

PRELIMINARY ASSESSMENT OF 53 PRIORITY AA WHEATBELT DAMS

CALM

Prepared by:

Ecoscape (Australia) Pty Ltd

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Acknowledgments

Preliminary Assessment of 53 Priority AA Wheatbelt Dams

Ecoscape wishes to acknowledge the input of Brett Beecham the Regional Ecologist for the CALM Wheatbelt Region, for his input during the production of this report.

Summary

Preliminary Assessment of 53 Priority AA Wheatbelt Dams

As part of an ongoing program to evaluate the nature conservation and other values of a range of CALM and non-CALM estate within the CALM Wheatbelt Region, this report establishes the priorities for field surveys for 53 Agricultural Area dams, on the basis of a desktop assessment.

The priorities for further assessment were based on both a quantitative and a qualitative method. The quantitative method involved the summation of class values for seven attributes for each reserve and a qualitative assessment was based on a visual examination of aerial photography.

The reserves were classed as either *High*, *Medium*, *Low* or *Very Low* priorities, and there was broad general agreement between the priorities established by the quantitative and qualitative methods. This would be expected given that the majority of attributes examined were common to both assessment methods. Sixteen of the fifty three reserves were ranked as *High* priorities.

The visual assessment, however did illuminate a number of features that could not be identified through the quantitative analysis alone, such as identifying significant vegetation associations (e.g. wooded wetlands); the context in which the reserves lie (e.g. the reserve's position within a corridor); the presence of degrading factors (e.g. deep drains); and degree of clearing.

The vegetation formations for each of the reserves was mapped and data for individual reserves was documented, including attributes that were not included as part of the quantitative assessment, such as the presence of rock pools.

1.0 Introduction

Preliminary Assessment of 53 Priority AA Wheatbelt Dams

1.1 Background

This project is the continuation of an ongoing program to evaluate the nature conservation and other values of a range of CALM and non-CALM estate within the CALM Wheatbelt Region. Previous surveys and assessment have been completed by various CALM staff and consultants.

This project represents a departure from the previous work, as it uses a desktop assessment of the conservation and other values. This information will be gathered from a variety of existing data and information, including remote-sensed imagery, aerial photography, GIS spatial datasets, corporate databases, and published and unpublished reports and papers.

The data and information will be interpreted and presented in a standardised report format to enable CALM staff to identify priority reserves for more detailed follow-up field surveys.

1.2 Objectives

To develop priorities for field surveys for 53 Agricultural Area dam reserves and to identify priority reserves for more detailed follow-up field surveys based on criteria such as:

- adequacy of existing information to assess conservation and other values, and
- longer-term viability of reserves.

The field surveys will be completed as a separate project.

1.3 The Study Area

The study area consists of 53 Agricultural Area dam reserves, covering a total of 7749 ha across 10 Shires. Granite outcrops occur on 21 of these reserves.

2.1 Aerial Photographic Interpretation

Interpretation of stereo pairs of aerial photographs was used to determine:

- adjacent landuses;
- vegetation formation and intactness;
- the presence and configuration of granite outcrops, and the organisation of vegetation on the granite outcrops.

2.1.1 Land uses

Land uses occurring on and adjacent to each reserve were determined by using stereo pairs of aerial photographs. Land uses were categorised as either:

- recreational;
- agricultural;
- mining;
- infrastructure; or
- a combinations of the above.

2.1.2 Granite Outcrops

Background

Many of the Agricultural Area Dam reserves rely on granite catchments for their water supply and granite outcrops can also provide a valuable contribution to the conservation estate. Whilst at least 1320 (and possibly 2000) plant taxa occur on WA granite outcrops and individual outcrops can support up to 200 species, including many endemics not found in surrounding habitats (Hopper, Brown and Marchant, 1997) only a small proportion of the large number of granite rocks in Western Australia are designated as, or are within conservation reserves (Main, 1997a).

There is therefore a potential for conflict between the conservation and utilitarian values of these granite outcrops and these were therefore specifically characterised as part of the assessment. An outline is provided below for the assessment of granite outcrops is provided below.

Granite Presence and Type

The more subdued the profile of an outcrop the less complex the topography (i.e. a domed outcrop will therefore generally exhibit a more varied topography than a pavement outcrop) (Main, 1997b). As a more varied substrate could be expected to result in a more diverse habitat for animals and plants, the topography of granite outcrops was characterised.

The main topographic features of an outcrop are associated with the sculptured surface and the surrounding *apron*. The apron being defined by the descending edges of outcrops that

frequently fan out into soil to a depth varying from 1.5 to 2.0 m (Newbey 1984 p33, 1988 p11). The topography of granite outcrops was classified according to the classes defined by Main (1997b) and shown in Figure 2.1.

