

A PROPOSAL TO ESTABLISH AN OFF-RESERVE CONSERVATION PROGRAM FOR WESTERN AUSTRALIA'S RANGELANDS

Executive Summary

This proposal seeks resourcing support for developing a program to deliver off-reserve biodiversity conservation outcomes across Western Australia's rangelands. The program, to be named Rangelands Off-reserve Conservation **ROC**, will be developed over a five year period, and will have four major components:

- ◆ A landscape planning process, similar to the workshops run through the EMU project;
- ◆ On-going technical support through annual visits or better, through communications support using web tools, and through special/demonstration projects that aim to protect or restore identified biodiversity values;
- ◆ Limited financial support for management, including funding for specific infrastructure necessary to protect and/or to restore biodiversity values, and a program of incentives or stewardship payments;
- ◆ A follow-up service to build the formal recognition of contributions to biodiversity conservation outcomes through legal and other means such as Section 16A Agreements, Lease conditions, accredited EMSs, and contracts.

The program will also provide technical and professional advice to CALM regional staff on the management of the existing conservation estate and acquired lands on request. The program may also provide advice on management of lands to be acquired through the 2015 processes. It is anticipated that this advice will come from the landscape process focus that will be a part of the ROC program.

It is expected that the ROC program will be completely consistent with the Rangelands NRM Regional Strategy and Investment Plan.

The budget for the ROC program is for \$0.5 million in Year 1 rising to \$1.1 million in year 5, subject to review.

The Rangelands

The rangelands of Western Australia take in all the lands outside the South West Agricultural Region, otherwise known as the South West Intensive Land-use Zone. The rangelands cover 200 million hectares (89% of the State) of which 98 million hectares is leased for pastoral purposes (45% of the State, 527 leases). Sixty two of these pastoral leases are held by Aboriginal corporations and communities, and 47 are owned by mining companies. Two leases are owned by not-for-profit conservation organisations. Other land-use in the region include national parks, nature reserves and conservation parks, Aboriginal reserves and mining and petroleum tenements.

Within the rangelands, CALM is responsible for the management of around 18.6 million hectares of national parks, nature reserves, conservation parks, timber reserves, former pastoral leases, marine parks and marine nature reserves. This is around 74% of the total CALM estate. In addition, CALM has responsibility for the management of unallocated Crown land throughout the State; the great majority of uCl is in the rangelands. About 23% of Departmental Regional staff have specific,

direct responsibilities for management of this substantial part of the State supported, of course, by the other Divisions.

It is proposed that the ROC program will focus on family-owned pastoral leases in the first instance, but will provide support for improved management of leases and other lands held by Aboriginal corporations and communities, and by mining companies as a second priority.

The ROC program will also provide support for the management of the CALM estate throughout the CALM regions that overlap the rangelands, on request. The pastoral leases acquired by CALM from 1998 to 2004 under the Gascoyne-Murchison Strategy have been documented through EMU workshops as a means of recording the local knowledge of each outgoing lessee, but there has been limited follow-up with Departmental staff.

If there is a Government decision to provide support for management of lands destined to come under the management of CALM (and possibly other agencies) through the 2015 process in the transitional period, to ensure that those lands and their identified values are appropriately managed between 2005 and 2015, it may be possible for the proposed ROC program to provide some of that support.

Biodiversity in the rangelands

The rangelands of Western Australia are very important for biodiversity conservation. The geographic coverage of the rangelands is vast: the rangelands encompass a substantial area, a wide range of environments from north to south, east to west, and a very large number of ecosystems, however measured. It is reasonable to expect that the rangelands would have included a substantial proportion of the State's biodiversity at the time of colonisation. However, only a small proportion of the rangelands have been comprehensively evaluated for their biodiversity values, present and past (based on reconstructions from sub-fossil records). What we do know, however, indicates clearly a substantial decline in the biodiversity values over the past 175 years. For example, a recent assessment for the Biodiversity Audit indicates that most of the rangelands bioregions have experienced regional extinction of 40-60% of their original non-volant mammal fauna. The reported extinctions in the Kimberley bioregions are less but, at the same time, there is an emerging concern about the contractions of many mammal species to a small proportion of their original distributions.

