INTERIM MANAGEMENT GUIDELINES

BLACK RANGE & LAKE MASON PASTORAL LEASES

2001-2006

Department of Conservation and Land Management

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INDEX

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1. PURPOSE OF INTERIM MANAGEMENT GUIDELINES (IMGs)

These guidelines are required for planning purposes so that certain operations can be carried out in an orderly fashion in the absence of an approved management plan. The operational activities described in the guidelines are defined as those actions necessary for the preservation or protection of persons, property, land, flora and fauna.

This IMG has been prepared in accordance with departmental policy and to fulfil the requirements of Environment Australia under the National Reserve System project.

1.1 Principal Management Directions.

These guidelines cover the major management issues. They are:

- the conservation of biological, physical, cultural and landscape resources
- the facilitation of recreation in a safe and appropriate form in relation to the physical and climatic conditions of the area and the conservation objectives
- To seek a better understanding of the natural and cultural environment and the impacts of a range of management activities.

1.2 Area Description.

These IMGs are for the adjoining Lake Mason and Black Range Stations purchased for the creation of a conservation reserve. They have a combined area of 228 884 Ha.

The former Black Range pastoral lease (79,329 Ha, Appendix 3) is situated 10-50 kilometres Northwest of Sandstone with the adjoining former Lake Mason pastoral lease (149,557 Ha, Appendix 3) to the East and some 15-70 kilometres Northeast of Sandstone. Both are in the Murchison Biogeographic Region.

The climate of the area is characterised by low and erratic rainfall with the annual average of 245 mm. Average maximum daily temperatures range from 18.4°C in winter to 35.3°C in summer.

Black Range Station is generally flat with low rises and granites. Breakaways in the centre and east provide drainage systems flowing to the south. Spinifex dunefields are the predominant feature of the NW section of the lease. The vegetation consists of, spinifex growing on sandplain and dunefields, Acacia (mainly mulga) woodland and scattered Eucalypts.

Lake Mason Station is gently undulating dominated by the lake system and low hills. Ridges of banded ironstone and granite feature to the NW. Lake Mason and the associated lake systems with fringing alluvial plains, gypsum (kopi) dunes and sandy banks link through the area from West to the East. The vegetation consists of, spinifex sandplain and some dunefields, Acacia (mainly mulga) woodland and scrub and scattered Eucalypts. The lake frontage consists of chenopod shrublands and halophytes.

2. MANAGEMENT FOR NATURE CONSERVATION

2.1 Geology and Landforms.

The area has subdued topography with an elevation ranging between 475 – 550m with drainage from low hills across broad plains into a series of playa lakes. The predominant surface geology is of quaternary sands and alluvium in the form of extensive sand and hardpan wash plains. These dominate on Black Range lease. This is interspersed with large breakaways, stony colluvial plains, and low granitic hills and rises, particularly in the western margin of Lake Mason, where there is a belt of meta-igneous rocks including metabasalts and metamorphosed banded ironstone formations. An extensive saline and gypsiferous playa lake occurs through centre of Lake Mason and it is from this lake that the property takes its name.

Action

- Provide interpretative material on the geology, landforms and soils of the area for visitors.

2.2 Vegetation Associations and Flora.

Lake Mason and Black Range Pastoral Leases contain five vegetation types (associations) and bare lake areas according to the vegetation mapping at the 1:250 000 scale by J S Beard (1974). These are listed below in order of the extent of their areas within the leases.

Vegetation code No. 18	a_1Li, Low woodland; mulga (*Acacia aneura*) (113,263 ha).
Vegetation code No 107	$a_1e_{21}Srt_2$Hi, Hummock grasslands, shrub steppe; mulga (*Acacia aneura*) and *Eucalyptus kingsmillii* over hard spinifex *Triodia basedoiwii* (75,114 ha).
Vegetation code No. 389	a_1Lr k_1Ci, Succulent steppe with open low woodland; mulga over saltbush (18,376 ha).
Vegetation code No. 39	a_1Si, Shrublands; mulga scrub (12,174 ha).
Vegetation code No. 125	sl, Bare areas; salt lakes (10,264 ha).

Four of these associations contain mulga (*Acacia aneura*): low woodland, mulga scrub and succulent steppe – low mulga woodland over saltbush. The fourth association found on red sands sometimes in dune and swale complexes is spinifex grassland with emergent mulga and *Eucalyptus kingsmillii.* The fifth vegetation type is salt lake. While some salt lakes are bare, the bed of Lake Mason is densely vegetated with samphires and as such, should be largely reclassified as succulent steppe.

