



Department of Conservation and Land Management, W.A.

Benger Swamp Nature Reserve



Summary of Public Submissions
July 1987

Management Plan No. 7

BENGER SWAMP NATURE RESERVE

SUMMARY OF PUBLIC SUBMISSIONS

JULY 1987

by

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MANAGEMENT PLAN NO. 7

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INTRODUCTION

This document summarises submissions to the draft management plan for Benger Swamp Nature Reserve. Comments have been detailed according to the section of the draft plan to which they refer.

The draft management plan (DMP) for Benger Swamp Nature Reserve was available for public comment for 4 months, from 7 December 1986 to 7 April 1987. This public comment period was extended from the usual two months (as required by the Conservation and Land Management Act 1984) to four months, to allow discussions of the draft with all landholders on and adjacent to the Swamp.

The DMP was distributed to State and Commonwealth Government departments, tertiary institutions, conservation groups, individuals who had expressed an interest in management plans for conservation areas, and landholders on and adjacent to Benger Swamp. Plans were available for purchase from the Department of Conservation and Land Management's (CALM) State Operations Headquarters, regional and district offices. In addition, plans were available for inspection at the Harvey Shire Office and library and Benger Post Office.

After release of the plan, further information was made available through an article in CALM's Landscape magazine, and meetings and informal discussions with interested individuals and groups.

ANALYSIS OF PUBLIC SUBMISSIONS

NUMBER AND ORIGIN OF SUBMISSIONS

A total of 30 submissions were received (App. 1):

*	Government	-	12
*	Organisations	-	10
*	Individuals	-	8

ISSUES OF CONCERN

All issues in Part C. of the Plan for Management (see Contents for listing) were discussed in 4 or more submissions. The majority of submitters offered their support for the strategies discussed.

METHOD OF ANALYSIS

Analysis of the public submissions involved:

1. Production of a summary of public submissions (this document).
2. Evaluation of submissions using set criteria. Strategies given in the DMP were changed if a submission (or submissions) -
 - A. provided additional information on the physical or biological resources of direct relevance to management;
 - B. indicated a change in Government or management commitment, legislation or management policies;
 - C. indicated that the inclusion of additional strategies for a particular issue would help to achieve the management objective(s);
or
 - D. referred to a lack of clarity in the existing strategies.
3. Review and amendment of the DMP.

The criteria listed above (A to D) were used to evaluate the submissions and amend the DMP. Table 1 indicates the degree of revision, the changes made and the reasons for revision.

There are two reasons why a section may have received submissions but no revisions appear in Table 1.

1. All submissions generally supported the strategies, therefore no revisions were necessary (A6.0, A9.0, B2.0, C1.0, C2.0, C11.0, C12.0 and C13.0).
2. Revision was not feasible (Table 2).

TABLE 1.

REVISED STRATEGIES --
DEGREE, CHANGES MADE AND REASONS

SECTION OF THE PLAN	DEGREE OF REVISION	SUMMARY OF CHANGES MADE	REASONS FOR REVISION #
ACKNOWLEDGEMENTS	* addition	* RAOU volunteers acknowledged.	courtesy
SUMMARY	* addition	* 7 known Freckled Duck breeding sites in SW Australia.	A
	* addition	* Bengier has highest known numbers of Australasian Bitterns in SW Australia.	A
	* modification	* recent purchase of 3 blocks on Swamp has increased % purchased by Government from 87 to 89%.	B
	* modification	* poorly planned mining may affect conservation values.	D
	* modification	* finalise agreement on 'no mining condition'.	B
	* modification	* legislative procedures clarified.	D
	A1.0 LOCATION AND PHYSICAL FEATURES	* modification	* Myalup Swamp removed from Fig. 1.
	* modification	* % purchased by Government increased from 87 to 89%.	B
	* modification	* nature reserve boundary clarified in Fig. 2.	D
A3.0 GEOLOGY, GEOMORPHOLOGY AND SOILS	* modification	* legislative procedures clarified.	D
	* modification	* clarification of 'no mining condition'.	D

