities for the community to be involved in the planning and management of Kalbarri National Park.						
	2 Continue to support volunteer involvement in departmental programs.						
CLIMATE							
Desired Outcome	Management actions at regional, community and species level consider and adapt to a changing climate.						
Management Actions	1 Support research into identifying and monitoring the impacts of climate change.						
	2 Implement adaptive management techniques (particularly in relation to fire management) to respond to impacts of climate						
	3 Improve the resilience of species and communities vulnerable to a changing climate by limiting non-climate stresses (for example disturbance, introduced animals, weeds and inappropriate fire regimes).						
GEOLOGY, LANDFORMS AND SOILS							
Desired Outcome	The significant features of the geology, landforms and soils are conserved.						
Management Actions	1 Ensure geological features (including fossils), visual landscape qualities and soil types vulnerable to environmental damage are protected during management activities and proposed developments.						
	2 Rehabilitate disturbed areas where required.						
	3 Provide opportunities for visitors to increase their awareness and appreciation of geological values.						
	4 Restrict access to significant geological features which are vulnerable to damage						
HYDROLOGY							
Desired Outcome	The significant features of the geology, landforms and soils are conserved.						
Management Actions	1 Ensure that proposed developments or operations and activities (for example, recreational use) are managed in a way to minimise impacts on hydrological values.						
	2 Support the Department of Water in continuing water quality monitoring of the Murchison River Basin.						
	3 Support relevant authorities and land managers within the Murchison River Catchment in considering the impacts of activities on hydrological values.						
NATIVE PLANTS AND PLANT COMMUNITIES							
Desired Outcome	Native plants and ecological communities are conserved.						
	The range of existing native plant species and vegetation associations is maintained.						
	No outbreaks of plant disease result from management actions						
Management Actions	1 Maintain records of plant species and communities of conservation interest.						
	2 Develop, update and implement recovery plans for threatened flora and ecological communities.						
	3 Undertake an assessment of the conservation status of, and threats to, the Kalbarri Ironstone ecological community and the vegetation of the Murchison Gorge (lower reaches).						
	4 Conduct condition monitoring and evaluation programs for the Kalbarri Ironstone ecological community and the vegetation of the Murchison Gorge (lower reaches), where required.						
	5 Continue to apply hygiene practices to minimise the spread of plant disease resulting from management activities.						
	6 Continue regular observation for outbreaks of plant disease and in particular for any occurrences of Phytophthora species. If required, prepare and implement a disease control plan consistent with Parks and Wildlife management approaches.						
Key Performance Indicator	Performance Measure	Target	Reporting Requirements				
	The presence of populations of threatened flora	Maintain or increase viable populations of threatened flora, subject to natural variation,	Every five years, or as per recovery plan				
	The introduction of plant disease	No plant diseases are introduced and/or spread.	Annually				
NATIVE ANIMALS AND HABITATS							
Desired Outcome	Native animals and habitats are conserved.						
	The range of native fauna is maintained.						
	Locally extinct mammal fauna are re-established.						
	No outbreaks of animal disease result from management actions.						

Management Actions	1 Maintain records of fauna species and habitats of conservation significance (in particular chuditch, woylie, tammar wallaby, Carnaby's cockatoo and malleefowl).						
	2 Develop, update and implement recovery plans for threatened fauna as required.						
	3 Assess proposed development operations and activities for potential impacts on fauna.						
	4 Continue to implement the Western Shield program including: <ul style="list-style-type: none"> • continuing the control of introduced predator species • assessing appropriate fauna reintroductions • carrying out relevant fauna reconstruction activities for identified species 						
	5 • monitoring threatened fauna and threatening processes.						
	6 Continue to apply hygiene protocols to management actions undertaken to minimise the spread of animal disease.						
7 Report identified animal diseases and implement appropriate management if required.							
Key Performance Indicator	Performance Measure	Target	Reporting Requirements				
	Presence of populations of threatened and priority fauna species.	Maintain or increase populations of threatened and priority fauna species.	Every five years				
	The protection of fauna from animal disease	No plant diseases are introduced and/or spread as a result of management activities.	Annually				
ENVIRONMENTAL WEEDS							
Desired Outcome	Impacts of weeds upon key values are minimised						
	No introductions of new weed species or new infestations of existing weed species that impact on key values.						
Management Actions	1 Prepare, maintain and implement a weed control plan as outlined above.						
	2 Regularly monitor areas of new recreation site and road developments and other disturbances to ensure any new weed infestations are quickly detected and controlled.						
	3 Develop opportunities to educate the community and visitors about identifying priority weeds species and appropriate hygiene practices.						
	4 Liaise with neighbouring land managers and implement measures to prevent weeds from adjacent areas becoming established.						
Key Performance Indicator	Performance Measure	Target	Reporting Requirements				
	Protection against the establishment of new weed species	No new weed species introduced.	Every two years				
	Infestations of high priority weed species	Infestations of established high priority weed species are contained or reduced.	Every two years				
INTRODUCED AND OTHER PROBLEM ANIMALS							
Desired Outcome	Impacts of introduced and other problem animals upon key values are minimised.						
	No new introduced animals species.						
Management Actions	1 Prepare and implement an introduced animal control plan as outlined above.						
	2 Continue to control goats, seeking support and assistance from Murchison House Station.						
	3 Continue to control foxes and other introduced animals in collaboration with neighbouring land managers.						
	4 Continue to undertake research and monitoring of introduced animals and their effects on and interactions with native species, and adapt management accordingly.						
	5 Consider fencing and rehabilitation of high-value areas to protect them from the impacts of grazing and trampling, particularly from introduced animals.						
	6 Monitor the severity of impacts caused by other introduced and other problem animals such as feral bees and house mice and investigate methods of control, if required.						
	7 Maintain and expand the use of goat exclusion plots and conduct an associated monitoring program to measure vegetation recovery, as an indicator of control effectiveness.						
	8 Work with neighbouring land managers, catchment groups, local government, other relevant agencies and the wider community to increase awareness of the ecological impacts that can result from the release of introduced fish species into natural waterways in Kalbarri National Park.						
	9 Prohibit domestic animals, except when used as: <ul style="list-style-type: none"> • guide dogs for visitors with visual impairments • animals required for emergency search and rescue. 						
Key Performance Indicator	Performance Measure	Target	Reporting Requirements				
	The number of goats shot per cull, over consecutive years, in relation to effort.	The number of goats shot per cull, over consecutive years decreases in relation to effort.	Annually				