There are a number of additional associations that are not recognised in Beard's 1:250 000 vegetation mapping but are identified by Agriculture WA's Rangeland mapping. These include 13 land types supporting 26 distinct land systems, many which support similar vegetation types to Beard's associations, while many are quite distinctive in terms of their vegetation. These land types even vary in their floristics between the two leases with the Bullimore Land System on Black Range supporting *Callitris sp*. on sand dunes, Marble Gum (*Eucalyptus gongylocarpa*) and Grass trees (probably *Xanthorrheoa thorntoni*).

The land types and their associated land systems are summarised below with their approximate areas.

Type 1	**Hills with Acacia Shrublands (11,462 ha).**
Wiluna	Low lateritized hills of amphibolite, schist and greenstone with extensive lower slopes and stony plains (about 5,950 ha)
Gabanintha	Ridges and rounded hills of basalt, dolerite, jaspilite and greenstone (4,051 ha).
Bevon	Low hills and rises with limonitic duricrust and stony plains (about 726 ha).
Brooking	Ridges of banded ironstone (about 432 ha)
Norie	Hills of exfoliating granite domes and tor fields (about 303 ha).
Type 4	**Breakaways stony plains and sandy surfaced plains on granite with Mulga shrublands and minor halophytic shrublands (13,574 ha).**
Sherwood	Breakaways, kaolinized footslopes and extensive gently sloping plains on granite (11,871 ha).
Waguin	Undulating sandy plains and stripped surfaces with small breakaways on laterite and granite (about 1703 ha).
Type 6	**Plains with gritty surfaces and low tors and domes on granite with acacia shrublands (757 ha).**
Challenge	Gently undulating plains with occasional hills, tors and low breakaways on granite (672 ha).
Bandy	Low outcrops of granite and fringing plains (about 85 ha).
Type 7	**Irregular plains and low rises supporting mulga, bowgada and some halophytic shrublands (3,064 ha).**
Violet	Undulating plains with stony and gravely mantles and low rises with limonite (2,828 ha).
Nubev	Gently undulating plains and low rises with limonite above alluvial plains with saline spoils (about 236 ha).
Type 8	**Stony plains and lower alluvial plains with predominantly saline soils and halophytic shrublands (147 ha).**

Gransal	Gently undulating plains, low rises and alluvial plains on granite (147 ha).
Type 9	**Stony plains and occasional low rises with acacia-eremophila shrublands (2,101 ha).**
Windarra	Level to gently undulating plains with quartz mantles on granite (about 1,250 ha).
Felix	Gently undulating stony plains on acid volcanic rocks (about 477 ha).
Yarrameedie	Stony hill spurs, slopes and pediment plains below ranges (about 374 ha).
Type 10	**Sandplains with spinifex hummock grasslands (118,577 ha).**
Bullimore	Gently undulating sandplain with occasional linear dunes (about 118,577 ha).
Type 12	**Sandplains with grassy acacia shrublands (2,935 ha).**
Kali	Level to gently undulating plains of red sand over laterite (about 2,935 ha).
Type 13	**Washplains on hardpan with mulga shrublands (5,976 ha)**
Jundee	Level to very gently inclined wash plains with mantles of fine ironstone gravel (4,348 ha).
Woodline	Nearly level loamy surfaced plains over hardpan (about 1,628 ha).
Type 14	**Wash plains and sandy tracts on hardpan with mulga shrublands and wandarrie grasses (32,734 ha).**
Yanganoo	Wash plains with concentrated drainage zones and sandy tracts (32,374 ha).
Type 15	**Wash plains on hardpan with mixed halophytic and non-halophytic shrublands (1,075 ha).**
Monitor	Alluvial fans and wash plains receiving distributary flow (about 1,075 ha).
Type 18	**Calcreted drainage plains with mixed halophytic and non-halophytic shrublands (8,643 ha).**
Cunyu	Calcrete platforms, narrow drainage floors and fringing wash plains (6,562ha).
Mileura	Calcrete platforms and alluvial plains with saline soils (about 1,182 ha).
Cosmo	Calcrete platforms and plains with calcrete rubble surrounded and partially overlain by sand (about 899 ha)
Type 20	**Salt lakes and fringing alluvial plains with halophytic shrublands (24,663 ha).**
Carnegie	Salt lakes with fringing alluvial plains, kopi dunes and sandy banks (about 24,663 ha).

There is one known species of priority flora from the area, *Grevilliea inconspicua*, which generally occurs on loamy gravel along drainage lines on rocky outcrops (Paczkowska and Chapman, 2000). Although this species was previously only known from two localities on Lake Mason, several additional sites were located during the survey for these Interim Management Guidelines.

