THOMSONS LAKE NATURE RESERVE

Analysis of Public Submissions

to the

Draft Management Plan

Department of Conservation and Land Management for the Conservation Commission Western Australia October 2004

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BACKGROUND

This document is an analysis of public submissions to the Thomsons Lake Nature Reserve Draft Management Plan 2003.

The Thomsons Lake Nature Reserve Draft Management Plan was released for public comment on 27 October 2003 for a period of three months. Late submissions were accepted. A total of 22 public submissions were received (see Appendix 1 for list of submitters). All submissions have been summarised and changes have been made to the plan where appropriate.

Following the release of the draft plan, advertisements were placed in two issues of the local newspaper, Cockburn Herald, and two issues of The West Australian, advising that the draft management plan was available for comment. The draft plan was distributed to commonwealth and state government departments, tertiary institutions, recreation and conservation groups, local authorities, libraries and other community **g**roups and individuals who expressed interest during the preparation of the draft. The plan was available for viewing and/or downloading from the Department of Conservation and Land Management's (CALM) NatureBase website, from which electronic submissions could be made. Printed copies of the plan were made available at CALM's offices in Kensington, Wanneroo and Fremantle, and could be inspected at CALM libraries at Woodvale and Kensington, and the libraries and municipal office of the City of Cockburn.

ANALYSIS OF PUBLIC SUBMISSIONS

METHOD OF ANALYSIS

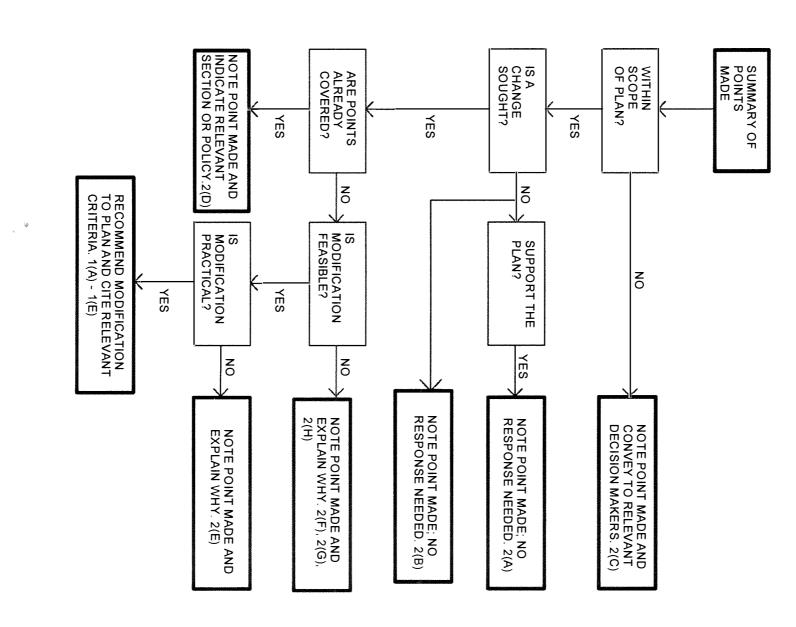
The public submissions to the Thomsons Lake Nature Reserve Draft Management Plan were analysed by the planning team before being submitted to the Beeliar Regional Park Community Advisory Committee for comment. The analysis was undertaken according to the process depicted in the flow chart overleaf. More specifically:

- The points made in each submission were collated according to the section of the draft plan they addressed.
- Each point made was assessed using the following criteria:
 - 1. The draft management plan was amended if the point:
 - (a) provided additional resource information of direct relevance to management;
 - (b) provided additional information on affected user groups of direct relevance to management;
 - (c) indicated a change in (or clarified) Government legislation, management commitment or management policy;
 - (d) proposed strategies that would better achieve management goals and objectives; or

- (e) indicated omissions, inaccuracies or a lack of clarity.
- 2. The draft management plan was not amended if the point:
- (a) clearly supported the draft proposals;
- (b) offered a neutral statement, or no change was sought;
- (c) addressed issues beyond the scope of the plan;
- (d) was already in the plan;
- (e) was one amongst several widely divergent viewpoints received on the topic and the recommendation of the draft plan was still considered the best option;
- (f) contributed options which were not possible (generally due to some aspect of existing legislation, Government or departmental policy);
- (g) was unclear; or
- (h) involved details that are not necessary or appropriate for inclusion in a document aimed at providing management direction over the long term.
- The reasons why recommendations in the draft plan were or were not changed, and the relevant criteria used, were discussed with each comment. Minor editorial changes referred to in the submissions have also been made.

Submissions have been assessed entirely on the cogency of points raised. No subjective weighting has been given to any submission for reasons of its origin or any other factor that would give cause to elevate the importance of any submission above another.





Thomsons Lake Nature Reserve Analysis of Public Submissions

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Comment No.	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Plan Amended	Criteria
1	1	GENERAL COMMENTS We are concerned at the deterioration of the reserve's biodiversity and bushland quality over the past 10 years, water level reduction, which is adverse to swans, migratory waders and other water birds, and paucity of resources allocated to	Comment noted. The final management plan contains strategies to address these issues.	No	2 (d)
2	6	reserve management. The department appears to not be sufficiently pro-active with on-site activity to deal with urgent issues. The Wanneroo base of operations appears too remote. CALM Fremantle or the City of Cockburn should take over management.	Management of Thomsons Lake Nature Reserve (TLNR) was transferred to CALM's Regional Parks Unit (RPU) as of 1 March 2004.	No	2 (c)
3	1	The management plan does not address CALM's management, appropriate budgeting or indicative remedial initiatives to address deficiencies.	CALM has prepared a maintenance program for Beeliar Regional Park (BRP) and will also prepare an annual projects list, in consultation with the Beeliar Regional Park Community Advisory Committee (BRPCAC). In relation to budgeting, CALM is allocated a recurrent budget for the maintenance of regional parks from State Treasury. The budget allocated to TL is not set and is dependant upon priorities across all of the regional parks.	No	2 (h)
4	1	The last management plan recommended appointment of a part-time wildlife officer on retainer or contract basis, to be appointed an honoury wildlife officer under the Wildlife Conservation Act. This would be a worthwhile appointment, particularly if an experienced wildlife officer or a local concerned environmental organisation had this role.	Current staffing levels are considered sufficient and appropriate for managing the reserve.	No	2 (f)
5	3	The new document is over-academic, less digestible to the park users and more difficult for the average citizen to understand. It is small, flimsy and likely to deteriorate fairly quickly compared to the 1981 booklet. It lacks the excellent vegetation map from the last plan and is unsatisfactory for a Ramsar wetland.	Noted, however the complexity of issues affecting the reserve did not warrant the preparation of a book. A detailed floristic survey of the reserve was undertaken in 1999 and a vegetation map of TL will be prepared as part of the Beeliar Regional Park Weed and Rehabilitation Plan.	No	2 (e)
6	1	CALM has had the opportunity to create a showpiece Lake Reserve of international importance. Instead it has allowed a series of problems to occur	Strategies have been included in the final	No	2 (d)

Comment No. of	SUMMARY OF COMMENTS DISCUSSION / ACTION TAKEN Plan Criteri	ia
No. Submissions	Amended	

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	Τ	which if seized upon by the media, could be quite embarrassing.	plan to address issues affecting the		
_			conservation values of TLNR.		
7		The draft plan appears to address all of the key issues. In most cases we are happy with the analysis of the issues and the proposed strategies and KPIs.	Supports the draft management plan (DMP).	No	2 (a)
8	3	Overall we are pleased with this draft plan but urge you to devote more resources to looking after Thomsons and Forrestdale Lakes. Currently they appear to be neglected and are not managed as well as neighbouring Regional Park properties. Surely CALM could organise for both reserves to be managed by regional parks rangers. The current arrangements are not satisfactory for a Ramsar wetland.	Management of TLNR was transferred to the RPU as of 1 March 2004.	No	2 (c)
9	6			No	2 (a)
0. 20 1	- 1920 - 1	We would like to see Thomsons Lake managed as the centrepiece of the Beeliar Regional Park and as an example of the state of the art in nature reserve management, and likewise for Forrestdale Lake and the Jandakot Regional Park.	Noted.		
10	3	The plan is a very modest document and in its current format it is unlikely to be read by many people apart from the key stakeholders. We would encourage you to develop a more attractive and inviting version of it, with species lists and colour photos on CD and your web site. There is a lot of interesting information in this plan but it needs to be made readily accessible for public education and information.	Noted. However, the plan is a management document, not a resource document, written to guide the management of TLNR. It is compact but contains relevant information needed for management of the reserve. It will be available at CALM offices, libraries and via CALM's NatureBase web site.	No	2 (e&h)
11	6	Better management is a necessity for this Ramsar site. Perhaps a shift to the Regional Parks Unit would enable a more efficient job of management to ensue.	Management of TLNR was transferred to CALM's RPU as of 1 March 2004.	No	2 (c)
12	6	The shift to Regional Parks Unit would encourage community groups to participate thus giving better aid in education, research and revegetation.	Management of TLNR was transferred to CALM's RPU as of 1 March 2004.	No	2 (c)
13	3	The plan does not yet reflect the importance of this nature reserve. It is too brief to give non-CALM readers any understanding of the nature of the reserve, the problems at the reserve and management practices being undertaken or planned to be undertaken.	The complexity of issues affecting the nature reserve did not warrant the preparation of a book. Further management direction will be provided through subsidiary plans prepared for BRP.	No	2 (e)
14	6	No mention is made in the plan that this reserve is managed from an office in Wanneroo. For a Ramsar wetland in an urban/semi-rural environment, I believe that this is unacceptable. It needs to be managed from a closer location.	Management of TLNR was transferred to CALM's RPU as of 1 March 2004.	No	2 (c)
15	3			No	2 (d)