SECTION OF THE PLAN	DEGREE OF REVISION	SUMMARY OF CHANGES MADE	REASONS FOR REVISION #
A7.0 FAUNA	* addition/ modifi- cation	* numerous details on birds (particularly waterbirds) provided by R. Jaensch.	A
A8.0 DUCK SHOOTING	* modifi- cation	* different sources of data in text and figures clarified.	D
C3.0 MINING	* modifi- cation	* poorly planned mining may affect conservation values.	D
	* modifi- cation	* finalise agreement on 'no mining condition'.	B
	* modifi- cation	* legislative procedures clarified.	D
C4.0 WATER LEVELS, FLOODING AND DRAINAGE	* modifi- cation	* clarification of role of WAWA.	D, (B)
C5.0 WATER QUALITY	* modifi- cation	* clarification of role of WAWA.	D, (B)
	* addition	* research into nutrient requirements of <i>Typha</i> required.	C
C7.0 REVEGETATION	* addition	* comprehensive details on replanting provided.	C
C9.0 FIRE	* addition	* added objective - protection of life and property.	B
	* addition	* should ensure that the local community likely to be involved in fire control on the Swamp recognises the area's conservation values.	C
C10.0 WEEDS AND PESTS	* addition	* added objective - to control weeds and animal pests that threaten the Swamp's conservation values.	D

SECTION OF THE PLAN	DEGREE OF REVISION	SUMMARY OF CHANGES MADE	REASONS FOR REVISION #
	* addition	* further details on pest control provided.	C
D1.0 IMPLEMENTATION	* addition	* summary of implementation details included.	--
REFERENCES	* modification	* updated reference used.	--
APPENDIX 2. ISSUE OF LEASES ON BENDER SWAMP	* modification	* leases current for 5 years.	D

explanation of codes given in associated text.

TABLE 2.

REASONS FOR LACK OF REVISION

SECTION OF THE PLAN	SUGGESTED REVISION	REASON FOR LACK OF REVISION
C4.0 Water Levels, Flooding and Drainage and C6.0 <i>Typha</i>	* stop draining and cultivating the Swamp.	* current tenure. * unknown effects of holding water longer (eg. salinity, eutrophication). * cultivation best method to-date for controlling <i>Typha</i> spread.
C8.0 Duck Shooting	* Swamp remain open to duck shooting.	* essential to protect Freckled Duck breeding sites. * Government policy.

SUMMARY OF PUBLIC SUBMISSIONS

General Comments

Many submissions commended the project team on their efforts. Typical comments were:

- . '...plan provides an opportunity to develop management methods and strategies that may be transferable to other wetlands...'
- . '...DMP appreciates the values of Bengier Swamp and has devised sound and imaginative management proposals which will protect and, hopefully, enhance these values, as well as retaining the involvement of the local community.'
- . '...an excellent document outlining a practical approach to the difficult problems of improving management in an area where land tenure problems and past management practices greatly limit management options.'

The Australian Institute of Landscape Architects (W.A.) felt that:

- . '...the landscape as a visual resource has a real community value and any plan for the management of a land resource (should) consider this attribute...'

Several other submissions referred to the importance of including flora and fauna lists.

ACKNOWLEDGEMENTS

One submission refers.

This submission suggested that volunteer observers from the RAOU should be acknowledged.

SUMMARY

Three submissions refer.

Nature Conservation Values

Information was provided which updated the waterbird status of the Swamp, namely:

- . there are at least seven known breeding sites for the Freckled Duck in South-western Australia.

- . the Swamp has the highest number of Australasian Bitterns recorded from any known location in South-western Australia.

Land Tenure

During the public submission period, three additional blocks on the Swamp were purchased by the Government. This has increased the percentage of land purchased by the Government from 87 to 89%.

Water Levels and Drainage

Another submission noted that the extra 6-8 weeks the Swamp would take to dry naturally could be critical for fauna.

Mining

One submitter questioned the need to include conditions covering mining (Strategy 2), if a 'no mining condition' is assured (Strategy 1).

Local Community Involvement

The Water Authority supported revision and re-structuring of the Bengier Swamp Regional Advisory Committee (BSRAC).

PART A. BENGER SWAMP

1.0 LOCATION AND PHYSICAL FEATURES

Three submissions refer.