Action

- Detailed flora and vegetation associations surveys and mapping are required (biological survey)
- Conduct detailed survey to determine the distribution of *Grevillea inconspicua* within the pastoral leases and identify management requirements.
- Conduct surveys for the presence of additional threatened and priority flora, or geographically restricted species and determine appropriate management.

2.3 Introduced Plant Species.

Introduced plants include garden species and weeds around the homesteads and weeds on the leases. A preliminary weed survey recorded Ruby Dock and Double Gees at Schwarts Well, Jericho Well, Granites Well on Lake Mason and no weeds outside of the homestead area on Black Range. Saffron Thistle sometimes occurs along the Sandstone-Gidgee Rd with control to date by grubbing (A Humphries pers com).

No major weed infestation has resulted however ongoing monitoring will be required.

The Saffron Thistle, Doublegee and Ruby Dock are the only problem weed species away from the homesteads requiring control and management at present. These plants are confined to several small populations adjacent to bores and roads. Any other weeds located will be simultaneously controlled.

Action

- Ongoing control of Saaffron Thistle, Doublegees, Ruby Dock and other weeds. Ongoing survey and monitoring around previous artificial water points and along roads for the occurrence of other weeds is required.

2.4 Native Fauna.

No formal biological survey of the area has been conducted.

The general region of Black Range and Lake Mason may support as many as 27 species of mammal including 4species of rodent, 3 species of kangaroo, 9 dasyurids, 8 bats and one monotreme- the Echidna. An additional six mammal species are thought to be locally extinct. Extinct mounds of *Bettongia leseuer* are quite common across wide areas of Lake Mason. Extinct nests of *Leporillus sp*. have been seen in breakaways. Given the diversity of habitat across the two properties it is reasonable to presume the majority of extant mammal species will be present. on either one or both properties.

The semi arid and arid areas of WA are particularly rich in herpetofauna with the Sandstone area being no exception. A total of 76 species of reptiles and amphibians occur there comprising of 6 varanids, 4 pygopods, 20 skinks, 12 geckos, 10 dragons 15 snakes and 9 frogs. Again, as for the mammals, the two properties would be expected to support the majority of these species.

A preliminary avifauna species list compiled from WA Museum records, an RAOU survey (92 species, A Humphries pers comm), officers from CALM and the leasee of Lake Mason, indicate the area has a diverse avifauna and suggest that the lake is a significant habitat for waterbirds and waders when it holds water. An opportunistic list of 50 species bird species was compiled during a recent survey of the properties (10-13 November 2000). There are records of Mallee Fowl from both properties.

Action

- A full biological survey is required following de-stocking.

2.5 Introduced Animals

Black Range and Lake Mason are currently being destocked of sheep and cattle. This is scheduled for completion by December 2001.

Foxes and feral cats are widespread on the lease in low numbers. Rabbits are also present in low numbers. Goats are present on Lake Mason and Black Range in the Breakaway granites and hills on the Western boundary up into Gidgee Station. Goats are being trapped and sold in conjunction with destocking.

Once destocked, domestic animals (other than guide dogs) will not be permitted on Black Range and Lake Mason outside of the homestead complexes. Pets disturb wildlife, can introduce disease, foul recreation areas and water holes, and can interrupt native fauna activity.

Action

- Destock by removing sheep and cattle from both stations by December 2001.
- Continue contributing to the Regional dog / feral predator control program including aerial baiting.
- Monitor other feral animal populations and initiate control programs as appropriate.
- Systematically decommission all artificial water points, to deny supplies to introduced animals and to restore the natural balance of native fauna. Undertake this work when animal populations are naturally dispersed as sudden denial of water from artificial sources is undesirable. Initiate a monitoring program to assess the effect of this.
- Discourage domestic animals from the reserve.

2.6 Aboriginal Heritage.
In pre European contact times, Aboriginal people lived in the Black Range and Lake Mason lease area, using the land for hunting, gathering and cultural purposes. There is occupation evidence at several sites.

A summary account of the presence of Aboriginal people in the Sandstone area is given in Chapter 1 of "Sandstone: From gold to wool and back again" by Sally Senior.

The Koara native title claim, WC 95-001 occurs over all of Black Range and the majority of Lake Mason. It is registered to Richard Guy Evans of Leonora.

As advised by the Aboriginal Affairs Dept there are no registered aboriginal sites on Lake Mason and Black Range leases listed in the Aboriginal Sites Register. It is highly likely there are sites not recorded or entered into the register.

Action
- Liaise with native title claimants and representative organisations to confirm the status of native title claims for the area and expectations.
- Consult with indigenous organisations and individuals to determine native title implications, cultural values and interests.
- Accommodate and protect sites, cultural values and interests during the planning and management of the Black Range/ Lake Mason reserve.