Configuration and Topography

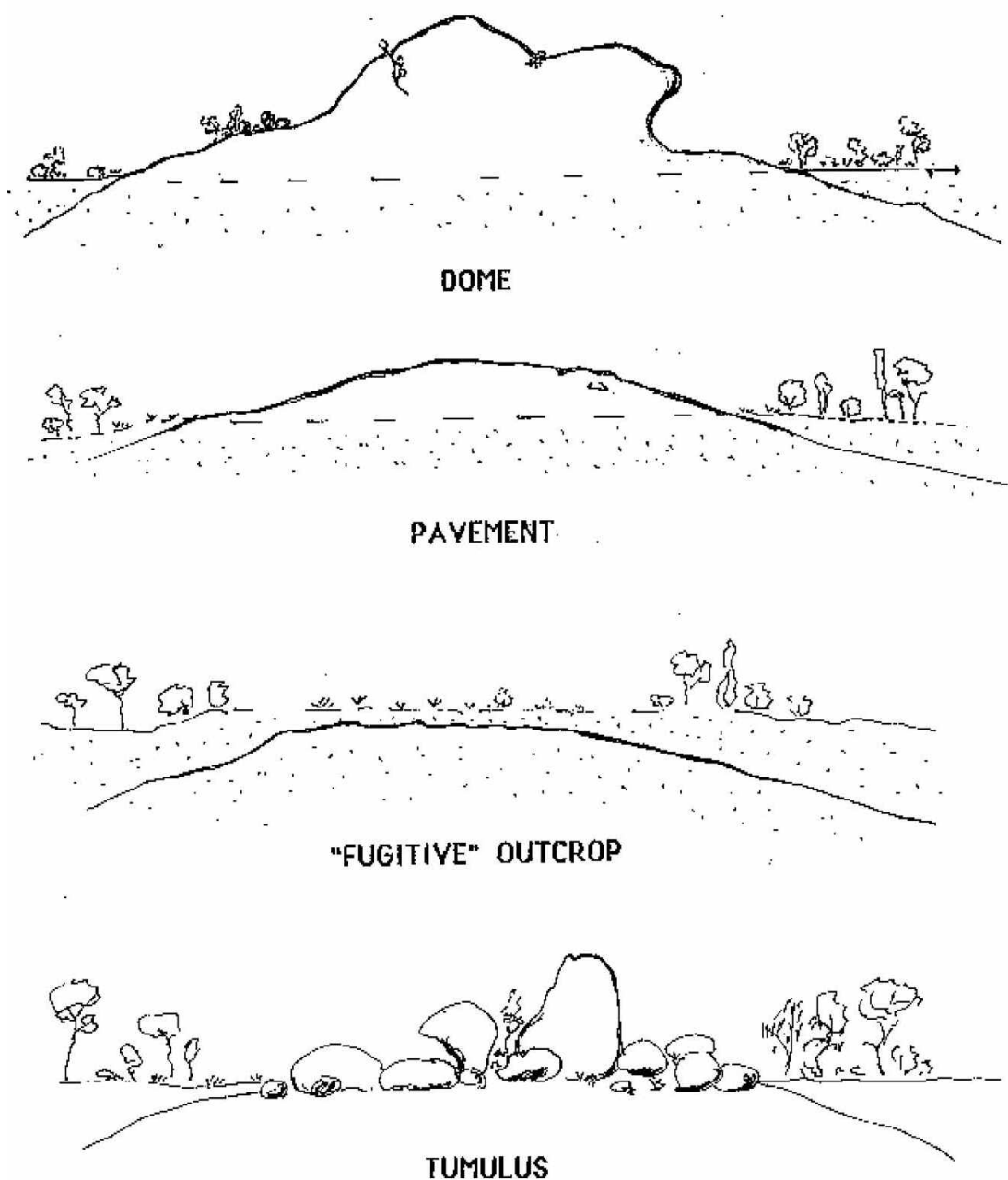


Figure 2.1 Examples of Configurations and Topography of Granite Outcrops
(Main, 1997b).

2.1.3 Vegetation Formations

Vegetation formation boundaries were interpreted from stereo pairs of aerial photographs on the basis of the colour, density, size and height of vegetation, and landform.

The formations used for describing vegetation in the Wheatbelt by Muir (1977) are as follows:

1. Woodland
2. Mallee
3. Shrubland
4. Heath
5. Lithic complexes
6. Breakaway complexes
7. Salt complexes
8. Other.

Vegetation descriptions were based upon the Muir classification system but there are limitations in discriminating between formations using aerial photography at the scale of available photography. Heathlands and shrublands can only be expected to be distinguishable at a scale below 1:10 000 (Muir, 1977). At the level of mapping for this project (1:25 000) it was not generally possible to differentiate between Mallee, Shrubland and Heath formations, and therefore these three formations were all attributed as 'Shrubland'. The vegetation was therefore attributed in this project only as one of the following formations:

1. Woodland formations
3. Shrubland formations
5. Lithic complexes
6. Breakaway complexes
7. Salt complexes
8. Other i.e. Swards & Waterbodies

In areas of very dense vegetation there can be difficulties distinguishing between woodland and shrubland as the height of the canopy can not be compared to height of the ground surface, such as at Dam 438.