1.1 Location and Tenure

During the public submission period, three additional blocks on the Swamp were purchased by the Government. This has increased the percentage of land purchased by the Government from 87 to 89%.

One submitter noted that the boundary of the nature reserve in Figure 2 is not clear, while two others expressed concern about Myalup Swamp being shown as a regional wetland (as it has been drained).

1.3 Other Wetlands in the Region

The W.A. Field and Game Association stressed the importance of studying the surrounding area and wetlands.

1.4 Implications for Management

One submittor questioned the usefulness of this section, asking the question 'implications of what?'

3.0 GEOLOGY, GEOMORPHOLOGY AND SOILS

Two submissions refer.

3.1 Geology, Geomorphology and Soils

The Conservation Council noted the importance of the lunettes on the western site of the Swamp and suggested that the plan should include a discussion of the lunette's significance, and associated management recommendations.

3.3 Mining

One submittor provided a clearer interpretation of the Mining Act. The Department of Mines stated that, 'we do not accept that mining in the catchment area of the Swamp would automatically lead to adverse impacts...the wording should be "poorly planned or managed mining in the catchment of the Swamp could lead to adverse impact on the Swamp"'.

6.0 VEGETATION

Two submissions refer.

6.1 Historic Perspective

One submittor noted that there may have been an even greater spread of *Typha* in the 1979-86 period.

6.2 Present Vegetation

Another submission stated that 'shrubs, such as *Melaleuca* spp., are not generally considered to form forests. The correct terminology is thickets'.

7.0 FAUNA

Three submissions refer.

7.2 Waterbirds

Several submissions provided the following additional information:

- . RAOU surveys were from 1981-85.
- . Black Swans appear as early as June/July.
- . Reed-Warblers arrive August/September.
- . Many species listed as arriving in spring and summer are already present in low numbers.

7.3 Waterbirds of Special Importance

Further information was provided:

- . 1986/87 breeding record of Freckled Duck.
- . Further details on Freckled Duck moulting.
- . Details on hypothesised regional movements of Freckled Ducks.
- . An update on the number of wetland nature reserves on which Australasian Bitterns have been sighted.
- . A suggestion that, as a number of other wetlands are more important breeding areas for the Bittern, the importance of Bengier has been exaggerated.
- . Further details on breeding by Bitterns.

One submission suggested the inclusion of an additional section '7.3.3 Other Waterbirds', detailing other species for which the Swamp is important.

7.5 Importance of Vegetation to Birds

Several additional points were noted:

- . *Baumea* and *Typha* are also nesting areas for ducks.
- . Grassland areas are also suitable habitat for Stubble Quail.

8.0 DUCK SHOOTING

One submission refers.

8.2 Freckled Ducks

The W.A. Field and Games Association felt that shooters should not be blamed for the demise of the Freckled Duck. They also referred to apparent inconsistencies between the text (1970 - 10 Freckled Ducks shot) and Figure 12 (1970 - no data).

9.0 FIRE

One submission refers.

9.1 General

This submitter suggested '...that the *Melaleuca* stand west of the access bridge has been burned thrice ... in the 80's. From 1966 to 1980 it was not burned at all'.

PART B. MANAGEMENT OBJECTIVES

One submission refers.

2.0 MANAGEMENT OBJECTIVES FOR BENDER SWAMP

The Conservation Council said that 'although we fully agree with the management objective ..., we believe that the potential importance of Bender Swamp for the conservation of flora, of fauna other than waterbirds and landforms, should not be overlooked'.

PART C. PLAN FOR MANAGEMENT

1.0 LAND ACQUISITION

Six submissions refer.

All submissions supported the strategies given. There were several additional suggestions:

- . 'Government ultimatums could justifiably be laid...'
- . the land on 'the eastern and western edges of the Swamp and which is subject to inundation when higher water levels are maintained, should be acquired...'

2.0 RESERVE CLASSIFICATION

Five submissions refer.

All submissions supported the strategies given. One submitter drew attention to the need for vesting with the power to lease, if areas of the Swamp are to be leased to farmers.

3.0 MINING

Seven submissions refer.