2.7 European History.
A summary of the development of Black Range and Lake Mason leases is given in "Sandstone: From gold to wool and back again" by Sally Senior (pages 252-253 and 266-271), Appendix 1.

The Sandstone - Wiluna Stock Route passes through the area along the approximate Gidgee Rd alignment. There are historic wells and associated infrastructure.

Both former stations have homestead complexes and infrastructure developed for pastoral purposes (tracks, fences, water points and yards).

Action
- Document, maintain and protect the heritage of the area.
- Provide historical information at the Lake Mason homestead for visitors.

2.8 Landscape
The term landscape is used to describe the visual image of the area. In many places the natural landscape has been modified by the activities of man to become the cultural landscape; the landscape has already undergone modifications and will continue to change. It is the rate of change and degree of impact, which are important to management of the landscape.

The objective of CALM's Visual Resource Management Policy is to ensure that all lands are managed in ways that sustain the beauty of the natural environment.

Lake Mason and Black Range pastoral leases are located within the "Meekatharra Plateau" Landscape Character Type (Stuart-Street and Kirkpatrick, 1994). Typical of this landscape is gently undulating sandplains with ridges of metamorphic rocks and granite hills and rises. Small scattered erosional breakaways are evidence of a former plateau landscape. Areas of salt lake, saline playas and clay pans are common. The vegetation is dominated by various associations of Mulga (*Acacia aneura*).

Action
- Ensure development proposals are managed to minimise impact on the landscape, in accordance with CALM's Visual Resource Management guidelines.

2.9 Erosion, Mining and Rehabilitation.

2.9.1 Black Range.

Agriculture WA rangeland condition reports indicate that 82 % of Black Range is comprised of very low pastoral value rangeland, most of which is spinifex sandplains. The balance of the lease consists of mostly moderate pastoral value mulga plains. As much of the lease has not been stocked, the general rangeland condition is quite reasonable with 49% in good condition, 25% fair and the balance (26%) in poor condition. Areas in the home paddock are badly degraded and eroded.

There is no known history of previous mining on Black Range. Exploration activities (tracks, drilling etc) have occurred in the western sandplain areas and there is one pending tenement application in the west (Appendix 2). There is no current mining or exploration activity. Inspection and mapping of all historical exploration tracks is required.

Some localised active track erosion has occurred in the Sherwood and Yanganoo range types and on other access tracks where the natural water flow has been intercepted, rehabilitation works are required.

2.9.2 Lake Mason.

Agriculture WA rangeland condition reports indicate that 37% of the rangeland is in good condition, 25% in fair condition and 38% is in poor condition. 851 hectares has been severely degraded (about 0.6%) with vegetation loss and active erosion. The lease has been very lightly stocked since the early 90's, with limited waters operating for a number of years and is showing signs of vegetation and range recovery.

Lake Mason has a history of mining, exploration and prospecting and currently there are 17 active tenements over the lease with 13 exploration licences and 4 mining leases (Appendix 2). In addition there are 3 pending applications. Areas of exploration with varying degrees of environmental management and impact were noted. A full inspection is required and liaision with tenement holders relating to ongoing and proposed activities and rehabilitation.

Prospecting and metal detecting has occurred in the Red Castle Well area. This will require management.

Some localised active track erosion has occurred in the Sherwood range type and on other access tracks where overland water flow has been intercepted by these alignments. Repair and rehabilitation work is required.

Action

- Any future mining tenements will be granted in accordance with conditions agreed to between CALM and the Department of Minerals and Energy (DME). Prior to any ground disturbing activity a detailed program will be prepared by the proponent and referred to CALM. This program will also address rehabilitation requirements.
- Map and inspect all exploration activity. Liaise with tenement holders
- Carry out erosion control and rehabilitation work (bunding, fill and closure) along 10 - 15 km of eroded tracks as outlined on the firebreak, access and rehabilitation plan (Appendix 3). Assess all tracks and complete work on a priority basis.

2.10 Fire.

Fire management considerations include the protection of persons, property and conservation values. Fire is a major ecological process in spinifex communities which burn readily and are adapted to fire. In these communities fire is a major determining factor for ecological diversity. Mulga communities and most of the other vegetation associations on Black Range and Lake Mason are fire sensitive. A program of protection and strategic prescribed burning will be necessary (manual and aerial).

Recent fire knowledge on Black Range/Lake Mason includes a number of spinifex and sandplain fires from 1995 to 2000. There is evidence of past fires in spinifex communities exists (charcoal, regeneration and burnt mulga).

An extensive area in the west and northwest of the lease was burnt in the summer of 1995. Vegetation regeneration and recovery has been good. There was a series of fires in the area, especially in the north, during the 2000/01 summer that have yet to be mapped.