Comment No.	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Plan Amended	Criteria
16	1	Although many good works have been conducted on the site, the reserve is in a poor state and is becoming further degraded every year. This is due to increasing weed cover, changes in drainage patterns, build up of urban areas, overstocking of kangaroos, cats and foxes within the fence.	Strategies to address weeds, drainage and problem animals are already in the DMP.	No	2 (h)
16	J	When members of the Friends of Yangebup Wetlands asked for assistance in rescuing cygnets from the wetlands the CALM officers from the Swan Coastal Office were fighting fires in Wanneroo. CALM had on several occasions confirmed that when these cygnets needed to be moved CALM would conduct this work. Until dedicated resources are provided to this reserve, perhaps shared with Forrestdale Lake, Thomsons Lake will continue to decline.	Noted. Current resources are considered sufficient and appropriate for management of the reserve.	No	2 (1)
17	1	The Recreational Fishing Advisory Committee Western Australia would like to commend CALM on the plan and encourages its implementation.	Supports the DMP.	No	2 (a)
18	3	Thomsons Lake is a rare resource for Perth area residents. The deterioration of the bush there, mainly due to dieback and lower ground water levels is clearly visible. The management plan effectively represents the minimum that is required to ensure that this bushland is not further degraded.	Noted.	No	2 (b)
19	1	I like the new pocket-book format. Much less intimidating than the old plans for members of the public!	Supports the DMP.	No	2 (a)
20	1	The plan does not fully address Australia's obligations under the Convention on Wetlands, specifically regarding the description of the ecological character of the Ramsar site. Although the ecological character is indirectly described throughout the plan it is difficult to distinguish this. This might be addressed by expanding the text under "Key Values".	A paragraph on Ecological Character has been added to the plan, following on from the Key Values.	Yes *	1 (c)
21	1	The Ramsar Information Sheet (RIS) for this Ramsar site has recently been updated by CALM, but is yet to be formally accepted by the Ramsar Convention Secretariat. We recommend that the plan be amended if the updated RIS is officially accepted before the plan is finalised. If the revised RIS remains to be formally accepted by the time the plan is finalised, reference should be made to the fact that it is being reviewed, and that a revised RIS will be available from www.deh.gov.au/water/wetlands/database/index.html.	Text to this effect has been added to the plan.	Yes	1 (e)

Comment No. of	SUMMARY OF COMMENTS DISCUSSION / ACTION TAKEN Plan Criteria	
No. Submissions	Amended	

22			Summarke the DMD	Ne	2 (a)
22	1	The introduction is very clear and supportive of basic conservation principles.	Supports the DMP.	No	2 (a)
23	1	Thomsons Lake is also included in the 'Directory of Important Wetlands in Australia', recognised as a System 6 wetland, and is an EPP and Conservation Category Wetland.	Text has been added to the final plan to this effect.	Yes	1 (e)
24	1	The second sentence within the second paragraph should be amended to "In 1990, Thomsons Lake, together with Forrestdale Lake, was designated to the list of wetlands of International Importance under the Convention on Wetlands (Ramsar, Iran, 1971)."	Text has been amended.	Yes	1 (e)
	J.	REGIONAL CONTEXT			
25	1	(With regards to bottom of page 3) - It needs to be noted and acknowledged that landowners on wooded 5 acre lots to the west of Thomsons Lake and on the western edge of Harry Waring Reserve fought the Ministry of Planning's proposed Industrial Zoning for the area, pleading for this area to be retained as a rural buffer to the two reserves.	Noted.	No	2 (c)
		Beeliar Regional Park			
26	6	Thomsons Lake (a Ramsar site) would be better managed if it were transferred to the Regional Parks Unit, combined within the Beeliar Regional Park.	Management of TLNR was transferred to the RPU as of 1 March 2004.	No	2 (c)
		PART B MANAGEMENT DIRECTIONS AND PURPOSE			
27	1	I agree with the management directions and purpose.	Supports the DMP.	No	2 (a)
28	1	The major issues were well covered and the plan will be an important basis for protecting the more sensitive issues, such as water use in the Jandakot area.	Supports the DMP.	No	2 (a)
		VISION			
29	1	The vision has to be to restore, and then maintain in a better condition, the Thomsons Lake Nature Reserve.	Supports the DMP.	No	2 (d)

Comment No.	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Plan Amended	Criteria
		LEGISLATIVE FRAMEWORK			
30	1	Thomsons Lake is an EPP wetland protected under the Environmental Protection (Swan Coastal Plain Lakes) Policy 1992, which protects the environmental values of the wetland. Therefore any unauthorised filling, mining, draining (into and out of the wetland) effluent discharge and alteration of water levels of the wetland is prohibited.	Comment added to the final plan.	Yes	1 (a)
31	1	The EPP is prescribed within the Environmental Protection Act 1986.	Comment added to the final plan.	Yes	1 (a)
32	1	The text describing the EPBC Act should be updated to reflect the additional matter of national environmental significance, which is national heritage places.	Plan amended.	Yes	1 (c)
33	1	We recommend that it be clearly stated that Ramsar wetlands are a matter of national environmental significance under the (EPBC) Act.	This has been added to the final plan.	Yes	1 (e)
		OBLIGATIONS AND AGREEMENTS			
34	1	We recommend that the Convention on Wetlands description be amended to: (wording given).	The description has been amended as recommended.	Yes	1 (e)
35	1	It should be noted that the number of migratory birds listed within the JAMBA and CAMBA agreements are 66 and 81 respectively. This should be reflected within the text.	These figures have been added to the final plan.	Yes	1 (e)
		PERFORMANCE ASSESSMENT			
36	1	The reporting of KPIs may be dependent on the requirements of each KPI, however, a maximum reporting period should be set (eg 5 years). As there is no timeframes set in this document it degrades the intentions of monitoring and reporting on KPIs. It appears as if this monitoring and reporting may never be done. Therefore I suggest that a reasonable maximum reporting period be set.	Noted. More detail has been added with regards to the monitoring and reporting of KPIs. Monitoring and reporting practises will be consistent with those in the Beeliar Regional Park Management Plan.	Yes	1 (d)
		PART C MANAGING THE NATURAL ENVIRONMENT			
37	1	Encourage Cockburn Council to fund more money for restoration. More urban development will aid the demise of this wonderful wetland.	Cockburn City Council funding for restoration is beyond the scope of management plans.	No	2 (c)