Very dense vegetation occupying the apron around granite outcrops is likely to be either *Allocasuarina huegeliana* woodland or *Acacia acuminata* thickets (shrubland); and these may co-occur. It is not possible to differentiate between these two formations through aerial photo interpretation and therefore in this project it was assumed that this vegetation was *Allocasuarina huegeliana* woodland on all occasions.

In the context of this project the formation 'other' was appropriate for distinguishing Swards. Swards commonly occur on granite outcrops where soil accumulates in depressions in the rock or on the shallow soils around the edge of the granite. Swards support small hardy plants such as *Boyra* species, lichens and moss, bulbous/tuberous plants and daisies which are able to survive long, hot summers when the soil has dried out (Hussey, 1998).

Vegetation was attributed on the basis of what was currently present, even if an area was degraded. This meant that, for example, an area which may have been previously been shrubland that has been degraded by salinity and inundation to the point that few shrubs was attributed as a 'Waterbody'.

Areas that were identified as 'roaded catchments' within dam reserves were always attributed as cleared in this project regardless of whether scattered vegetation had re-established.

2.1.4 Lithic Vegetation Organisation

Lithic vegetation cover was classified according to the classes shown in Figure 2.2. This classification system was developed by Semenuik *et al.* (1990) for wetlands of the Darling System, south western Australia.


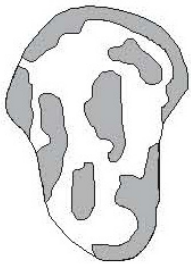




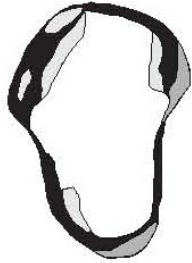






		VEGETATION COVER		
		PERIPHERAL	MOSAIC	COMPLETE
INTERNAL ORGANISATION OF VEGETATION	HOMOGENEOUS	PERIFORM 	PANIFORM 	LATIFORM 
	ZONED	ZONIFORM 	GRADIFORM 	CONCENTRIFORM 
	HETEROGENEOUS	BACATAFORM 	HETEROFORM 	MACULIFORM 
KEY  Water, salina, or vegetation free zone		Vegetation zones  Assemblage 1  Assemblage 2  Assemblage 3		

Figure 2.2 Classification of Lithic Vegetation based on Vegetation Cover and Form
(after Semenuik *et al.*, 1990)

It was considered appropriate to adapt this classification system because:

- more diverse sites are generally considered to have higher conservation value and it was assumed that greater diversity in vegetation patterns would be associated with greater flora and fauna diversity;
- the patterns of vegetation in both wetlands and granite outcrops are associated with the depth of suitable soil;
- similar patterns could be expected in lithic vegetation; and
- It enabled the rapid assessment of vegetation diversity on granite outcrops at association level, based on a visual interpretation of photography. This assessment provided more detail/ distinguished between more units than the digitised maps which were based on the interpretation of broader vegetation formations.

2.1.5 Vegetation Intactness

Vegetation intactness was assessed using the Department of Agriculture's condition assessment methodology developed for the NLWRA by Beeston, Hopkins and Shepherd (2002).

This simple four-tier rating system was used to describe the extent and intensity of each of the disturbance types. Photographic examples, as used by Beeston, Hopkins and Shepherd (2002) are provided below in Plates 1-4.



Level 1 – Light and localised disturbance



Level 2 – Light but widespread disturbance



Level 3 – Heavy but localised disturbance



Level 4 – Heavy and widespread disturbance

Fire scars were not considered a disturbance for the purposes of this rating as they are a form of modification rather than degradation.

Typical disturbances observed included quarries, roads, tracks, grazing, cleared areas and salinity.