Appendix 2- Part 2: Example Implementation Status Update
 CC of WA Position Statement No. 10: Monitoring Strategy for assessing the implementation of management plans

	Vegetation recovery in areas where goats have been removed.	Vegetation recovery is recorded in areas where goat control occurs.	Annually				
FIRE							
Desired Outcome	Threat of bushfire to life and community assets is reduced.						
	Stakeholders are engaged in the prescribed fire planning process.						
	Sites of cultural and heritage significance are considered in developing a prescribed fire plan.						
Management Actions	1	Maintain an appropriate level of bushfire suppression preparedness by ensuring adequate equipment, access to water, strategic access and communication.					
	2	Continue to implement a prescribed fire and fuel modification program that incorporates relevant fire management policies, guidelines and available knowledge (including fire history) to: <ul style="list-style-type: none"> • protect the town of Kalbarri, neighbouring properties and other assets (both within and outside the park) from bushfire • adapt management and implement appropriate fire management for fire regime-specific biota and habitats • establish and maintain a mosaic vegetation structure across the landscape. 					
	3	Work closely with DFES, the Shire of Northampton, Kalbarri Volunteer Bushfire Service and local government volunteer bushfire brigades, neighbouring land managers, the community and other authorities to encourage cooperative arrangements and ensure appropriate community protection from fire.					
	4	Promote public education and awareness of the department's fire planning and management, the effects of fire on the natural environment, the need to prevent bushfires, the safety and survival of people, and protection of property.					
	5	Work with Nanda in managing fire, including the application of prescribed fire and protection of sites of cultural and heritage significance.					
	6	Establish and maintain post-fire monitoring sites to measure the impact of bushfire and prescribed fire, and to develop an understanding of ecological fire requirements of biota.					
	7	Develop and implement recovery plans after bushfires for which the department is responsible.					
Key Performance Indicator	Performance Measure		Target	Reporting Requirements			
	The impact of bushfire and prescribed fire on human life or community assets		No serious injury to people or damage to community assets attributed to the department's fire management.	Annually			
	Implementation of the prescribed burn program.		Prescribe burn program is kept up to date and implemented.	Annually			
	The impact of fire management activities on known threatened flora and priority ecological communities.		No adverse impacts on threatened flora and priority ecological communities as a result of fire management activities, without appropriate approval.	Annually			
MINERAL AND PETROLEUM OPERATIONS							
Desired Outcome	Impacts of mineral and petroleum operations and extraction of basic raw materials on key values are minimised.						
Management Actions	1	Work with the Department of Mines and Petroleum and the Environmental Protection Authority to evaluate proposed mineral and petroleum operations that may impact on Kalbarri National Park and seek to avoid or minimise these impacts.					
	2	Ensure that any areas disturbed by mineral and petroleum operations are rehabilitated in accordance with the conditions of the mining or exploration tenure or approval documentation as well as departmental rehabilitation standards and guidelines.					
	3	Rehabilitate areas disturbed by basic raw material extraction in accordance with departmental policies and undertake post-rehabilitation monitoring and evaluation to ensure compliance.					
	4	Ensure that all mineral and petroleum operations and basic raw material extraction adhere to departmental disease hygiene practices.					
BEEKEEPING							
Desired Outcome	Impacts of beekeeping and introduced honeybees on key values are minimised.						
Management	1	Do not issue any apiary site permits within Kalbarri National Park.					
WATER RESOURCE USE							
Desired Outcome	Impacts of utilities and services on key values are minimised.						
	Infrastructure and services in and around Kalbarri Nation Park facilitate park management.						
Management Actions	1	Locate new utilities or services within existing corridors and/or outside Kalbarri National Park, where possible.					
	2	Liaise with utility providers to ensure that the operation and maintenance of utilities and services are in accordance with departmental conditions.					
	3	Ensure the responsible management of environmental issues associated with the provision and maintenance of utilities and services, particularly issues of disease and hygiene.					
	4	Ensure the removal of infrastructure and rehabilitation of land when utilities and services are no longer required.					
RESEARCH REQUIREMENTS							

Appendix 2- Part 2: Example Implementation Status Update
 CC of WA Position Statement No. 10: Monitoring Strategy for assessing the implementation of management plans

Desired Outcome	Knowledge and understanding of key values and management issues is increased and aids in implementation of this management plan.						
Management Actions	1	Conduct integrated research and monitoring programs that facilitate management, with a focus on key values and threats identified in this management plan; the establishment of baseline information; meeting key performance indicators' and other departmental research priorities.					
	2	Encourage and support, wherever possible, external agencies and individuals where their research contributes directly to departmental objectives or the implementation and auditing of this management plan.					
	3	Ensure relevant information gained through research, monitoring and experience is available to managers and in regional and district office libraries/databases, and is kept up to date.					
	4	Incorporate research and monitoring findings into performance assessment against the objectives of this management plan and adapt future management, if required.					