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		BIOGEOGRAPHY No submissions			
		GEOLOGY, LANDFORM AND SOILS			
38	1	This lake is most likely underlain by pyritic peaty sediments (i.e. potential acid sulphate soils). This means that extensive digging (eg <i>Typha</i> removal), dewatering or drainage has the potential to cause considerable environmental damage if this issue is not considered.	Plan amended to include comment.	Yes	1 (a)
		CATCHMENT AND WATER PROTECTION			
	*	Hydrology			
39	1	We believe the lake has silted up over time and needs a channel to be excavated to form a source of permanent water and an island to be a more secure nesting place.	This suggestion is not considered appropriate given the risk of acid sulphate soils at TL should excavation occur. Water supplementation will be trialled at TL to address declining water levels.	No	2 (f)
40	2	On page 9, paragraph 2, it is more accurate to say "Lake water levels respond to events that cause variations to the quality and quantity of groundwater supply such as rainfall and modified land uses within catchments, including groundwater extraction, urban development, and <u>drainage</u> ."	Plan amended.	Yes	1 (e)
41	2	The draft plan comprehensively covers the hydrology and stormwater issues associated with the long-term management of Thomsons Lake.	Supports the DMP.	No	2 (a)
42	1	Addition to paragraph 4 on page 9 – However, if the water level of the lake falls below the agreed minimum environmental water provisions before the commencement of summer, the infrastructure is in place to top up the lake with stormwater inflow.	The supplementation of water into TL will occur in accordance with the "Water Supplementation Operational Management Plan for TLNR (2004)".	No	2 (f)
43	1	Paragraph 5, page 9 and 10 – Another contributing factor to decreasing groundwater levels is the abstraction of groundwater from the Jandakot Mound.	This is already mentioned in the DMP (pg 10, paragraph 1).	No	2 (d)
44	1	In recent years the water level in Thomsons Lake has been insufficient to provide water for bird breeding and survival.	Noted. A water supplementation program is being trialled at TL, which should aid water bird breeding. The final plan has	Yes	1 (c)

Comm ent No.	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Plan Amended	Criterio
			been amended to make specific reference to the water supplementation trial.		
45	1	The buffer zone around the lake appears to be effective as it assists in reducing runoff from the surrounding land, provides a physical barrier that slows surface rates and traps sediment and nutrients.	Noted.	No	2 (b)
46	1	The DMP for Thomsons Lake provides the level of information required for managing the surface, groundwater and stormwater resources.	Supports the DMP.	No	2 (a)
47	1	The Corporation recommends that CALM should coordinate any future investigations with the Department of Environment (DoE), which should also administer the source controls within the catchment as development progresses. The Water Corporation would be interested in participating in the research work.	Noted.	No	2 (f)
		Water Levels			
48	1	Water levels are an important part of the management of Thomsons Lake. Information regarding minimum and maximum water levels, as dictated by the Jandakot Groundwater Scheme EMP should be included in the management plan.	This information is already included in the DMP.	No	2 (d)
49	1				
		The plan refers to the water level regime set down by the South Lakes Drainage Scheme and assumes that it is suitable for the protection of Thomsons Lake. What is this assumption based on?	This information is based on the Environmental Management Program for the South Jandakot Drainage Management Plan.	Nø	2 (d)
50	1	Have there been studies to confirm that Water Corporation has been successful in protecting the lake since the creation of the drainage scheme? The plan should undertake further research to confirm that the water level management undertaken by Water Corporation is suitable for the long-term future.	The Water Corporation undertakes water quality and water level monitoring as a condition of the development of the drainage scheme, the results of which are submitted to DoE. The water supplementation program to be trialled at Thomsons Lake will address the water level management issues (see comment 32).	Yes	1 (c)
51	1	There needs to be an active role by CALM in the review of the Jandakot Groundwater Scheme EMP so that the plan achieves its aim of protecting Thomsons Lake.	Noted. CALM regularly liaises with the DoE regarding the management of Thomsons Lake.	No	2 (d)

Comment No.	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Plan Amended	Criteria
52	7	The lake is drying up prematurely (November 2002/December 2003) despite the water level criteria specified for Thomson's Lake by CALM in relation to South Jandakot Drainage Management Plan.	The lake has been drying up earlier as a result of the drier climate and lower rainfall levels and abstraction of water from the Jandakot Mound. The water supplementation trial will help address the issue of low water levels.	No	2 (d)
53	7	The South Jandakot Drainage Management Plan has not performed in accordance with expectations. It was always intended by the EPA and Minister that the lake would only dry out from January to April each year. The lake is now drying out in November/December causing stress and destruction to wildlife and reduced wader habitat.	The lake has been drying up earlier as a result of the drier climate and lower rainfall levels and abstraction of water from the Jandakot Mound. The water supplementation trial will help address the issue of low water levels.	No	2 (d)
54	1	The plan needs to specify that CALM will be very pro-active in dealing with Water Corporation and others to ensure that they do not endanger the lake due to inappropriate drainage operations.	Noted. Drainage management is an on- going process involving CALM, the Water Corporation, DoE and the City of Cockburn.	No	2 (d)
55	1	The technical advisory committee monitoring the Drainage Management Plan and lake water levels lost its Chairman and he was not replaced. CALM needs to ensure the continuance of such committee and its proper function so that urgent decisions can be made on water levels, water input etc when required. This needs to be covered in the plan in a specific way.	CALM did not administer and is not responsible for the Technical Review Committee (TRC). Issues regarding the TRC need to be directed to the DoE or Water Corporation. Management of water levels and water input is an operational matter and does not require the approval of the TRC. Water supplementation is to be trialled at TL in winter 2004.	No	2 (c)
56	Ŧ	New water issues are emerging such as acid from development of sulphate soils in Banjup. CALM needs to be very pro-active with advice to EPA/DoE indicating its interest in protecting water quality.	Noted. CALM regularly liaises with DoE, the Water Corporation and local government (where appropriate) in relation to protecting water quality on lands it manages.	No	2 (d)
57	1	I would like to have a better understanding of why water must be drained from the lake. Can water be left in the lake and still keep nutrient levels down?	Water is not drained from the lake. The Southern Lakes Drainage Scheme enables water to be removed from the lake if it reaches a level of 12.8 AHD. This is the maximum operational drainage water level for the lake.	No	2 (g)

Comment No.	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Plan Amended	Criteria
58	7	I worry about the fact that the lake is dry for such a large part of the year. It used to have water nearly all year round.	The lake has been drying up earlier as a result of the drier climate and lower rainfall levels and abstraction of water from the Jandakot Mound. The water supplementation trial will help address the issue of low water levels.	No	2 (b)
59	7	Water levels are an issue if it is to support wading and migratory birds.	Noted.	No	2 (d)
60	7	The water levels of the lake should be better managed so that it doesn't dry up so early. Ministerial conditions should be enforced.	The lake has been drying up earlier as a result of the drier climate and lower rainfall levels and abstraction of water from the Jandakot Mound. The water supplementation trial will help address the issue of low water levels.	No	2 (d)
61	7	The most crucial issue facing Thomsons Lake at present is the changing water levels brought about by the decline in rainfall, the development of land to the east of the Lake and extraction of groundwater from the Jandakot Mound. These factors have combined to produce early drying of the lakebed with the consequent spread of $Typha$ and stress on the waterbird population. In view of the importance of Thomsons Lake as a waterbird habitat and a Ramsar site this issue is of the highest priority.	The issue of water levels has been addressed in the DMP. The final plan specifically refers to the water supplementation trial.	Yes *	1 (c)
62	2	The analysis of the water level issue is adequate and notes that breaches have occurred. We strongly support the initiative to enforce the environmental water provisions (EWPs) at Thomsons Lake and will also continue to press for a solution to this problem.	Supports the DMP.	No	2 (a)
63	1	The establishment of suitable buffers to trap undesirable nutrients from runoff water should be considered a priority so that water can be redirected to the lake increasing the water level. This will enable the lake to return to being an important international bird way as well as a beautiful natural feature of Cockburn.	The Bartram Road Buffer Lakes have been constructed to reduce nutrients in drainage water such as that redirected to the lake as part of the water supplementation trial.	No	2 (d)
64	7	Water management is needed due to early drying of the lake; drainage from urban development may create more top up.	The water supplementation trial at TL addresses water level issues. The water used in the supplementation trial is drainage water from existing urban areas.	Yes	1 (c)