2.2 Geographic Information Systems Analysis

2.2.1 Overview

The methods of analysing the GIS datasets is summarised in Table 2.1

Table 2.1 GIS Analysis

Criteria	Method
	Area Description
Area	The area of the reserves were autogenerated using 'XTools' in ArcView®. The State Cadastral Database (SCDB) was used to delineate reserve boundaries.
Nearest Road	The nearest road to the reserve was determined from the Roads and Tracks WA road atlas (Cadgraphics WA, 2005) which was more detailed than the Natmap dataset in ArcView®.
	Asset Description
Soil / Landscape Unit	The soils dataset provided by CALM was intersected with the reserve boundaries in ArcView® to determine the soil 'Mapping Units' for each reserve. The resultant attribute table was 'joined' in ArcView® with the soil description files provided by CALM. This was done to provide the soils descriptions associated with the Mapping Units. The dataset did not cover dam numbers 187 (Lake Grace Shire), 204 (Dumbleyung Shire) and 448 (Yilgarn Shire).
Regolith Unit	The Regolith dataset provided by CALM was intersected with the reserves in ArcView® to determine the regolith 'Code', 'Type' and 'Description' for each reserve.
Geology	The Geology dataset provided by CALM was intersected with the reserves in ArcView® to determine the geology 'Code' for each reserve. The dataset did not cover dam numbers 51, 76, 77 (Wyalkatchem Shire), 190 (Lake Grace Shire), 196 (Dumbleyung Shire) and 294 (Wongan Ballidu Shire).
Landscape Position	The subcatchment dataset provided by CALM was used to determine the landscape position for each reserve. Reserve position = percentage from the highest point in the subcatchment. This is further discussed in section 2.2.2.
DRF & Priority Flora; TEC's; Rare & Priority Fauna	The rare flora and rare fauna dataset provided by CALM was used to determine species occurring within a 10km radius of each reserve. The only PEC was for Wongan Hills, this dataset was provided by CALM.
Flora & Fauna Species	Species lists were obtained for Dam numbers 51 and 77 from Safstrom, True and Coates (1996), See appendix 2 and 3.
Structural Vegetation Formations	Vegetation boundaries were digitised and intersected with the reserve boundaries in ArcView®. The reserve boundaries are State Cadastral boundaries, therefore they were not adjusted. (See section 2.2.1)
Vegetation Associations & Vegetation System Associations	The Pre-European vegetation dataset provided by CALM was intersected with the reserves in ArcView® to determine the vegetation association numbers for each reserve. The resultant

	attribute table was joined in ArcView® with the Pre-European Vegetation database file (Beeston <i>et al.</i> 2002) to provide a vegetation description for each association number.
Sensitive sites	The register of indigenous sites was overlaid over the reserve locations in ArcView® to determine the presence of these sites for each reserve.
Land uses	Aerial photographic interpretation (see section 2.1.5)
	Threats
Introduced Plants	Species lists were obtained for Dam numbers 51 and 77 from Safrom, True and Coates (1996), See appendix 2 and 3.
Altered Hydrology (salinity)	Salinity images (Land Monitor dataset provided by CALM) produced from Landsat TM scenes by CSIRO (CMIS) displayed three salinity classifications; 1. Areas at risk of becoming saline; 2. Recent saline areas (1995-1998) and 3. Older saline areas (1989-1991). The percentage cover of each salinity classification for each reserve was assessed by eye in ArcView®. The percentage cover was estimated by 10 percent intervals. (see section 2.2.4)
Vegetation Intactness	Aerial photographic interpretation (see section 2.1.2).
Adjoining Land Use	Aerial photographic interpretation (see section 2.1.5)
	Viability
Altered Hydrology (salinity)	See above.
Perimeter to Area Ratio	The Perimeter (m ²) was divided by the Area (m ²) of the reserve to calculate the ratio. These values ranged from 0.00167 – 0.03059.
Area & Tenure of adjoining Remnant Vegetation	Adjoining remnant vegetation within 100 metres of each reserve was extracted from the Vegetation Mask Dataset provided by CALM and intersected with the State Cadastre database. The area and tenure of adjoining remnant vegetation was summarized in ArcView®.
Landscape Context	The Vegetation Mask Dataset provided by CALM was clipped in ArcView® with the State Cadastral database within a 10km buffer around each reserve. Records that were less than 10 hectares were deleted in the attribute table. The area and tenure of remnant vegetation was summarized in ArcView®.

A more detailed discussion of some aspects of the GIS analysis is provided below.

2.2.2 Landscape Position

Granites high in the landscape are likely to have been exposed above the Tertiary peneplain, and often support a variety of endemic and relictual flora and fauna (aquatic and terrestrial). These species are of high conservation significance. It was therefore considered important to identify the presence and topographic position of granite outcrops relative to the highest points of surrounding the landscape.

Given that the reserves being examined are distributed across an area spanning approximately 370 km by 300 km, and the degree of relief within the landscape varies considerably over this area, the position of the reserves was assessed relative to the relief in individual subcatchments.