Observations of landscapes in the pastoral areas of the southern rangelands over the past decade indicate that a considerable proportion of those lands are moderately to seriously degraded, and that the degradation will continue without deliberate management interventions. This represents a substantial loss of habitat, and is also leading to an as-yet undocumented problem of fragmentation of the rangelands. A problem of major proportions is the loss of critical drought-buffering habitats - the wetlands, springs and soaks, waterholes and damplands that fauna and components of the flora rely on through extended low rainfall periods.

There is clearly a need for increased conservation efforts in the rangelands if the proposed biodiversity conservation objective of *Decline in biodiversity is halted and where possible reversed* is to be achieved within 25 years (CALM 2004, *Towards a biodiversity conservation strategy for Western Australia*. Government of Western Australia, Perth. 'Vision' page 9).

Off-reserve conservation in the rangelands

The conservation estate alone will not be sufficient to achieve biodiversity conservation across the rangelands, and some complementary management is required. The present terrestrial conservation estate covers only around 8.8% of the State's rangelands. It does not yet satisfy criteria for comprehensiveness, adequacy and representativeness. At this sampling level, it is unlikely that the reserve system will contain more than 50% of the total range of biodiversity values of the rangelands.

Some biodiversity values are too large (eg. rivers and riparian vegetation), too scattered (eg. individual populations of rare plant species) or too ephemeral in their use of resources (eg. grass seed-eating birds) to be fully incorporated in the conservation reserve system. Further, the highly variable and seasonal nature of the climate throughout the arid and semi-arid rangelands results in much of the more mobile elements of the biota migrating or dispersing across large distances in response to local, favourable conditions.

An off-reserve conservation program is critical to deal with the specific, significant biodiversity values of the rangelands that occur outside the existing conservation reserve estate in that region.

Such an off-reserve conservation program will also need to focus on the threatening processes that occur at a scale beyond that of the individual park or reserve. Landscape or sub-catchment scale threatening processes that have been identified for the rangelands include:

- ◆ Changed patterns and rates of water movement into, across and through rangelands landscapes (includes abstraction);
- ◆ Loss of topsoil, nutrients, seedbanks;
- ◆ Changed fire regimes;
- ◆ Predation by introduced species, notably foxes and feral cats (possibly some impacts from so-called wild dogs, potential impacts of toads);
- ◆ Trampling and grazing by ungulates, notably sheep, cattle and goats;
- ◆ Overgrazing by non-ungulates including camels, increased populations of macropods;
- ◆ Invasion by environmental weeds notably buffel grass (though it should be noted that invasion by some unpalatable woody weeds is closely related to changed hydrology).

The proposed off-reserve conservation program for the rangelands will address all these threatening processes to some degree; in some cases such as fire regimes and predation, advice will be provided to specialists elsewhere in the Department to instigate a suitable response.

The Proposed Rangelands Off-reserve Conservation Program (ROC)

Scope

The proposed off-reserve conservation program to be established within the Department will have the following scope of work:

- ◆ Collation of information leading to the identification of biodiversity values in the rangelands, including regional and local biodiversity hotspots;

- ◆ Provision of support for the management of significant biodiversity values known to occur outside the existing CALM-estate;
- ◆ Negotiations to secure management agreements to conserve the identified biodiversity values, including funding arrangements for management where necessary;
- ◆ Planning for and, where possible, acting to mitigate, threatening processes that impact on biodiversity values, both those within the CALM-estate and those known to occur outside the CALM-estate;
- ◆ Provision of professional support for the management of portions of the CALM-estate where requested by the CALM Regional staff; and
- ◆ Provision of professional support for the management of 2015 excision lands for biodiversity conservation purposes in the event of a Government decision that this should happen.

Personnel

The proposed program will build on relevant areas of strength that have emerged over the past 7-8 years in the Department's work in the rangelands, especially as a result of activities under the Gascoyne-Murchison Strategy:

- ◆ The outstanding negotiating skills and working relationships with pastoralists of Mr Tony Brandis leading to successful voluntary adjustment of 37 pastoral leases in the Gascoyne-Murchison Strategy area, and the successful conclusion of negotiations on 62 of the 65 areas proposed for excisions for conservation under the 2015 processes (need to check numbers w Tony);
- ◆ Mr Brandis' work in developing Interim Management Guidelines for pastoral leases acquired under the Gascoyne-Murchison Strategy, in collaboration with Regional staff;
- ◆ The outstanding capacity of Dr Ken Tinley to read and understand landscape processes, to identify problem issues and practical solutions, to apply this in working with pastoralists and other land managers to achieve biodiversity conservation outcomes, as demonstrated through the EMU project; and
- ◆ The work of Dr Tinley in identifying potential biodiversity hotspots in the Gascoyne-Murchison Strategy area through the collation and analysis of relevant datasets. (Note that the outcomes of this work were used by Mr Brandis in the later stages of his lease acquisition program.).