Action

- Use historical data and survey to map fire history, impacts and prescribed burning needs. Interpret, through biological survey and mapping vegetation associations, the fire susceptible areas requiring management and protection.
- Prior to any prescribed burning being undertaken, a fire management plan for Black Range / Lake Mason will be developed.
- Undertake ground and aerial prescribed burning in accordance with the fire management plan.
- Remove dry grass and other flammable material annually from around the Homestead buildings and assets.
- Develop and grade strategic access tracks and firebreaks

2.11 Land Tenure, Boundary and Internal Fences.

Lake Mason Pastoral Lease (3114/551) was purchased by CALM on 25th July 2000 and Black Range PL on the 18th October 2000. Both became unallocated Crown land, managed by CALM under section 33(2) of the CALM Act as agreed in the MOU between CALM and DOLA, pending action to set them aside as conservation reserves. The intention is to convert these previous pastoral leases to a Conservation Reserve (Nature Reserve or Conservation Park), vested with the Conservation Commission and consistent with Native Title requirements. Liaison with the Shire of Sandstone and the Department of Minerals and Energy (DME) will be necessary.

Lake Mason, from the north west corner in a clockwise direction, has common boundaries with;

- Gidgee Pastoral Lease 3114/849 (two parts with 10 km of boundary with no effective fence). Destocked.
- 2 Crown reserves, Public Utilities #17437 and Common #9959 (22 km of boundary with very old poor quality sheep fence). No grazing.
- Part of Kaluwiri Pastoral Lease 3114/1232 (40 km of boundary with very old poor quality sheep fence). Destocked.
- Yeelirrie Pastoral Lease 3114/620 (8 km of boundary with 7 km of good quality sheep fence). Grazed adjacent to boundary, shared water at Kellys Bore.
- Booylgoo Spring PL 3114/790 (4.5 km of boundary with poor fencing). No stock adjacent to boundary.
- Kaluwiri Pastoral Lease 3114/1232 (80 km of boundary with very old poor quality or non existent sheep fence). No stock adjacent to boundary.
- Black Hill PL 3114/1031 (11 km of boundary with very old poor quality sheep fence). Destocked.
- the former Black Range Pastoral Lease (CALM) with 21 km of common boundary.
- Barrambie Pastoral Lease 3114/1187 (30 km of boundary with very old poor quality sheep fence). No stock adjacent to the boundary.

Black Range, from the north west corner in a clockwise direction, has common boundaries with;

- Barrambie Pastoral Lease 3114/1187 (32 km of boundary with only 7 km of very old poor quality sheep fence and the remainder unfenced). Minimal stock, no stock adjacent to boundary.
- the former Black Range Pastoral Lease (CALM) with 21 km of common boundary
- Black Hill PL 3114/1031 (26 km of boundary with old poor quality sheep fence). Destocked.
- Windamurra PL 3114/1150 (23 km of boundary with only 7 km of old poor quality sheep fence). No stock adjacent to boundary.
- Windsor PL 3114/1207 (26 km of boundary with a good fence (the No 1 Rabbit proof fence along reserve 29839). No stock adjacent to boundary.
- Cogla Downs PL 3114/744 (5 km of boundary with a good fence (the No 1 Rabbit proof fence along reserve 29839). Minimal stock adjacent to boundary.

Only the Lake Mason east (Yeelirrie, 8 km) and Black Range west (the No 1 Rabbit proof fence, 31 km) boundary fences are stock proof. No other external internal fences are stock proof to either cattle or sheep.

Currently there are only stock adjacent to the boundary in the east on Yellirrie PL and some of the west where there are stock proof fences. Boundary fencing will be monitored and maintained where grazing is occurring adjacent to the reserve.

Stock movements are limited by the availability of natural or artificial waters and the type of country, especially where spinifex vegetation occurs adjacent to the boundary. Once artificial waters have been closed down, entry and grazing by neighbouring stock will be very limited when seasonal conditions provide surface water.

There is in excess of 300 km of internal sheep fencing in various states of repair from good, through poor to virtually non-existent. Some fences restrict access, interfere with water flow and creeks, are dangerous to wildlife and require removal.

Action

- Remove internal fencing on a priority basis especially sections of internal fences which cross-creeks or impact on access, landscape and tourism management.
- Commence the process of changing the tenure to a CALM managed conservation reserve under relevant legislation.
- Monitor entry by neighbouring stock, assess their impact, and develop control measures by fencing where necessary, in conjunction with neighbours.
- Liaise with the Murchison Regional Vermin Council about ongoing maintenance of the No 1 vermin fence and access track.
- Once reserve vesting is finalised, undertake statutory management planning.
- Establish a boundary track, in liaision with neighbours, where required, to demarcate the reserve and facilitate fence, fire and stock management.