Comment No.	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Plan Amended	Criteria
65	ł	Monitoring of water levels has been conducted for some time now. Anecdotal evidence suggests that water levels are in decline. Considering this, it may be time for the Environment Minister to halt further developments in the area as stipulated in the MRS amendment documentation. Perhaps it is time to act to protect the values of the wetland by pumping water from the treatment ponds during the winter months when nutrients are diluted by rainwater. If the lake levels get to a reasonable level during the winter the lake will dry out in mid to late summer rather than spring to early summer.	A water supplementation program is being trialled at the lake.	Yes	1 (c)
66	1	This section of the plan should contain more information on the water level criteria so that community members can get an understanding of the constraints that are being applied. At present, both on the ground and within the plan, it appears as if only monitoring is being undertaken.	Noted. The water level criteria are already stated in the DMP. A water supplementation program is being trialled at the lake in 2004.	No	2 (d)
67	2	We strongly support the strict compliance with the EWPs for Thomsons Lake. Any breaches of the environmental conditions that affect water levels are of concern. Any revision of environmental conditions must be consistent with improving the catchment and water protection regime. There should be no diminution of environmental standards. Strategies should be amended accordingly.	Noted. As stated in the DMP, the EWPs are currently being revised as part of the Section 46 review of Environmental Conditions on the Management of the Gnangara and Jandakot Groundwater Mounds.	No	2 (d)
68	2	The impact of bores in the surrounding areas on water levels in Thomsons Lake requires further investigation.	Noted, however, investigation of the impact of bores is beyond the scope of the plan. Licences for water bores are administered by DoE.	No	2 (c)
69	2	My observations over the past few years have been that the levels of water in Thomsons Lake, even during winter, are too low to provide a safe and adequate water supply for waterbirds. Development in the surrounding district will put further pressure on Thomsons Lake water levels, particularly if the installation and use of water bores is unrestricted.	Noted. The Metropolitan Region Scheme and the City of Cockburn's Town Planning Scheme guide development in the surrounding district. Licences for water bores are administered by DoE.	No	2 (c)
70	ł	The statutory EWP minimum level of 11.3 m AHD needs to be revised in view of the now more frequent drying out of the lake.	Noted. As stated in the DMP, the EWPs are currently being revised as part of the Section 46 review of Environmental Conditions on the Management of the Gnangara and Jandakot Groundwater Mounds.	No	2 (d)
71	1	On page 11, paragraph 3, the 3 rd sentence should be omitted and replaced with "In September 2001, the Environmental Protection Authority (EPA) endorsed a	Plan amended.	Yes	1 (e)

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		two-stage approach to a review of the Ministerial conditions of environmental approval for management of the shallow groundwater resources of the Jandakot Mound. This arose from a Water and Rivers Commission request to the Minister for the Environment for a review of the existing Ministerial conditions because of consistent transgressions. The Minister subsequently asked the EPA to "inquire into, and advise on, changes to the existing Ministerial conditions" under Section 46 of the <i>Environmental Protection Act 1986.</i> "			
72	1	The reference for this is: Water and Rivers Commission (2003) Progress Report 2003, Section 46 Review of the Conditions on the Management of the Gnangara and Jandakot Mounds. Water and Rivers Commission, Perth.	Plan amended, added to reference list.	Yes	1 (e)
73	Ţ	Page 10, paragraph 2 – reference is made to the Water Corporation's responsibility for monitoring water levels in the lake as an environmental condition of the development of the Southern Lakes Drainage Scheme. The Water Corporation's responsibility is limited to satisfying these environmental conditions, which have a sunset clause and will expire when land development is complete. The Water Corporation has requested a clearance of a number of these conditions from DoE this year.	Plan amended to indicate that the monitoring is not indefinite.	Yes	1 (b)
74	1	We recommend that the revised limits for groundwater abstraction be reflected within the management plan and Table 1 where necessary.	At the time of going to print, the revised limits for groundwater abstraction were yet to be determined.	No	2 (f)
		Water Quality			
75	l	The plan highlights the need to manage water quality within a certain range. What is this range? There should be a micrograms per litre level figure for nutrients and chlorophyll to assist with management.	The first water quality KPI has been amended in the final plan to focus on indicators of wetland health such as the occurrence of aquatic macroinvertebrate species. The KPI dealing with nutrient levels has been retained.	Yes	1 (e)
76	1	Water quality targets should be at the very least strictly maintained, but preferably raised in accordance with community standards and expectations. Any deterioration in water quality is unacceptable.	Noted. This supports the objectives and strategies in the DMP.	No	2 (a)
77	1	We are unhappy with the impact of diffuse sources of pollution on Thomsons Lake and the ability of CALM to adequately address this issue. As a consequence KPI 1 should be to improve the water quality of the lake over the	The first water quality KPI has been amended in the final plan to focus on indicators of wetland health such as the	Yes	1 (e)

Comment No.	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Plan Amended	Criteria
		life of the plan, not merely to prevent further decline.	occurrence of aquatic macroinvertebrate species. The KPI dealing with nutrient levels has been retained.		
78	1	Water quality in the lake is monitored by the Water Corporation, which also monitors the quality of stormwater inflow to the Bartram Road Water Pollution Treatment Ponds. If the stormwater contains high nutrients it is diverted away from Thomsons Lake.	Noted.	No	2 (g)
79	1	Page 11, paragraph 2 – reference is made to the Water Corporation's responsibility for monitoring water quality in the lake. This paragraph infers that the Southern Lakes Drainage Scheme set maximum and minimum lake level and frequency criteria etc. This is not the case as the Scheme only sets the maximum water level in the lake.	Plan amended to indicate that the Southern Lakes Drainage Scheme has only set the maximum operational drainage level, of 12.8 AHD.	Yes	1 (e)
80	1	Page 11, paragraph 3 should note that the major influence on water quality in the lake is the influx of groundwater.	Plan has been amended to reflect this comment.	Yes	1 (e)
81	1	Page 11, paragraph 4 – reference is made to the Water Corporation monitoring water quality in the lake. Once again, as mentioned above, a sunset clause applies to this monitoring, and the responsibility of the Water Corporation is limited to satisfying the environmental conditions during the land development stage only.	Plan amended to indicate that the monitoring is not indefinite.	Yes	1 (b)
		NATIVE ANIMALS AND HABITATS			
82	4	Are there provisions in place to allow for the movement of cygnets from Thomsons Lake to Kogolup Lake? It has been identified that there are cygnets moving from Kogolup Lake to Yangebup Lake, would the same be expected at Thomsons Lake?	It is anticipated that the supplementation of water will assist in providing enough water to enable cygnets to develop at Thomsons Lake to the point where they can fly, thus alleviating this problem. Additionally, a contingency plan for cygnet movement will be put in place should there be insufficient water in the lake.	Yes	1 (c)
83	4	Numerous cygnet deaths now occur annually due to the lowered water level and the fence enclosure that prevents their escape. CALM did not implement any rescue strategy and relocate the cygnets even though the Beeliar Regional Park Community Consultative Committee received a written assurance from EPA that such rescue would take place.	It is anticipated that the supplementation of water will assist in providing enough water to enable cygnets to develop at Thomsons Lake to the point where they can fly, thus alleviating this problem. Additionally, a contingency plan for cygnet movement will be put in place should there be insufficient	Yes	1 (c)

Comment No.	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Pian Amended	Criteria
			water in the lake.		
84	2	A list of the bird, frog, lizard and snake species alluded to should be provided.	Relevant species have been added to plan where appropriate. Please note, however, that it is not the intent of this plan to provide a full list of fauna recorded in the reserve.	No	2 (c)
85	1	Reference to extinct species should be expanded.	Detail in the DMP is considered appropriate.	No	2 (h)
86	1	Some limited dredging may be of great benefit to water birds.	Dredging is not considered appropriate given the risk of acid sulphate soils. The proposed water supplementation trial should be suitably beneficial to waterbirds.	No	2 (f)
87	4	Better management of the cygnet population should be a priority. As the water dries up and they need to move to other wetlands to survive.	Water supplementation should help address this issue. Additionally, a contingency plan for cygnet movement will be put in place should there be insufficient water in the lake.	Yes	1 (c)
88	1	You will need to consider in more detail how you will cope with issues related to the vermin-proof fence. This fence serves as a very useful function in excluding feral animals from the reserve. It also inhibits wildlife migration and prevents terrestrial species (including immature flightless cygnets) from escaping from the reserve in case of fire or the drying of the lakebed. In recent years hundreds of cygnets have died as a result of the early drying of Thomsons Lake.	The proposed water supplementation should address the issue of the cygnets dying due to early drying of the lakebed. The plan has been amended, however, to discuss the advantages, disadvantages and the future of the fence. In relation to the cygnets, a contingency plan will be put in place to manage cygnet movement when necessary.	Yes ≉	I (c)
89	2	P12 2 nd paragraph, what are the 136 bird species mentioned?	Extensive species lists have not been included in this management plan, which is a management document and not a resource document. Such lists are available from CALM on request.	No	2 (c)
90	2	3^{rd} para: What are the 7 species of frogs, 12 lizard species, 3 snake species and tortoise species?	Relevant species have been added to the final plan where appropriate. Please note, however, that it is not the intent of this plan to provide a full list of fauna recorded in	No	2 (c)