The median height of the reserve was calculated as a percentage from the top of the subcatchment. A reserve with a median height that was the same height as the highest point in the subcatchment was attributed as 0% from the top of the subcatchment and a reserve with a median height the same as was the lowest point in the subcatchment was attributed 100% from the top of the subcatchment. The following formula was used to determine this.

$$100 \times \left(1 - \left(\frac{(\text{Median reserve height} - \text{Minimum subcatchment height})}{(\text{Maximum subcatchment height} - \text{Minimum subcatchment height})} \right) \right)$$

2.2.3 Polygon Boundaries

The cadastre dataset was used for producing the boundaries for vegetation mapping, with aerial photo mosaics used for heads-up (onscreen) digitising the boundaries of vegetation type and condition by cutting the cadastre polygons.

2.2.4 Salinity Extent

The extent of salinity within each reserve was estimated for the following three classes produced from the original Landsat TM scenes processed by CSIRO (CMIS):

- Areas at risk of becoming saline – 2m from valley floors
- Recent Saline areas (1995-1998)
- Older Saline areas (1989-1991)

The extent of each of these classes was determined by visual assessment of the GIS dataset and grouped into the 10 classes listed in Table 2.2

Table 2.2 Classes for salinity distribution

Class	Percentage cover of salinity
0	0%
1	1-10%
2	11-20%
3	21-30%
4	31-40%
5	41-50%
6	51-60%
7	61-70%
8	71-80%
9	81-90%
10	91-100%

The total extent of salinity for each of the reserves was then determined by adding the values for each of the three classes. The extent of the three salinity classes was estimated individually and then added, rather than as an overall extent to allow re-manipulation of the data if required (e.g. if areas where there was no salinity but less than 2 m from the valley

floor were excluded from the estimation). This addition of estimates occasionally resulted in a total estimate greater than 100% (due to imprecise values being added) as shown in Table 2.3.

Table 2.1 Example of Salinity Total for Dam 573

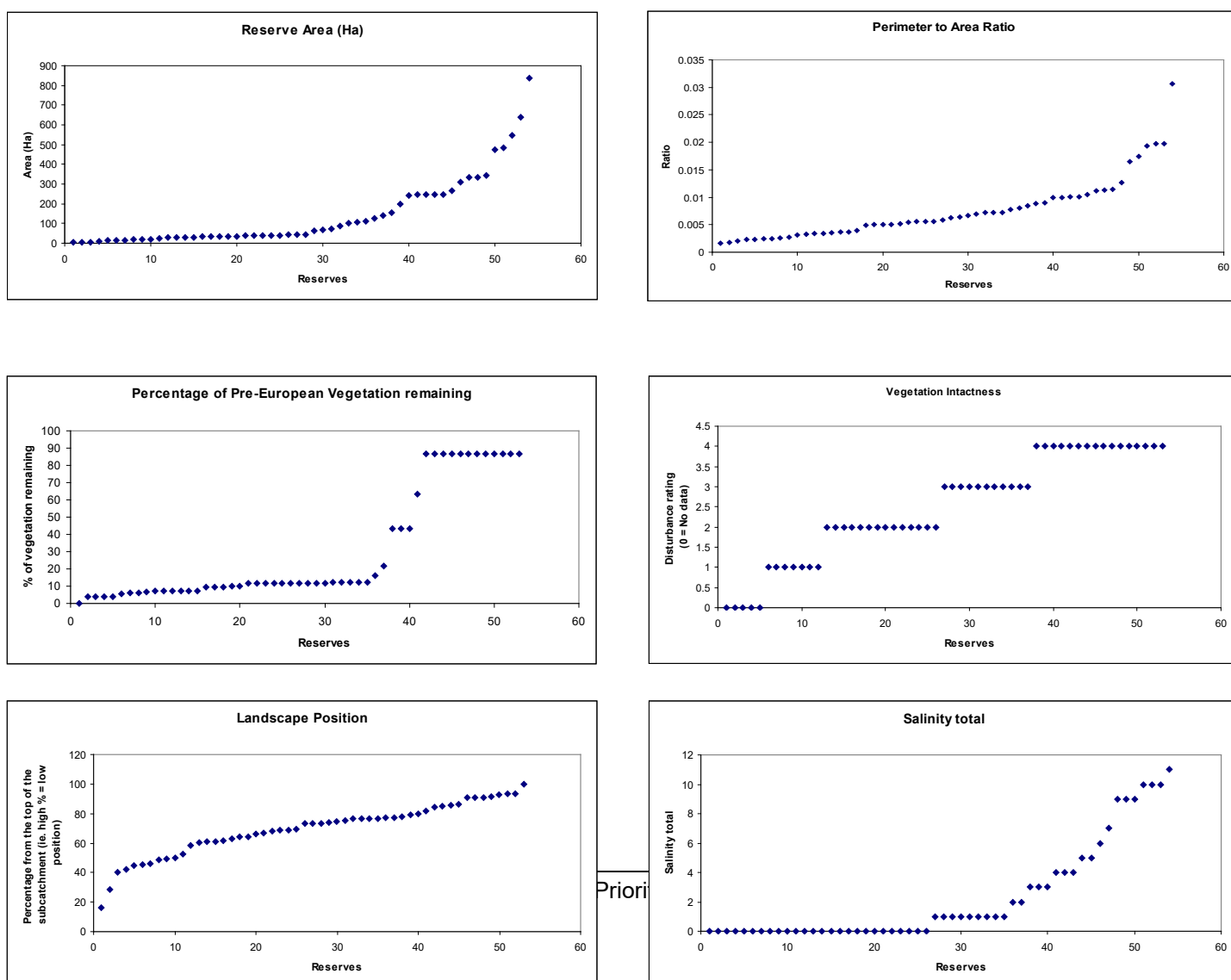
Dam	Recent salinity	Old salinity	At risk areas	Total Salinity
573	0	1	10	11