Four of these submissions gave complete support to the strategies given, with the Conservation Council making the additional point that 'Mining is not an appropriate activity on any National Park or Nature Reserve.'

The other submissions:

- . provided a clearer interpretation of the Mining Act.
- . suggested that the approach '...may be inappropriate following a Crown law opinion on the scope and intent of the CALM Act.'
- . indicated that...'from past experience the Department (of Resource Development) is of the opinion that provided adequate environmental controls are implemented, mining in a catchment will not adversely affect the conservation values of that area, the statement', in the DMP is therefore inappropriate.

4.0 WATER LEVELS, FLOODING AND DRAINAGE

Eight submissions refer.

Two submissions completely supported the strategies given -

- . 'the actual management of the Swamp...appears sound and practical providing no significant changes to the present filling and draining...occur.' (Water Authority).
- . the proposal 'should not be extended to the rest of the Swamp until the full effect...can be assessed' (Department of Agriculture).

- all others, although offering support, made additional comments.

These were:

1. Lengthening the period of time the Swamp is flooded. A number of suggestions were made:
 - . initiate a cycle dependent on natural elements, rather than controlled management strategies.
 - . favour deeper water in winter combined with later drainage.
 - . improved internal drains may increase the drainage rate and enable the drainage date to be delayed.

- . 'CALM officers should be ready and able to rescue and transport trapped birds to suitable habitat'.

The Water Authority stated that if the Swamp was to be filled earlier, using the large check in the Bengier Main Drain south of the Swamp, the land upstream and to the east of the drain would flood. This action was not favoured by the Authority. To avoid this problem expensive check structures would be required close to Swamp Road. The Authority 'would not be interested in contributing to the cost of these structures'.

2. Nutrient build-up in the southern compartment. Particular concerns were:

- . 'saline level would be unable to disperse'.
- . widespread growth of *Typha* could be expected.

On the basis of these concerns submittor opposed construction of the levee.

3. Water Authority involvement.

The Water Authority stated that it 'should not be involved in the physical operation and management of the Swamp. Ultimately it should be CALM staff who operate all structures controlling water levels,... however as an interim stage it may be necessary for Authority staff to carry out works or procedures at cost to CALM ... The construction and maintenance of ... "internal" drains would be entirely the responsibility of CALM.'

4. Monitoring

Several submitters stressed the importance of monitoring. The Conservation Council referred specifically to monitoring of sedimentation, nutrient levels and salinity.

5.0 WATER QUALITY

Seven submissions refer.

Most submitters stressed the need for further studies, in particular more information on:

- . fertiliser and pesticide use.

- . nutritional requirements of *Typha* - without this knowledge we can not determine whether altered fertiliser practice will affect water quality or *Typha* (Department of Agriculture).

The Department of Agriculture also noted that 'nutrients entering the Swamp from surrounding farmland are likely to be unimportant compared to those applied directly to the Swamp'.

Finally, the Water Authority stated that it ... 'would have little or no involvement ...' in the proposed investigations.

6.0 TYPHA

Thirteen submissions refer.

All submitters agreed that *Typha* had to be controlled, however, there were divergent opinions as to how this should be achieved.

These ranged from complete approval -

- . 'an important part of the management is the plan to cultivate, and thus control, some of the *Typha* beds' (W.A. Museum).

to conditional approval -

- . recommend research on alternative methods of *Typha* control.
- . '...reservations about the proposed leasing system and farming of the Swamp, particularly as to its compatibility with the concept of an A Class Nature Reserve' (Waterbird Conservation Group).
- . 'the use of fertilisers...should be discouraged' (Conservation Council).
- . 'CALM should ensure that no insecticides or herbicides are used and that fertiliser use is minimised' (Wetland Conservation Society).

to disapproval -

- . '...strongly opposed to any part of the Swamp being used for agricultural purposes...' (FC and SM Porter).

The Department of Agriculture indicated that fertiliser rates could be reduced on previously cropped areas and also provided details on the effects of late drainage on forage crops.

One submittor questioned if the funds gained from leasing would be directly used to manage the Swamp.

7.0 MELALEUCAS/REVEGETATION

Seven submissions refer.