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			the reserve.		
91	1	In 1990 when setting down water levels criteria, Syd Shea noted 8 species of frogs. Which frog species have become locally extinct? Without listing these species individually, local community members are left in the dark about these matters of importance.	Noted. References sourced in the preparation of this management plan mentioned up to seven species of frog.	No	2 (d)
92	2	There is no mention of species that would once have lived within Thomsons Lake, which have now become extinct on the Swan Coastal Plain.	Species that once would have occurred at TL have been added to the final plan.	Yes	1 (e)
93] ∵æ	Are the three mammal species listed the only ones at Thomsons Lake? This would be a good opportunity to publicly document this information.	There is most likely only three mammal species, apart from bat species. CALM maintains electronic databases with this information, which is available to the public on request.	No	2 (h)
94	1	We support the objectives, strategies and KPIs.	Supports the DMP.	No	2 (a)
		Migratory Waders			
95	1	The migratory long toed stints' seasonal habitat (a key value of the lake's Ramsar listing) may be under threat due to the early drying time.	The water supplementation program to be trialled at TL should help preserve such habitat.	Yes	1 (c)
96	1	What species protected under JAMBA and CAMBA regularly visit the lake? A list of these would be invaluable.	CALM maintains electronic databases with this information, which is available to the public on request.	No	2 (h)
		Invertebrates and Macroinvertebrates			
97	1	There appears to have been no terrestrial invertebrate survey done at Thomsons Lake. As insects and other invertebrates are important members of the food chain, it would be relevant to conduct such a survey. There is no strategy or objective in Table 1 to complete this important research.	Given the wetland values of TLNR, the study of invertebrates concentrates on aquatic invertebrates and is undertaken by Murdoch University.	No	2 (d)

Comment No.	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Plan Amended	Criteria
		NATIVE PLANTS AND PLANT COMMUNITIES			
98	1	The KPIs should include retaining the extent of existing vegetation. We are pleased that there is a KPI on understorey density.	The KPIs have been amended in the final plan and focus on local wetland flora, Priority species and an increase in the density and diversity of understorey vegetation.	Yes	1 (e)
		ENVIRONMENTAL WEEDS			
99	2	A key requirement for protecting the environmental values of the reserve is the control of weeds. Weed management is critical when protecting the biodiversity of the reserve.	Noted. Weed control continues on an ongoing basis in the reserve. Further direction on weed control will be provided in the Weed Control and Rehabilitation Plan for Beeliar Regional Park.	No	2 (d)
100	1	The City supports <i>Typha</i> control, any weed control work, within the Thomsons Lake Reserve.	Supports the DMP.	No	2 (a)
101	5	Typhus rushes are getting out of control because of low water levels.	Noted. Strategies are already included in the DMP to address this issue. Control is a high priority and will be in accordance with operational resources.	No	2 (d)
102	5	Spread of arum lilies is badly out of control in the reserve. Annual spraying is virtually a waste of time because the area of arum lilies eradicated is less than the annual expansion of the weed through the reserve. Orchids are particularly affected.	Noted. Control of arum lilies is a high priority and will be in accordance with operational resources.	No	2 (b)
103	5	Controlling the spread of <i>Typha</i> should be another priority, a Ramsar obligation.	Noted. Strategies are already included in the DMP to address this issue. Control is a high priority and will be in accordance with operational resources.	No	2 (d)
104	1	The huge area of spear thistle that surrounds the lake on the mud needs urgent attention also.	The control of spear thistle will be in accordance with operational priorities and resources.	No	2 (d)
105	2	Weed control is another major issue and you have correctly identified the major species.	Supports the DMP.	No	2 (a)

Comment No.	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Plan Amended	Criteria
106	1	We are concerned that CALM has insufficient resources at present to manage Thomsons Lake and urge CALM to work more closely with community groups and Regional Parks Unit to tackle the weed problem.	Noted. CALM will continue to develop partnerships with the community for management of the reserve. As of 1 March 2004, the reserve is now managed by CALM's RPU.	No	2 (d)
107	5	You are currently losing the battle against several invasive weeds including $Typha$, pampas grass and arum lily and urgent action is required. Regional Parks Unit has a more effective control program in the Beeliar Regional Park, and Thomsons Lake, as the "crown jewel" should be a CALM showpiece, which it is not at present.	Noted. TLNR is part of Beeliar Regional Park, and as of 1 March 2004 is being managed by the RPU.	No	2 (b)
108	5	Weed control is a major concern. Both <i>Typha</i> and arum lilies are advancing rapidly to the detriment of indigent species.	Noted. Strategies are already included in the DMP to address this issue. Control of these weeds is a high priority and will be in accordance with operational resources.	No	2 (d)
109	4	The weed control program that has been instigated seems to have been successful for many of the main target species, especially the Pampas Grass, Castor Oil plants, fig etc. Unfortunately the same cannot be said about Arum Lilies, particularly on the eastern side of the lake, both inside and outside this reserve. I hope more money can be found to combat this highly invasive species in our wetlands.	Noted. Control of arum lilies is a high priority and will be in accordance with operational resources.	No	2 (b)
		INTRODUCED AND OTHER PROBLEM ANIMALS			
110	1	It may be necessary to assess the validity of shooting (kangaroos) when you consider that soon the land to the east of the reserve, which is currently rural, will soon be urban. Implications of this are: (1) Future urban community's acceptability of shooting; (2) An expected increase in visitors to the reserve may pose safety risks with shooting. Future kangaroo management needs to take this land use change into consideration.	Noted. The final plan has been amended to indicate that kangaroo management methods will be reviewed as necessary over the life of the plan.	Yes	1 (d)
111	1	Kangaroo numbers have been permitted to get out of control. CALM allowed the numbers to steadily increase since the vermin-proof fence was constructed, and knew that the reserve could only accommodate a finite number before they would start having impacts. Their foraging impact is devastating the understorey bushland and biodiversity.	Noted. A kangaroo management program has been outlined in the final plan.	Yes	1 (c)
112	1	We estimate there are currently about 150 kangaroos, which are increasing in numbers annually.	Noted.	No	2 (d)

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Comment No.	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Plan Amended	Criteria
113	1	The management plan should require that kangaroos be immediately removed from the good bushland areas and restricted to the degraded southwest corner and the lake fringes, to enable the good bushland to recover from severe over- grazing.	This option is not considered feasible. A kangaroo management program has been included in the final plan.	No	2 (f)
114	4	Culling should occur as soon as possible, but relocation is an interim solution.	Relocation has been considered however the preferred strategy is to manage the kangaroo population by culling.	No	2 (f)
115	5	Foxes and rabbits remain a menace within the reserve despite the presence of a vermin proof, electrified fence.	The final plan has been amended to indicate that whilst foxes will continue to re-invade in small numbers, they will be subject to on-going controls. Rabbits are not considered to be a significant problem at TL and will be controlled as necessary.	Yes	1 (b)
116	1	The end of Pearse Rd is a good spot to review kangaroo numbers on dry lake especially between sunset and darkness.	Comment noted.	No	2 (b)
117	5	Foxes and rabbits in the reserve need to be eradicated completely.	The final plan has been amended to indicate that whilst foxes will continue to re-invade in small numbers, they will be subject to on-going controls. Rabbits are not considered to be a significant problem at TL and will be controlled as necessary.	Yes	1 (b)
118	2	We support the idea of removing the grey kangaroos and introducing brush wallaby, quokkas and possibly chuditch.	Noted and taken into consideration when determining strategies for on-going kangaroo control.	No	2 (a)
119	2	A strategy is required for maintaining an ecologically sustainable population of western grey kangaroos and perhaps also reintroducing other native mammals that once inhabited the reserve (such as the brush wallaby).	Noted. This has been addressed in the final plan.	Yes	1 (c)
120	5	Feral animals are still present in the reserve despite the vermin-proof fence. Baiting with 1080 needs to be carried out more regularly and the KPI needs to be strengthened to read, "no evidence of foxes or rabbits in the reserve".	Noted. The final plan has been amended to indicate that pest animal control will continue to be undertaken as necessary. The KPI relating to Introduced and Other Problem Animals has been amended.	Yes	1 (a)
121	5	Control of predators eg foxes, cats and stray dogs, should extend to the region	Noted. Control of predators in areas of	No	2 (c&d)