2.12 Artificial Waters.

At the time of inspection for the IMG's of the 30 bores and mills on Lake Mason, the common and south part of Gidgee Station there were 7 mills and the homestead complex (several mills) operating. On Black Range there were 8 mills operating (including the homestead) with several other abandoned mills and wells. All the mills and waters infrastructure, apart from the Lake Mason homestead complex belong to the former owners.

Artificial waters support artificial population levels of animals, concentrated in areas surrounding those waters. Artificial waters will be systematically closed down as seasonal conditions and destocking permit. This will be done when existing native animal populations are naturally dispersed as sudden denial of water from artificial sources is undesirable.

Action

- Existing mills, other than the 2 mills at the Lake Mason homestead and the 2 mills at the Black Range homestead (subject to negotiated ongoing occupancy terms), will be systematically closed down as seasonal conditions and destocking determine. Open wells and bores will be secured so they are safe and not accessible to stock and wildlife.
- Windmills and infrastructure (privately owned), other than those at the Lake Mason homestead, will be sold and removed by the former owners following destocking. Anticipated to be after December 2001.

3. MANAGEMENT FOR PARKS AND VISITOR SERVICES

3.1 Access and Basic Raw Materials.

Public access through the area is currently limited to the Gidgee Rd and Sandstone - Meekatharra Road. The main roads are managed by the Shire. There are good access roads to the Lake Mason homestead off the Gidgee Rd (3 km) and Black Range homestead from Sandstone (4.5 km within the lease).

There is a network of boundary (320 km) and internal station tracks (more than 520 km) in various states of repair, with many overgrown.

Shire gravel borrow pits occur adjacent to the Sandstone - Meekatharra Road and Gidgee Road. Borrow pits require rehabilitation for vegetation, landscape and erosion management.

Action

- Liase with the Shire of Sandstone to ensure current and future borrow pits are operated in accordance with CALM Basic Raw Material Guidelines and rehabilitated to current standards.
- Maintain a strategic network of roads and boundary tracks for management, fire control and visitor access (Appendix 3). This will involve some grading, realignment, clearing of overgrown vegetation and possible minor new construction
- Erect boundary and management signs at entry points to the reserve and at the Lake Mason homestead.
- Liaise with the Sandstone Shire to remove grids where internal fences cross main roads.

3.2 Tourism and Visitor Safety.

Black Range and Lake Mason currently receive some visits from tourists and prospectors. Waukenjerrie breakaway is an attractive site with some camping occurring in the past. Recent camping activity in alluvial gold prospective areas around Red Castle Well indicate active use by prospectors (metal detecting).

No location or direction signs exist on the leases other than on the main road, there are visitor risk management issues associated with this.

The extent and type of visitor use of the area requires assessing and management.

Action

- Conduct a visitor risk analysis.
- Assess the need to maintain, upgrade, close or rehabilitate access roads and tracks.
- Review PVS program demands and needs. Develop an access and site management plan for the reserve, Lake Mason homestead and Waukenjerrie breakaway area as demand dictates.
- Establish strategic direction and orientation signs throughout the lease in areas accessed by visitors

3.3 Infrastructure and Facilities.

Infrastructure has been established for management of the area as pastoral leases including buildings (homesteads and shearers quarters), sheds, shearing shed, fences, yards, roads, water points, a rubbish tip and airstrip.

The Lake Mason homestead complex has good quality facilities and buildings including the homestead, Shearers' quarters, shearing shed and associated sheds, outbuildings, yards, fences and water supply. The Shearers' quarters are in need of maintenance and the water supply requires rationalising and refurbishment (tank stands relocation, overhead tanks and piping). There is evidence of considerable termite activity that will need regular treatment.

The Black Range homestead complex has limited facilities including the house, shed and a small shearing shed and associated yards, water supply and some sheds. None were purchased with the lease and some will be removed when the former owner chooses to leave.

For ongoing management and protection of the reserve some infrastructure will be required including 'caretaker' accommodation at the Lake Mason homestead, “field study centre” accommodation for visiting staff and for biological survey projects, airstrips, roads and tracks and some internal management fences and boundary fencing.

Action

- Maintain essential homestead facilities and infrastructure for a caretaker and the field study centre accommodation (shearers quarters) at the Lake Mason homestead complex.
- Maintain (bore and rainwater), rationalise and refurbish the Lake Mason homestead water supply infrastructure.
- Treat the LM homestead and shearers quarters for termites and assess damage.