All submitters offered support for the strategies. One submittor requested that more details be provided, while others suggested species for replanting. The Wetland Conservation Society stressed that 'healthy wetlands need a wide, dense buffer zone...'

A number of submitters also offered their personal assistance.

8.0 DUCK SHOOTING

Ten submissions refer.

The majority of submitters supported the strategies:

- . '...we applaud your conclusion that the area should be closed to duck shooting' (W.A. Naturalists' Club).

Several submitters disagreed. The W.A. Tourism Commission felt that duck shooting at Benger should be developed as a regional tourist attraction. The W.A. Field and Game Association:

- . do not accept the argument of closing an area because of the regular occurrence and breeding of rare and endangered species. 'This is being used as an excuse to restrict duck shooting.'
- . suggested that increased education of shooters would reduce the impact on Freckled Ducks.
- . interpreted (through a lack of clarity in the plan) that this document was solely blaming shooters for the decline of the Freckled Duck at Benger.

9.0 FIRE

Six submissions refer.

All submissions supported the strategies given. One submittor noted that protection of life and property should be included in the objectives.

The Conservation Council emphasised that 'all those who may be involved with fire control activities are fully conversant with the policy and appropriate procedures'. The Waterbird Conservation Group suggested 'firebreaks which weave in and out', and that fire crews attend any prescribed burn adjoining the Swamp.

One submittor disagreed 'with stock being allowed to feed on summer pastures (to reduce fuel levels) as their droppings will add to the nutrient levels...'

10.0 WEEDS AND PESTS

Seven submissions refer.

Submitters emphasised -

- . the need to control weeds and pests when these threaten values in adjacent private land.
- . prevention of the establishment of declared plants on the Swamp, and if established, prevention of their intrusion into adjacent private land.
- . protection of adjoining agricultural properties from declared animals on the Swamp.
- . liaison with the Agriculture Protection Board and local landholders.
- . the difficult and ongoing (low priority) nature of feral animal control.
- . the need for fox control.
- . the importance of an eradication program for the Chestnut-breasted Mannikin.

- and provided specific details on -

- . weed species.

11.0 PUBLIC USE AND ENVIRONMENTAL EDUCATION

Four submissions refer.

All submitters supported the strategies. Several additional points were made:

- . develop the Swamp as a tourism product for duck shooting.
- . provide hides, perches, roosting posts and nest boxes.

- . provide for identification of all fauna, particularly snakes.

12.0 COMMUNITY INVOLVEMENT IN MANAGEMENT

Nine submissions refer.

All offered support for the strategies, with the following additional points being made:

- . W.A. Field and Game suggested shooters as volunteers for work on the Swamp.
- . 'neighbouring landholders could control fox and cat populations on their properties, and could also be alert to suspicious behaviour eg. people lighting fires in summer'.
- . public involvement in management is likely to promote a greater awareness and concern.

The Shire of Harvey sought assurance that the BSRAC would continue to function, while the Water Authority supported a transfer of Committee chairmanship from the Authority to CALM.

13.0 RESEARCH

Five submissions refer.

All submitters supported the strategies, while emphasising the importance of continued scientific studies and the need for more information. Areas of interest were:

- . water sampling.
- . survey of biological resources.
- . importance of aquatic flora to waterbirds.
- . adverse impact of human pressures on the flora.

PART D. IMPLEMENTATION AND REVIEW

1.0 IMPLEMENTATION

One submission refers.

The need to designate an officer responsible for developing yearly works programs was noted.

Discussions with CALM regional and district staff have led to the development of an 'implementation table' detailing responsibilities, priorities and duration of activities.

REFERENCES

One submission refers.

One reference was updated.

APPENDICES

APPENDIX 2. ISSUE OF LEASES ON BENGER SWAMP

3 submissions refer.

The following points were made:

- . no restriction should be placed on farmers leasing CALM land, particularly in relation to crops that are economic and viable (whether vegetable or fodder).
- . farmer interest should not be stifled.
- . a rigid policy on pesticide and herbicide use was endorsed, and the requirement for permission to be obtained in writing, supported.
- . 'should be made clear that...leases will run for the full life of the plan and not annually'.