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		surrounding Thomsons Lake to reduce the risk of these entering the lake area and causing further destruction.	Beeliar Regional Park surrounding TL will be considered in the Regional Parks Pest Animal Control Program and requires coordination between CALM, the City of Cockburn and adjoining private land holders.		
122	5	Although enclosed with suitable fencing, feral animals are within and must be removed.	The final plan has been amended to indicate that whilst foxes will continue to re-invade in small numbers, they will be subject to on-going controls. Rabbits are not considered to be a significant problem at TL and will be controlled as necessary.	Yes	1 (b)
123	4	Wildlife within: over 150 kangaroos need to be culled or removed.	Noted. This has been addressed in the final plan.	Yes	1 (c)
124	4	Swans, their cygnets, cannot fly or gain sanctuary of Lake Kogolup and therefore become the victims of foxes.	The plan has been amended to indicate that water supplementation should assist with this issue, and that a contingency plan will be put in place to address cygnet movement.	Yes	1 (c)
125	1	Rabbits and midges appear in Table 1 but not here. If they are singled out for importance in the summary surely they require a brief introduction here.	Text amended accordingly, however reference to midges as a potential problem animal (Strategy 2) has been removed.	Yes	1 (e)
126	1	There are no mention of rabbits, bees, and rainbow lorikeets. All of these affect local fauna and the rabbits also have some impact on flora. Bees and rainbow lorikeets are gradually taking up more and more tree hollows to the detriment of our local birds.	Beehives are removed in accordance with operational priorities. Rainbow lorikeets and rabbits are not considered to be a significant problem at TL and will be controlled in accordance with operational resources.	Yes	1 (e)
127	ł	Both kangaroo management options appear to be acceptable. Both are much better than the present situation, which is getting worse each year.	Noted. The final plan indicates that the preferred method for reducing the kangaroo population is by culling.	No	2 (a)
128	4	The sooner something is done to reduce [kangaroo] numbers the better. The present situation is threatening the conservation status of this reserve as it is being severely degraded by kangaroo grazing.	Supports the DMP.	No	2 (a)

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129	1	I think that if culling to a sustainable level occurs the population would have to be a single sex population, so that this doesn't continue to be a management problem.	Noted. The final plan indicates that the preferred method for reducing the kangaroo population is by culling.	No	2 (d)
130	1	This year has been a good breeding season for kangaroos and there are many young to add to the 2002 tally.	Noted. The final plan indicates that the preferred method for reducing the kangaroo population is by culling.	No	2 (b)
131	4	Their numbers have to be reduced and I agree the best way is to have them shot by a competent marksman.	Support for one of the options outlined in the plan. The final plan indicates that the preferred method for reducing the kangaroo population is by culling.	No	2 (a)
132	1	I would still like to see the grey kangaroo species remain in the reserve, though their numbers will have to be actively managed.	Noted. The final plan indicates that the preferred option for managing the kangaroo population is by culling to reduce numbers to a sustainable level.	No	2 (d)
133	l	The number of orchid plants and species are definitely down, possibly as a result of over grazing by kangaroos.	Plan amended to acknowledge this comment.	Yes	1 (b)
134	2	We recommend that strategies to reduce the grey kangaroo population to a sustainable level be included within Table 1.	A strategy to this effect has been included in the final plan.	Yes	1 (d)
		DISEASES			
135	1	A dieback management plan is vital towards halting the spread of the disease through the reserve. Will one be developed for the reserve?	Planning for dieback will occur in accordance with operational priorities and relevant CALM policies and procedures.	No	2 (d)
		FIRE			
136	1	The City of Cockburn is still reviewing is responsibilities towards hazard management of Thomsons Lake and until this is completed the City will not commit itself in any way. The Thomsons Lake Management Plan should reflect this position.	TL is now part of the Gazetted Fire District. As such, FESA is responsible for fire suppression in the reserve, and CALM is responsible for pre and post fire suppression works. The final plan has been amended to reflect this change.	Yes	1 (c)
137	1	The reduction of fuel load should also be undertaken by weed control.	Noted. Fire management will be in	No	2 (e)

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		Prescribed burning will not be supported due to the lack of information on impacts and the intended application of this method to Thomsons Lake.	accordance with CALM's Fire Management Policy. If selected prescribed burning is considered for the reserve, further consultation will occur with the city of Cockburn and other stakeholders.		
138	2	The reserve is under risk due to the lack of fire access tracks (vehicles got bogged at the recent fire event). Limestone perimeter tracks should be constructed in the firebreak strips.	Fire access has recently been upgraded with a track around the entire reserve. Hardening of the tracks will occur in selected areas as required.	Yes	1 (a)
139	2 *	There are not enough fire access gates.	Additional fire access gates will be considered on the eastern side of the reserve once adjoining land has been developed.	No	2 (h)
140	1	Many plant species need regular hot fires to aid propagation. Controlled fires in December each year would reduce the risk of a major wildfire and threat to neighbours and create a healthier bushland. If this is not done, it is inevitable that a disastrous fire will happen.	Noted. Fire management will be in accordance with CALM's Fire Management Policy, which allows for prescribed burning. If selected prescribed burning is considered for the reserve, further consultation will occur with the city of Cockburn and other stakeholders.	No	2 (e)
141	1	The occurrence of veldt grass spread after fires must be avoided. The proper balance of kangaroos and wallabies in the reserve will help keep down the veldt grass.	Noted. Control of veldt grass will occur in accordance with operational priorities.	No	2 (d)
142	1	Better fire protection is needed.	Noted.	No	2 (d)
143	1	We agree with most strategies except Strategy 4. There is ample evidence from the scientific work done by Kings Park to show that prescribed burning of Banksia woodland is counter-productive. It destroys the undergrowth leading to veldt grass invasion, which increases the susceptibility of the area to fire.	Noted. Fire management will be in accordance with CALM's Fire Management Policy. If selected prescribed burning is considered for the reserve, further consultation will occur with the city of Cockburn and other stakeholders.	No	2 (e)
144	2	There is an added danger of setting fire to the reserve while it is already under threat from kangaroos.	Noted.	No	2 (e)
145	1	We favour a good fire control plan with a clear line of command and rapid response from all relevant agencies. In the past, many fires have caused	TL is now part of the Gazetted Fire District. As such, FESA is responsible for	Yes	1 (c)

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		unnecessary damage due to jurisdictional disputes between CALM, FESA and the Bushfire Brigades. They should develop coordinated response plans.	fire suppression in the reserve, and CALM is responsible for pre and post fire suppression works. The final plan has been amended to reflect this change.		
146	1	Fire control needs faster perception and control.	Noted.	No	2 (d)
147	2	We advocate a reduction in fires and therefore do not support selective prescribed burning. The KPI should include – no deterioration in biodiversity values over the term of the plan, with a 5 yearly assessment and review of biodiversity values.	Noted. Fire management will be in accordance with CALM's Fire Management Policy. If selected prescribed burning is considered for the reserve, further consultation will occur with the city of Cockburn and other stakeholders.	No	2 (e)
148	1	Please refer to the attached <i>Water Notes Wetlands and Fire</i> for advice on management.	Noted.	No	2 (b)
		PART D MANAGING OUR CULTURAL HERITAGE			
149	1	There are no management strategies or KPIs associated with this. Perhaps protection of listed sites should be a management strategy.	Plan amended. Appropriate strategies have been included in the final plan. However, KPIs for 'Managing our Cultural Heritage' are not considered necessary.	Yes	1 (d)

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·····		INDIGENOUS HERITAGE			
150	1	The plan adequately addresses cultural heritage and clearly outlines the obligations of the Aboriginal Heritage Act 1972.	Supports the DMP.	No	2 (a)
151	3	The plan lists the sites that exist in the park. However, no details are provided as to how the sites are to be protected and managed. It is recommended that consultation be carried out with the Aboriginal community and the DIA to ensure that Aboriginal heritage issues are adequately incorporated into the management plan.	Plan amended. A strategy indicating that further consultation with the Aboriginal community will occur has been added to the final plan.	Yes	1 (e)
152	3	It is important that cultural heritage is accommodated into the management plan to ensure that sites are not disturbed by future improvements to the park or disturbed by visitors to the park. All sites in the park should be managed with the consent and involvement of the Aboriginal community.	Plan amended. A strategy indicating that further consultation with the Aboriginal community will occur has been added to the final plan.	Yes	1 (e)
153	1	How are the ceremonial and mythological values associated with Thomsons Lake going to be taken into account?	Plan amended. A strategy indicating that further consultation with the Aboriginal community will occur has been added to the final plan.	Yes	1 (e)
154	3	We recommend that the indigenous community be invited to contribute to the protection and management of the reserve, particularly the sites that have been recorded on the Department of Indigenous Affairs' Register of Aboriginal Sites, and that such actions are recorded on Table 1.	Plan amended. A strategy indicating that further consultation with the Aboriginal community will occur has been added to the final plan.	Yes	1 (e)
		NON-INDIGENOUS HERITAGE			
:		No submissions			
		PART E MANAGING VISITORS			
		VISITOR OPPORTUNITIES			
155	8	If visitor facilities are required they should be constructed outside the boundary fence.	Parking facilities will be located outside the vermin proof fence. Interpretation signs may be located within the fenced area of the nature reserve.	No	2 (d)
156	8	Development of the area in terms of people use should be the lowest possible	Walk trails and possibly interpretation	No	2 (d)