Note here that a number of other people have made significant contributions to the outcomes referred to above, and this is acknowledged. In particular, Gordon Graham and Regional staff have been heavily involved in the 2015 negotiations. The EMU project has been a collaborative one with the Department of Agriculture (Dr Hugh Pringle) and has involved additional staff employed through the Centre for the Management of Arid Environments.

The proposal is that Mr Brandis and Dr Tinley will make up the core of the Rangelands Off-reserve Conservation program. Dr Tinley will probably transition to part-time employment at some stage, so provision has been made for him to train at

least one additional staff member during his final working years. Administrative support has also been provided for in the budget.

Additional investment

For the proposed program to be effective, there will be necessary to include in the budget an amount for provision of infrastructure for management, including fencing, trap yards etc and for rehabilitation works such as scrub packing and limited earthworks.

It is also proposed that the budget include an amount for incentives and stewardship payments. While the specific details of this component of the program have yet to be developed, it is envisaged that this component will be complementary with the Bushland Benefits scheme that is now being developed for the South West Intensive Land-use Zone. The focus for this investment is specifically in the rangelands.

The discussion below on outcomes indicates that there is support amongst pastoralists for the use of Environmental Management Systems EMSs as a practical alternative to contracts and other formal mechanisms to achieve conservation outcomes on pastoral leases. It is suggested that this emerging trend is worth supporting, and the draft program budget includes an annual allocation for this purpose.

It should be noted that the increased Departmental presence and activities in the rangelands are likely to result in approaches to sell entire pastoral leases or portions of leases to the Department for conservation purposes. A specific stream of funding for land acquisition should be loosely linked to this program.

Funding for development and implementation of a specific communication strategy has also been included in the budget.

Governance

It is proposed to establish a steering committee for the program, at least for its formative years. The steering committee will have responsibility for setting the general program direction, deciding targets for each of the performance indicators, and evaluating performance against these indicators. The steering committee will also be the primary reference point for all negotiations with the Rangelands NRM Coordinating Group, the Pastoral Lands Board (where necessary) and other Government Departments.

The program will operate within the Nature Conservation Division under the direct supervision of the Acting Manager, Wildlife Branch, and alongside the existing off-reserve conservation programs including Land for Wildlife program and the Conservation Covenants program.

Composition of the steering committee will be (proposed):

- ◆ Dr Ken Atkins Acting Manager, Wildlife Branch;
- ◆ Dr Neil Burrows, Director Science Division (to provide necessary scientific oversight and because of his personal interest in the state of the rangelands);
- ◆ Mr Nigel Sercombe, Rangelands NRM Coordinator; and

- ♦ Mr Kelly Gillen, Regional Manager, Midwest Region (because of his previous engagement with the Gascoyne-Murchison Strategy and consequent familiarity with the issues and process, and because of his previous strong support for the EMU process).

It is proposed that the program be subject to an independent review after four years of operation to identify future directions and funding needs.

Budget

A detailed budget is provided at Attachment 1. A summary of that detailed budget is shown here.

Draft Budget

Cost Item	Year 1	Year 2	Year 3	Year 4	Year 5
Salaries + oncosts: Brandis, Tinley plus administrative support	249,000	271,000	290,000	305,000	328,000
Operating Brandis, Tinley + administrative support	51,000	56,000	62,000	69,000	75,000
Salary + oncosts, additional rangelands/ landscape ecologist	—	48,000 (half year)	95,000	99,000	105,000
Administrative support 0.5 increasing to 0.8 L2/4 salary + oncosts	34,000	44,000	57,000	65,000	80,000
Subtotal: salaries & operating	300,000	389,000	471,000	481,000	539,000
Legal costs, management agreements, lodgement of documents	Not costed				
EMS accreditation support	30,000	50,000	75,000	75,000	75,000
Management infrastructure, rehabilitation works	50,000	100,000	100,000	100,000	100,000
Incentives, stewardship payments	80,000	100,000	150,000	200,000	300,000
Funding for land acquisitions to be included elsewhere, but activities under this program will create opportunities for acquisition and support for management once agreement reached					
Communication strategy development & implementation	20,000	30,000	30,000	30,000	30,000
GIS support, data analysis & management	20,000	30,000	30,000	30,000	30,000
Total program costs	500,000	699,000	851,000	916,000	1,074,000