However this did not invalidate the method the overall values were relative rather than absolute.

2.3 Classification of Attributes

Each attribute was classified into a maximum of four groups where group one equals high priority values and group four equals low priority values. The values for a number of the attributes examined expressed clustering (as shown in Figure 2.3) and natural breaks were used to determine class boundaries for these attributes.

Figure 2.3 Graphs displaying classification groups



Attributes for which the reserves produced very uniform values (such the number of vegetation formations, for which almost all reserves had a value of two) were not used in the analysis.

The attributes considered reasonable for analysis and the spread of reserves amongst the classes for these attributes are listed in Table 2.4.

Table 2.4 Classes for each field

Attribute	Classes	Number of Dams per Class
Area (ha)	1 = > 300 ha	9
	2 = 200-300 ha	6
	3 = 100-200 ha	7
	4 = < 100 ha	32
Perimeter / Area ratio (m: m ²)	1 = 0.00167 – 0.00393	18
	2 = 0.0049 – 0.00894	22
	3 = 0.00991 – 0.01261	9
	4 = 0.01652 – 0.03059	6
Vegetation Intactness	1 = Light & localised	4
	2 = Light and widespread	17
	3 = Heavy & localised	12
	4 = Heavy & widespread	17
Percentage of Pre-European vegetation remaining	1 = < 10%	20
	2 = 10-30%	17
	3 = > 30%	16
Salinity	0 = 0%	0
	1 = 1-30%	25
	2 = <30%	14
	3 = 30-60%	7
	4 = >60%	8
Landscape Position	1 = < 53%	11
	2 = 53-70%	14
	3 = 70-86%	20
	4 = > 86%	8
Granite Presence	1 = yes	21
	2 = no	32

3.0 Results & Recommendations

Preliminary Assessment of 53 Priority AA Wheatbelt Dams

3.1 Complications and Limitations of Method

3.1.1 General limitations

Desktop assessments such as that used in this project can not identify and quantify all the major processes identified by Hopper, Brown and Marchant (1997) as threatening outcrop plant communities such as weed invasion, grazing by stock and feral animals, too-frequent fire, clearing, loss of shrub layer, salinity, and dieback. However, the list of priorities developed in this report are not considered immutable and this desktop assessment is intended only as a basis for identifying priority reserves for more detailed follow-up field surveys.

3.1.2 Aerial Photograph Interpretation

Availability of Photography

There were no stereo pairs supplied for the following dams: 466, 541, 463 and 146. Imagery was not available for Dam 448 and therefore it was omitted from the final table of recommendations.

Fugitive Granite

Most of the granite outcrops were easily identifiable using the stereo pairs of aerial photographs. The only class of outcrops for which there was any difficulty in interpretation was *fugitive* outcrops an example is Dam 554 where immediately to the east of the main granite outcrop an area was interpreted as a very sparse shrubland over fugitive granite that could have also been interpreted as a degraded shrubland.

3.1.3 GIS Analysis

Misalignment of datasets

There were displacement discrepancies between the aerial photographs and the SCDB dataset. Displacement discrepancies were up to 44 metres but were commonly in the order of 14-27 metres.

These discrepancies are likely to have arisen during rubbersheeting (the non-uniform adjustment of images used to correct distortions associated with aerial photography due to the tilt and roll of the aeroplane and parallax error) and/or projection (converting the image from the 3 dimensional surface of the Earth to the 2 dimensional surface of a computer screen or paper).

This type of problem has previously been noted by Ecoscape in similar projects such as *Lake Bryde Recovery Catchment Vegetation Survey* (Ecoscape, 2003) where it was noted that there were displacement discrepancies in the order of 40 m between the aerial photo mosaic and the NLWRA dataset.