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		and restricted to minimum impact usage such as bushwalking and bird watching. The establishment and maintenance of walk trails would assist in this and help prevent the spread of dieback.	signs will be the only facilities located within the fenced area of the reserve. Outside of the vermin proof fence a car park and shared path will be provided.		
157	2	I have concern about the fact that there is a blanket prohibition upon commercial use. I believe the statement would also restrict CALM's ability to grant licences for commercial tours to the reserve even though they might have a high interpretive value and be totally appropriate. You encourage private individuals to visit but not groups on commercial tours who would be under supervision and the operators subject to licence conditions to manage their behaviour. I can't think there would be a huge demand but could this please be considered?	Plan amended. A statement has been added to the final plan allowing for commercial licences for passive recreation activities such as bird watching tours and guided nature walks.	Yes	1 (c)
158	2	My concern is the absence altogether of a section in the plans on commercial operations.	Given TL is a nature reserve, a section on commercial concessions is not considered appropriate and hasn't therefore been added to the plan. However, a discussion on the potential for commercial licences has been included in the "Visitor Opportunities" section of the final plan.	No	2 (f)

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		VISITOR ACCESS			
159	2	The City strongly agrees that entry into the reserve should be upgraded and the construction of a deceleration road on Russell Road should occur.	Supports the DMP.	No	2 (a)
160	3	There should also be upgrading of the path network system. The use of the reserve will only increase and these works will ensure better management of the area.	The hardening of path surfaces will occur at selected locations where required.	Yes	1 (a)
161	8	Restrict access on walk trails. People use should be kept to a minimum to restrict impact on the area. Walking and bird watching is ok, boats, punts etc only for study purposes, not general public.	Plan amended. A comment indicating that unauthorised access to the lake is prohibited has been included in the final plan.	Yes	1 (e)
162	* 8	Never let Thomsons Lake get the use that Bibra Lake does. Keep this 551 ha mainly for the ground dwellers & migratory birds – not a picnic area.	Noted. TL is a nature reserve and has a different purpose to Bibra Lake. Therefore it is promoted for nature appreciation rather than recreation.	No	2 (a)
163	8	Limited and controlled access is appropriate with managing the very special values of this nature reserve.	Supports the plan.	No	2 (a)
164	1	This Department recommends that the further enhancement and management of trails located in both the Forrestdale and Thomsons Lake areas be exposed to a specific strategic planning process. This process should focus on the connectivity with surrounding trails and recreational pursuits in addition to considering connection of trails of regional significance.	Noted. This issue has been considered in the development of the Beeliar and Jandakot Regional Park management plans.	No	2 (c)
165	2	The main entrance off Russell Rd could do with at least some limestone hard base to cover the two informal 'driveways' and the car parking area. There is currently a 10-15cm drop off the bitumen road surface to the sand. This means that ordinary cars have to ease themselves back onto the road where the traffic is travelling at 80kph.	Noted. The final plan has been amended to indicate that when Russell Road is duplicated, appropriate design measures need to be incorporated to allow for vehicle access into TL, and that the existing car park will be upgraded to appropriate	Yes	1 (a)
166	1	The second or safety gate has been missing from this entrance through the fence for quite a while. If someone forgot to secure the remaining gate a fox would be able to enter.	standards. Noted.	No	2 (h)

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*		VISITOR USE			
167	2	We support your approach to visitor use. Good information about the reserve should be made available through CALM outlets and the web site and via community facilities such as the Cockburn Wetlands Education Centre and Harvest Lakes Environmental Centre.	Supports the DMP.	No	2 (a)
168	8	We do not want to see any more visitor facilities developed there than exist at present. There are plenty of recreational and picnic areas nearby, so Thomsons Lake should be left as it is.	Noted. Thomsons Lake is a nature reserve therefore it is promoted for nature appreciation rather than recreation.	No	2 (a)
169	8	Thomsons Lake should be kept in as pristine a natural state as possible. It is one of the last areas of any size, containing natural bushland, in the southern corridor. Further generations of metropolitan children will have very limited opportunity to see natural bushland in the vicinity of the metropolitan area and neglecting to retain this area in a natural state will deprive them of their rightful heritage.	Supports the objectives in the DMP.	No	2 (a)
170	8	There should be no increase in facilities eg bird hides, boardwalks.	Noted. The final plan has been amended and there are no boardwalks or bird hides are proposed for the reserve.	Yes	1 (c)
171	1	We agree with the objective and strategies being proposed.	Supports the plan.	No	2 (a)
172	1	It is important to highlight the incompatibility of bridle trails with the nature reserve and should any impact occur, the acceptability of allowing a bridle trail abutting a significant nature reserve should be reviewed.	Horse riding is to occur only around the outside of the fence and at this stage, opportunities are provided for local riders only. Horse riding will be reviewed over the life of the management plan in light of environmental impacts, conflicts of use and demand for the activity.	Yes	1 (d)
173	1	Aboriginal heritage sites in the park may be of interest to tourists. Interpretive signs could be established at the sites in consultation with the Aboriginal community, to enable visitors to understand the significance of the sites.	Interpretation at TL will focus on water birds and their habitats. An interpretation plan will be prepared for Beeliar Regional Park and will include information on Aboriginal heritage at other locations.	No	2 (d)
174	1	There should be designated walk trails, signage and barriers (fencing or	The existing vermin proof fence is considered sufficient for restricting access.	No	2 (d)

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		bollards) within and around Thomsons Lake to prevent uncontrolled access through areas of the wetland.	Designated walk trails are identified in Map 2 of the final plan. Signs will be provided in the reserve. However their location is beyond the scope of this plan.		
		Horse Riding			
175	2	While the reasoning for allowing the continuation of horse riding on the outside of the reserve, if managed properly, is understood, there should still be an effort to relocate the trail if an opportunity arises.	Horse riding will be reviewed over the life of the management plan in light of environmental impacts, conflicts of use and demand for the activity.	Yes	1 (d)
176	* 2	The reference to horse riding on page 22 may have to be reconsidered because the horse hire operations have virtually ceased operation, and a lower level of horse riding is occurring.	Noted. The text has been amended to reflect this comment.	Yes	1 (a)
177	2	Horses need to be strictly monitored, particularly hire horses.	Noted. The two local horse hire operations have now closed. Horse riding at TL will be reviewed over the life of the management plan in light of environmental impacts, conflicts of use and demand for the activity.	No	2 (d)
178	2	Page 22, paragraph 1 – most of this paragraph is no longer relevant as the two horse hire companies have closed down. However, many local horse riders still frequent the area.	Noted. The text has been amended to reflect this comment.	Yes	1 (a)
179	1	The horse-riding trail around the outside of the perimeter fence of the reserve has been a good idea as it forms an effective firebreak. The western edge of Lake Kogalup has been degraded with most of the large paperbarks dying and with indiscriminate horse riding also adding to the damage. In light of this the informal bridle path near the lake may have to be looked at in the future.	Horse riding on the western side of Kogolup Lake will be prohibited in the Beeliar Regional Park Management Plan.	No	2 (c)
180	1	Generally, the Water and Rivers Commission recommends a minimum 50m buffer around Conservation Category (CCW) and Resource Enhancement (REW) wetlands. However it is understood that horse riding in the Thomsons Lake area is an historical use for the last 40 years. Therefore the Commission would recommend the following management practices to prevent impacts from horse riding:	The provision of a formal bridle trail has been removed from the plan. Horse riding at TL will be reviewed over the life of the management plan in light of environmental impacts, conflicts of use and demand for the activity.	No	2 (h)

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Comment No,	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Plan Amended	Criteria
		 Designated bridle trail to be made from compacted limestone; Trail to be made on existing track or firebreak (avoid additional clearing of vegetation); Trail to avoid boggy or wet areas; Fencing or barrier along bridle trail to stop horses leaving the trail; No resting points along the trail near wetland areas (i.e. within 50m of wetland boundaries); Manure management (i.e. riders to collect horse manure and dispose of in collection bins along the trail – similar to dog manure management in parks); The creation of a local bridle trail or horse riding groups to assist in management and maintenance of the trail; and Education program for riders and owners providing a background and understanding for reserve management, how impacts can be reduced and what they can do to help. Education to be in the form of signs, pamphlets (located at the reserve, local council offices, CALM offices, horse riding clubs etc), local newspaper articles, horse riding magazines etc. 			
181	1	My concern is the absence of any mention of non-commercial leases that may be required to in the area in future eg for emergency services or other infrastructure (eg water supply pipelines, communications facilities etc). There may not be a need for these now, but if they are not provided for in the plan it makes it very hard to deal with any legitimate proposals that may come up in the future.	Plan amended. A statement has been included in the final plan indicating that non-commercial leases are not considered appropriate at TL and where possible, will be directed outside of the boundary of the nature reserve. Applications for such leases will be considered on a case-by-case basis.	Yes	1 (b)
		SCIENTIFIC AND RESEARCH USE			
		No submissions.			