Outcomes of the proposed Rangelands Off-reserve Conservation program

It is essential that the proposed Rangelands Off-reserve Conservation program have tangible, measurable biodiversity conservation outcomes that can be reported against annually and for the proposed program review in Year 5. A list of draft performance indicators is given below: it is recommended that these form the basis of a discussion

between the steering committee and the program staff at the commencement of the program and that targets be set at that stage. However, it is anticipated that the performance indicators and targets will evolve and develop increasing relevance and precision as the program itself develops.

The rangelands present a number of special challenges for off-reserve conservation, particularly in the realm of performance measures. These include the large areas that will be needed for conservation, the remoteness and likely costs of infrastructure such as fencing, and the fact that the land is leasehold rather than freehold. This last point is a key one, as it has a bearing on the formal mechanisms that can be used to protect off-reserve land and the consequent performance measures. The covenants under the National Trust of Australia (WA) Act, and the contracts with associated caveats on title under the Transfer of Land Act cannot be used, as they are both agreements with owners as distinct from lessees or occupiers. Until such time as the Biodiversity Conservation Act, with comprehensive conservation covenanting provisions, is enacted, this constraint will remain.

Section 16A of the Conservation and Land Management Act was inserted specifically to provide a legal mechanism for agreements for the management of pastoral leases (for purposes other than grazing of livestock). To date, one section 16A agreement has been negotiated over a portion of a pastoral lease – over the “Poison Paddock”.

Two other legal mechanisms have been used in the past for purposes other than biodiversity conservation and have been suggested as options for this program: conditions on leases under the pastoral lands part of the Land Administration Act, and Soil Conservation Notices under the Soil and Land Conservation Act. Both of these mechanisms can be long term, and can be put into effect relatively quickly and easily. Further investigation of these options will be required.

Recent developments with Environmental Management Systems EMSs in the southern rangelands under the existing EMU project indicates considerable promise for the use of EMSs to achieve biodiversity conservation outcomes. EMSs are becoming increasingly familiar to, and accepted by, pastoralists and this trend is likely to accelerate and incorporate independent accreditation as the industry moves to self management. The EMS framework that has been developed under the EMU project, and that is built on the outcomes of the EMU workshop, incorporates opportunities for management of key assets for biodiversity conservation. It also ensures appropriate monitoring and reporting. For these reasons, the number of accredited EMSs that incorporate and report biodiversity conservation outcomes is included as a possible performance indicator for the ROC program.

The following list of draft performance indicators is provided as a guide for the steering committee, and to indicate clearly that the ROC program is designed to be completely accountable for the substantial investment sought.

Draft list of performance indicators for the Rangelands Off-reserve Conservation program

- ◆ Number of pastoral leases that have had an EMU-type workshop with one follow-up visit, and total area of land involved +/- some measure of the value of the biodiversity assets involved;

- ◆ Number of pastoral leases within identified, potential biodiversity hotspots (Tinley hotspots report and versions for other regions) that have had an EMU-type workshop, and the total area of land involved;
- ◆ Number and type of actions resulting from the initial EMU-type workshop that have been implemented, the area of land involved, per year +/- some measure of the value of the biodiversity assets involved;
- ◆ Number of formal, legal biodiversity conservation mechanisms concluded, and the total area of land involved;
- ◆ Number of EMSs with identified biodiversity conservation outcomes incorporated in them that achieve accreditation, the area of land involved +/- some measure of the value of the biodiversity assets involved, and appropriate measure of the satisfactory performance of each EMS;
- ◆ Amount of infrastructure installed specifically to achieve biodiversity conservation outcomes, categorised by activity (eg trap yards, fencing, levy banks, length of scrub packing, baseline structures) and area of land involved +/- some measure of the value of the biodiversity assets involved;
- ◆ Area of degraded or degrading land protected and rehabilitated, and measures of success of those rehabilitation (noting that improvement is not likely to be instantaneous, especially in rangeland areas subject to drought);
- ◆ Area of wetlands, springs and soaks, waterholes and damplands protected from immediate and long-term loss;
- ◆ Number of biodiversity conservation monitoring sites installed, and number reported on, in each year;
- ◆ Measures of community support for the program, as revealed by independent survey;
- ◆ Successful Envirofunds applications submitted by members of the community in response to the ROC program (while NHT 2 continues to run);
- ◆ Scientific papers and reports published, by type, formal presentations given.