For this project the cadastral boundaries were not adjusted and the vegetation formations were intersected using these boundaries. Where the boundary occurred beyond the remnant vegetation into a cleared area, this section was attributed as cleared, for example Dam 51. However if there was only a small area of the boundary occurring beyond the vegetation it was not separated out as cleared as this would have produced a series of small polygon slithers.

3.1.4 Erroneous data

An erroneous omission of remnant vegetation in the Vegetation Mask Dataset, adjacent to Dam Reserve 626, was detected when it was compared to the aerial photography. This is possibly due the temporary loss of vegetation, after a fire, in imagery that was interpreted for the creation of the Vegetation Mask Dataset. No amendments were made to the GIS dataset and therefore this error was not eliminated from the calculations relating to adjacent vegetation and the map does not show adjacent vegetation.

3.1.5 Attributes not incorporated in the assessment

Although relatively few terrestrial animals (three invertebrates and four reptiles) are known to be restricted to granite outcrops, many animals utilise these specialised habitats and these outcrops are important as a seasonal resource or temporary refuge. The presence of granite outcrops was recorded but the size of these outcrops was not, as the prioritisation matrix was intended to be as simple and transparent as possible. However in finalising prioritises it should be noted that Kitchener *et al.* (1980) recommended 10 hectares as the minimum preferred extent of a lithic community for supporting sustainable associated lizard assemblages.

Rock pools were recorded for granite outcrops where they were observed because they can provide an important source of water to fauna, and granite-rock pools are characteristically different from pools lying on the regolith due to their lack of turbidity (Bayly, 1997). However the presence of rock pools was not used as part of the prioritisation of reserves/granite outcrops as the variation in dates of aerial photography precluded comparison of outcrops at the same time of year.

If rock pools are used as part of a process of prioritising granite outcrops then it is preferable to record the size of the rock pools as Bayly (1997) noted that there is a highly significant positive correlation between invertebrate species richness and the logarithm of both the volume and area of temporary waters in gnammas on granite outcrops in Western Australia.

3.2 Prioritisation of AA Wheatbelt Dams

The final decisions regarding which, if any, reserves are to be further investigated or acquired is the responsibility of CALM but as this project has been undertaken to contribute to this process an initial assessment of priorities has been provided as part of this report.

The priorities for further investigation of the reserves made are relative to each other, in the absence of a standard reference scale, and these priorities may change in light of external

factors not included in this assessment such as any negotiations occurring over reserves and the personal knowledge of CALM officers.

The quantitative values of each of the attributes assessed were summed to produce an overall score for each of the reserves. These overall scores ranged from 7-22 (from a possible range of 6-25) where the lower values equates to higher priorities.

It was also considered necessary to conduct a qualitative assessment for each reserve as the quantitative method did not take into account the high value placed on assets such as wooded wetlands in the Wheatbelt.

The priorities placed on each of the reserves through the quantitative and visual assessment is provided in Table 3.1.

Table 3.1 Priority Assessments for Individual Reserves
(in order of quantitative score & coloured by visual ranking)

Reserve Number	Dam Name	Shire	Dam Number	Quantitative Assessment Score	Visual Assessment Ranking	Comments
28291	Bodallin Dam	Yilgarn	5006	8	High	
2863	Moorine Rock	Yilgarn	5008	8	High	
15702	Mocardy	Wongan Ballidu	568	9	High	Diverse granite
20212	Dulyalbin Jilbadji Rock	Yilgarn	2017	10	High	good condition, diverse and large
17648	Lake Grace 13 Mile	Lake Grace	389	11	High	
8390	Kings Rocks (& bore)	Kondinin	445	11	High	diverse, large granite outcrop
28449	Lake Grace Station / Newdegate East	Lake Grace	188	11	Very High	
17663	McGanns Rock	Kondinin	420	12	High	diverse granite
13524	Mt Holland	Yilgarn	488	13	High	
UCL	Newton Rock	Lake Grace	463	13	High	Mostly wooded wetland
27863	Berringboodin	Mukinbudin	492	13	High	Semi-arid wooded granite
22460	Allen Rocks & Bores	Kondinin	5012	13	High	
18384	Lake Grace East	Lake Grace	379	13	Medium	uncleared areas very good
23140	Lake Biddy No. 1	Lake Grace	390	14	High	good where not cleared
1378	Warralakin (Geeleakin RK)	Westonia	450	14	Medium	central clearing
13231	White Old Tank	Lake Grace	186	14	Low	heavily mined
19929	Hyden TWS	Kondinin	444	14	Low	High level of recreation
18593	Bendering New / Siding	Kondinin	353	15	Low - Medium	adjacent to siding
19981	Karlgarin C (Llewellyn's)	Kondinin	421	15	Low - Medium	
18067	Lake Grace	Lake Grace	377	15	Medium	