- Clean up the Black Range homestead complex as required once removal of sheds and equipment occurs subject to negotiated ongoing occupancy terms.
- Assess the safety and risk factors, value, practicality and cost/benefit of maintaining the homestead buildings. Remove or retain and maintain infrastructure such as buildings following this assessment.
- Maintain the airstrip located near the Lake Mason homestead.
- Rationalise, bury existing rubbish and re establish the Lake Mason rubbish tip as a managed site.

3.4 Information and Interpretation.

A well-informed and supportive public can greatly assist CALM with the management of remote areas such as Black Range and Lake Mason. Information and interpretative display boards at key recreation, historical and cultural locations provide an important avenue for communicating with visitors. Staff contact on site is also an effective means of communicating information. The remoteness of Black Range and Lake Mason restricts regular CALM staff visits. The appointment of a 'caretaker' at Lake Mason and Honorary CALM Officers may provide opportunities for the transfer of information and assist with management activities.

Action

- Identify key locations for the provision of suitable interpretative material.
- Prepare information about the reserve for distribution on site, regionally and through the Sandstone information centre.
- Provide interpretative displays in accordance with existing standards.
- Develop a 'caretaker' role for Lake Mason and liase with neighbouring land managers about assistance and HCO roles

4. RESEARCH AND MONITORING

4.1 Nature Conservation.

Effective conservation management requires adequate knowledge of flora, fauna and natural processes within the landscape, including baseline condition and changes associated with management, natural events and climate. Survey, research and monitoring provided long term information on trends.

Action

- Detailed flora and fauna surveys (biological survey) are required to document baseline condition, locate threatened or priority species of flora and fauna and document vegetation associations including any unique assemblages.
- Feral animal and weed populations will be monitored and controlled through appropriate management.
- Monitoring of recovery and succession trends following removal of grazing pressure, particularly around former artificial water points
- Identify and monitor degraded areas to prevent further degrade and damage.

4.2 Social.

Visitor numbers to the area are expected to increase once the area is gazetted as a CALM Reserve and the Mt Magnet - Sandstone - Leinster road sealing is complete.

To assist in the development of interpretative information and other facilities, regional staff will need to gather information about the number of visitors, their expectations and reasons for travelling in this area. Visitor surveys will provide information about patterns of use and the need for the provision of facilities and information.

Action

- Conduct appropriate visitor surveys.
- Monitor visitor impacts to the area.
- Install a vehicle counter (VISTAT) at the homestead access gate and liase with the Sandstone Shire about vehicle usage levels on the main road.

5. IMPLEMENTATION AND WORKS PROGRAM

The implementation of these guidelines will be undertaken within the annual works program developed by Goldfields regional staff. Implementation activities will also be subject to broader regional priorities and will depend on the availability of staff and other resources.

These guidelines may be amended as new information becomes available or major development (such as mining activities) occurs.

Activities that will be conducted over the next few years, and costs are identified in the Operations Plan (Appendix 4).

“High Priority” activities are programmed for completion in 2000/2001 and 2001/2002

“Medium Priority” activities are programmed for completion in 2002/2003

“Low Priority” activities are programmed for completion in 2003/2004

6. REFERENCES.

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ISSUE AND STRATEGY	PRIORITY H, M, L *	SALARY Days/$	WAGES Days/$	T/A Days/$	BUDGET				COMMENTS
					MATERIALS	PLANT	CONTRACT	TOTAL	
2.1 Geology & Landforms									
Provide interpretive material	L	2 / 400			100			500	
2.2 Vegetation Associations and Flora									
Vegetation and flora survey (biological survey/Landscope Expedition)	M	60 / 12000	20 / 2000	80 / 4000	4000	6000		28000	Cost TBC depends on Landscope expedition details
Rare and priority flora survey	M	Included above in 2.2 biological survey							
2.3 Introduced Plant Species									
Control and monitor weeds	H Annual		5 / 500	5 / 250	500	1000	1000	3250	Use contractors or 'caretaker'
2.4 Native Fauna									
Biological survey	M	Included in 2.2							
2.5 Introduced Fauna									
Destock	H	No cost to CALM							
Monitor re-entry of stock	H	2 / 400		2 / 100		100		600	
Contribute to regional control programs and aerial baiting	H				1000		1000	2000	APB and group dogging
Monitor & control other ferals	M	2/400			100	300	1500	2300	Includes roos initially
Decommission artificial water points	H	No cost to CALM							
Discourage domestic animals	L	Included in 3.4							