Comment	No. of
No.	Submissions

		REHABILITATION			
182	1	Can grazing within the reserve be supplied by planting more edible native plants?	Only appropriate local species will be planted in the reserve, and pressure from grazing will be eased by implementing a kangaroo management program.	No	2 (f)
183	1	Introduce only native species free of <i>P. cinnamomi</i> , keep disturbance to a minimum.	This is stated in the DMP.	No	2 (d)
184	en 1 *	Intelligent management of the restoration of this very important nature reserve is essential. The restoration would provide an opportunity for Cockburn City Council to become a leader in nature reserve management as this reserve has the potential to become a world-class reserve providing an excellent environment for education, research and leisure.	The reserve is vested with the Conservation Commission of WA and managed by CALM.	No	2 (g)
185	1	There are several areas where there has not been natural regeneration, which could do with some planting out with appropriate local species. This should probably not be attempted before the kangaroo problem has been addressed or the areas are fenced off.	Rehabilitation priorities will be in accordance with the Beeliar Regional Park Rehabilitation Plan. The issue of kangaroo management has been addressed in the final plan.	No	2 (d)
		PART G INVOLVING THE COMMUNITY			
		INFORMATION, EDUCATION AND INTERPRETATION			
186	1	School groups, UWA & birdwatchers should be encouraged.	This is consistent with the DMP.	No	2 (d)

Comment No.	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Plan Amended	Criteri
		WORKING WITH THE COMMUNITY			
187	3	A "Friends of the Lake" group would be an asset.	Noted and agree. Preliminary discussions have occurred with members of the community to undertake works in Thomsons Lake and Kogolup Lake. The plan has been amended to indicate that CALM should seek to establish an active Friends Group for TL.	Yes	1 (d)
188	3	A "Friends of Thomson's Lake" should be encouraged and supported. Working in revegetation and education by community groups needs to be emphasised.	As above.	Yes	1 (d
189	1	Community groups have a vital role to play in raising public awareness about the value of Thomsons Lake as a Ramsar site and explaining its values to the public.	Noted and agree.	Yes	1 (d)
190	1	We agree with strategy to involve the community in management and monitoring of the reserve. Our members have been involved over the years and could do more if you developed a coordinated weed control program and detailed plans for monitoring and education. Some modest funding would be needed to cover costs.	Supports the DMP.	No	2 (a
191	3	A "Friends of the Lake" community group should be established in order to monitor and assist in the improvement of the lake and the reserve.	Noted and agree. Preliminary discussions have occurred with members of the community to undertake works in Thomsons Lake and Kogolup Lake. The plan has been amended to indicate that CALM should seek to establish an active Friends Group for TL.	Yes _e .	1 (d
192	1	The unpaid work of the Wetlands Conservation Society and others involved in maintaining the natural values of Thomsons Lake should be acknowledged and appreciated. Volunteers who contribute over a long period should not be treated as free labour but as partners and their views and concerns be fully considered.	The work of the Wetlands Conservation Society is acknowledged by CALM, and words to this effect have been added to the final plan.	Yes	l (e)
193	1	Members of the Aboriginal community should be involved in all aspects of the management plan.	Members of the Aboriginal community were invited to have input during development of the DMP and will be consulted during development and implementation of the final plan. Words to this effect have been added to the final plan.	Yes	1 (e)

		PART H MONITORING AND IMPLEMENTING THE PLAN			
194	2	Reference to KPIs on page 7 - there should be timeframes set.	Timeframes for reporting on KPIs to the Conservation Commission have been included in the final plan.	Yes	1 (d)
195	2	There is a need for the setting out of perceived urgent priorities in management plan and related budgeting.	Priorities for works have been included in the final plan.	Yes	1 (d)
196	1 .,	An independent audit every five years by a reputable qualified private firm or individual is recommended. CALM should not judge CALM.	The final plan has been amended to indicate that auditing of management plans is the responsibility of the Conservation Commission of WA, an independent statutory authority. CALM does not audit management plans.	Yes	1 (e)
197	1	Perhaps it would be possible to keep residents on the west side of Thomsons & Harry Waring reserves informed of progress through council and local papers i.e. Cockburn Herald & Gazette. They should do it as a community service.	The public will be notified of significant achievements during the term of the plan.	No	2 (h)
198	1	Implementation of the management plan should begin as soon as possible in order to minimise further degradation of this nature reserve and to achieve maximum results within ten years.	Noted. Many of the strategies are already part of an ongoing works program. Implementation of the management plan will occur once the final plan has been gazetted.	No	2 (a)
199	2	There are few timescales involved with the KPIs. Some mention over the term of the plan. Inclusion of further timescales would be beneficial. Also some indication of monitoring frequencies to determine if KPIs are being met.	Timeframes for reporting on KPIs to the Conservation Commission have been included in the final plan.	Yes	1 (d)
200	2	We have concerns with the lack of detail in the draft management plan and recommend that a detailed Works Program be prepared, to be released with the final management plan. This should include more detailed objectives, targets and timelines.	Noted. A works program is a "live" document and is subject to change in accordance with operational priorities. A works program is not considered appropriate for inclusion in the plan, which is aimed at providing management direction over the long-term.	No	2 (h)

Comment No.	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Plan Amended	Criteria
201	2	We recommend that the implementation of the plan include more detail, such as specific timeframes, identification of stakeholders who are, or will be responsible for actions (management and monitoring), and priority rankings for actions.	Timeframes for reporting on KPIs to the Conservation Commission have been included in the final plan. All strategies are to be implemented by CALM. Priority rankings for actions have been added to the plan.	Yes	1 (d)
202	2	We suggest that a comprehensive implementation program be prepared. This should be open for public comment.	An implementation program is not considered appropriate for inclusion in the plan. However, CALM prepares an annual projects list for Thomsons Lake in consultation with the Beeliar Regional Park Community Advisory Committee.	No	2 (h)
203	1	The Australian Ramsar Management Principles provide for reviews of plans at least every seven years, whilst this plan has a 10-year life span.	Noted. The management plan will be reviewed mid-term, i.e. after five years.	No	2 (d)
204	1	The implementation section should note that any activities that have, will have or are likely to have a significant impact on a matter of national environmental significance (i.e. the Ramsar site or migratory species) will require approval under the EPBC Act.	This is already stated in the Legislation section of the plan.	No	2 (d)
205	1	We recommend that actions to follow up monitoring results be included within Table 1 (that is, measures to address changes to the water quality including investigating the source of the problem and identifying possible solutions be incorporated into the plan).	Additional strategies have been added to the plan to address this.	Yes	1 (d)
		REFERENCES			
206	1	The last management plan referred to comprehensive studies and good work in the reserve by Mrs Pauline Clay pre 1981 and Professor O'Connor. These should be included in the list.	This reference was not used in the preparation of the management plan and is therefore not included in the reference list. More current references are now available.	No	2 (c)

Comment No.	No. of Submissions	SUMMARY OF COMMENTS	DISCUSSION / ACTION TAKEN	Plan Amended	Criteria
207	1	MAPS The map of the reserve should include the boundary of the Ramsar site, and reference that the site is a component of the entire Ramsar site, which encompasses both Thomsons and Forrestdale Lakes.	The boundary of the Ramsar site has been included on the map of the reserve.	Yes	1 (e)

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APPENDIX 1.

Submitters to the Draft Management Plan 🔹

Individuals Mr J. Spencer F.W. and D.O. Kipling Ms J.A. Hill Ms E. Mitussis Mr J.E. Connolly Ms R. Pickering Mr D. James Mr A. Williams Mr D. Mead-Hunter Mr A. Antonovsky

Community Organisations Wetlands Conservation Society Waterbird Conservation Group Recreational Fishing Advisory Committee WA

Local Government City of Cockburn

State Government Department of Conservation and Land Management (x 3) Department of Environment (formally Water and Rivers Commission) Department of Sport and Recreation Department of Indigenous Affairs Water Corporation

Commonwealth Government Department of Environment and Heritage