Concluding remarks

This proposal, to establish a Rangelands Off-reserve Conservation program within the Department of Conservation and Land Management, as been prepared at the specific request of the Acting Director, Nature Conservation, and with the strong support of other members of the Department. The proposal presents an opportunity to capitalise on the outstanding work of Mr Tony Brandis and Dr Ken Tinley over the past 7-8 years or so, and to covert the resulting, accumulated knowledge and expertise into a program with a long-term future. There is a pressing need for a greatly enhanced biodiversity conservation effort in the rangelands and, it is believed, the proposed ROC program will fill much of that need.

Attachment 1. Detailed Draft Budget for the Proposed Rangelands Off-reserve Conservation Program

Cost Item	Year 1	Year 2	Year 3	Year 4	Year 5
Rangelands/Landscape Ecologist PL703 salary + oncosts (Note 1)	105,000	109,000	112,000	115,000	119,000
Rangelands conservation officer PL703 salary + oncosts (Note 2)	115,000	118,000	121,000	125,000	129,000
Administrative support 0.5 increasing to 0.8 L2/4 salary + oncosts	34,000	44,000	57,000	65,000	80,000
Base salaries subtotal	249,000	271,000	290,000	305,000	328,000
Rangelands/Landscape Ecologist operating costs					
♦ Vehicle hire	18,000	20,000	22,000	25,000	27,000
♦ Travel allowances	3,000	3,500	4,000	4,500	5,000
♦ Consumables	3,000	3,000	3,500	3,500	4,000
Rangelands conservation officer operating costs					
♦ Vehicle hire	18,000	20,000	22,000	25,000	27,000
♦ Travel allowances	3,000	3,500	4,000	4,500	5,000
♦ Consumables	3,000	3,000	3,500	3,500	4,000
Administrative Officer operating	3,000	3,000	3,000	3,000	3,000
Operating subtotal	51,000	56,000	62,000	69,000	75,000
Base staff salaries + operating	300,000	327,000	351,000	354,000	403,000
Second Rangeland/ Landscape Ecologist PL 504/601 salary + oncosts	—	48,000 (half year)	95,000	99,000	105,000
Second Rangelands/Landscape Ecologist operating costs					
♦ Vehicle hire	—	10,000	18,000	20,000	22,000
♦ Travel allowances	—	2,000	4,000	4,500	5,000
♦ Consumables	—	2,000	3,000	3,500	4,000
Additional staff salaries + operating		62,000	120,000	127,000	136,000
Total staff salaries + operating	300,000	389,000	471,000	481,000	539,000
Legal costs, management agreements, lodgement of documents	?	?	?	?	?
EMS accreditation support	30,000	50,000	75,000	75,000	75,000

Management infrastructure, rehabilitation works	50,000	100,000	100,000	100,000	100,000
Incentives, stewardship payments	80,000	100,000	150,000	200,000	300,000
Funding for land acquisitions to be included elsewhere, but activities under this program will create opportunities for acquisition and support for management once agreement reached					
Communication strategy development & implementation	20,000	30,000	30,000	30,000	30,000
GIS support, data analysis & management	20,000	30,000	30,000	30,000	30,000
Total program costs	500,000	699,000	851,000	916,000	1,074,000

Note 1. Salary + oncosts calculated on the basis of present arrangements for Dr Ken Tlnley who is employed as a casual employee, at February 2005 pay scales with annual adjustment.

Note 2. Salary + oncosts calculated on the basis of present arrangements for Mr Tony Brandis, at February 2005 pay scales with annual adjustment, but not including the Temporary Special Allowance to PL 801.