2.6 Aboriginal Heritage									
Liaision and consultation	H	2 / 400						400	
Site protection	H	2 / 400				250		650	Install signs
2.7 European History									
Provide information	M	1 / 200			100			300	
Document, maintain and protect	H	5 / 1000		5 / 250				1250	See also 3.3
2.8 Landscape									
Incorporate visual resource management guidelines	L	1 / 200						200	
2.9 Erosion, Mining and Rehabilitation									
Administer mining tenements	H	5 / 1000		5 / 250		1000		2250	
Map and inspect exploration									Concurrent with admin, mgt above
Erosion control work (tracks)	H	2 / 400		2 / 100		500	4500	5500	Loader & grader, up to 15 km @ $300/km and signs
2.10 Fire									
Map history and impacts. Identify areas requiring fire management and protection	L	4 / 800		2 / 100		1000		1900	Mapping, photos and remote sensing
Prepare a fire management plan	H	3 / 600			100			700	
Annual prescribed burning	H	10 / 2000	10 / 1000	20 / 1000	500	1000	?	3500	Contract depends on aerial component
Annual homestead protection	H						500	500	Caretaker
Grade strategic access tracks and firebreaks	H	5 / 1000		5 / 250		1000	34000	36250	250 km of boundary @ $100/ km 190 km internal @ $100/km

2.11 Land Tenure, Boundary & Internal Fences									COMMENTS
Remove internal fences which pose management difficulties	L		5 / 500	5 / 250		2000	1000	3750	Wages and/or caretaker
Create a conservation reserve	M	2 / 400						400	
Monitor stock entry &develop controls where necessary	H	Included in 2.5							
Liaise with MRVC re No1 fence and track	H								
Undertake statutory management planning	L	15 / 3000		5 / 250		2000		5250	
Establish a boundary track	H								Included with 2.10 firebreaks and access
2.12 Artificial Waters									
Decommission windmills	H	No cost to CALM							
Dispose of windmills	H	No cost to CALM							
3.1 Access and Basic Raw Materials									
Liaise with Sandstone Shire re borrow pits	M	1 / 200						200	
Liaise with Sandstone Shire re removing grids	M	No cost to CALM							Shire meetings, as above
Maintain strategic access	H-M	Included in 2.10							
Erect signposting at major access points and the LM homestead area	H		5 / 500	5 / 250	3000	500	?	4250	6 signs Wages and/or caretaker

3.2 Tourism and Visitor Safety									COMMENTS
Conduct visitor risk analysis	H	2 / 400		2 / 100		250		750	
Prepare an access track management program	H	Included in 2.10							
Review PVS needs. Develop a reserve site management plan	L	5 / 1000		3 / 150		1000		2150	
Erect key direction signs	H		2 / 200	2 / 100	1000	500		1800	Wages and/or caretaker
3.3 Infrastructure and Facilities									
Maintain LM Hsd buildings and shearers quarters	M	2 / 400		2 / 100	1000	500	1000	3000	
Refurbish LM Hsd water supply	H				3000	500		3500	2 tanks (20K & 4.5K) delivered Installed by caretaker
Treat for termites	H	1 / 200					4000	4200	
Assess status/cost/benefits of buildings and retain or remove									With other visits
Clean up BR homestead area	L		6 / 600	6 / 300		1000		1900	Wages and/or caretaker
Rationalise rubbish tips	L	1 / 200		1 / 50			1000	1250	
Maintain LM airstrip	H		1 / 100	1 / 50		100		250	Wages and/or caretaker
3.4 Information and Interpretation									
Identify key interp locations	L	1 / 200						200	
Prepare and distribute information	L	1 / 200			50			250	
Provide interpretive displays	L	5 / 1000			4000			5000	
Caretaker and liaise with neighbors re HCO roles	L	1 / 200		1 / 50		500	5000	5750	TBC, depends on negotiated deal

4.1 Nature Conservation									
Biological survey (see 2.2 & 2.4)	M	included in 2.2							
Monitor feral animal and weed populations (see 2.3 & 2.5)	H	included in 2.3 and 2.5							
Monitor vegetation recovery and succession (WARMS)	M	5 / 1000		5 / 250	500	1000		2750	
Monitor degraded areas	H	Included in with other work							
4.2 Social									
Conduct visitor surveys	L	1 / 200		1 / 50				250	While on other work trips
Monitor visitor levels and impacts	H	Included in routine work							
Install a vehicle counter at the homestead	M				500			500	While on other work trips

	SUMMARY							
PRIORITY		**SALARY**	**WAGES**	**T/A**	**MAT**	**PLANT**	**CONT**	**TOTAL**
High 2000/01 and 2001/02	H	35 / 7000	23 / 2300	59 / 2950	6000	6200	45000	69450
Medium 2002/2003	M	68 / 13600	20 / 2000	87 / 4350	6200	7800	2500	36450
Low 2003/2004	L	25 / 5000	11 / 1100	24 / 1200	4250	7500	7000	26050