	North					
13836	Walyurin RPF	Kulin	146	15	Low	Adjacent buildings
45610	Holt Rock Lake Fox	Kulin	462	16	Low - Medium	
21523	Purmta Rock	Lake Grace	466	16	Low - Medium	Small, degraded by tracks
12665	Nippering	Dumbleyung	339	16	Medium	Forms part of corridor
17616	Newdegate TWS & Tank / Siding	Lake Grace	385	16	Medium	likely to have further impacts
19649	Lake Biddy	Lake Grace	402	16	Medium	
20274	Lake Magenta North	Lake Grace	438	16	Medium	good but not uniform
21828	Tarco / Newdegate Lake King	Lake Grace	541	16	Medium	Corridor
23842	Sugg Rock	Lake Grace	554	16	Medium	disturbance throughout
19789	Wardercarrin Lake Grace	Lake Grace	427	17	High	
18156	Lake Grace South 20 Miles	Lake Grace	378	17	Medium - High	
11442	Bullock Hills	Dumbleyung	282	17	Low - Medium	corridor, nearby salinity
14417	Gabys (Rams)	Kent	205	17	Medium	corridor
18961	Newdegate South No. 2	Lake Grace	393	17	Medium	irregular boundaries
9570	Red Tank	Wyalkatchem	51	17	Low	
34518	Pingrup Townsite	Kent	391	17	Very Low	Highly Degraded
29369	Karlgarin / Karigann	Kondinin	583	17	Very Low	Highly Degraded
16318	James	Lake Grace	190	18	Low	small & modified
9447	Moulyinning	Dumbleyung	573	18	Low	nearby farm houses
16344	Kukerin N	Dumbleyung	183	19	Medium	stepping stone
23159	Kukerin Siding	Dumbleyung	202	19	Low	
22444	Titicup	Kent	226	19	Low	
17068	Elphin Siding	Wongan Ballidu	294	19	Very Low	Highly Degraded
26137	Lake Grace	Lake Grace	580	19	Very Low	Highly Degraded
20282	Lake Romani	Lake Grace	626	20	High	wooded waterbodies
18981	Greys Lake Grace East	Lake Grace	380	20	Low - Medium	A lot of nearby salinity
11230	Dumbleyung Town	Dumbleyung	196	20	Low	adjacent to town numerous tracks
23598	Lake Grace South Tommy's	Lake Grace	556	20	Low	
20710	Kents Dam	Lake Grace	429	21	High	Good condition natural drainage lines feeding larger reserve
12645	Datatine Old	Dumbleyung	203	21	Low	deep drains in ecw
18668	Nalkain	Wyalkatchem	77	21	Very Low	Highly Degraded
17312	Kulin	Kulin	257	21	Very Low	Highly Degraded
15543	Wallambin Tank	Wyalkatchem	76	22	Very Low	Salinity

There is a broad general agreement between the priorities established by the semi-automated quantitative assessment and the visual assessment.

Table 3.2 Comparison of Priorities with Quantitative Values

Priority determined by Visual Assessment	Typical Values produced by Quantitative Assessment	Number of reserves in Visual Assessment Class
High	7-14	16
Medium	15-17	20
Low – Very Low	18-22	18

This would be expected given that the majority of attributes examined were common to both assessment methods.

The visual assessment, however, did illuminate a number of features that could not be through the quantitative analysis alone. This included:

- identifying potential significant features such as wooded wetlands. This resulted in Dam 626, a small reserve in poorer condition and no granite present with a score of 20, being elevated from a low to high priority because it supports a *wooded waterbody*;
- the context in which the reserves lie such as the whether the reserve forms part of a larger corridor or supporting riparian vegetation along a natural drainage line feeding into a nature reserve (e.g. Dam 429);
- the distribution of disturbance across a site in a more nuanced manner than that possible with the use of intactness scale developed by Beeston, Hopkins and Shepherd (2002). The intactness scale was found to be generally very easy to assess and the results useful but limitations arise with simple scale such as this. The limitations of the scale generally became more of an issue in larger reserves, where for example disturbance was not localised but did cover an entire reserve either;
- the presence of degrading factors such as golf courses and nearby farmhouses utilising the reserve for access, and deep drains feeding into reserves; and
- the reserves being entirely or nearly entirely cleared. This could have been addressed by including this attribute as a part of the quantitative scoring matrix but as reserves that were entirely or nearly entirely cleared were all relegated to very low priority this was not critical;

The results for individual reserves are provided in the following section, in the form of maps and tables.

4.1 Dumbleyung Shire

4.1.1 Dam Number 573 – Reserve Number 9447

Moulyinning (Dumblenyung Shire)

Area Description

Criteria	Value
Reserve Number	9447
Parcel ID Number	650946,650942
Vesting	Water Corporation
Purpose	
Area	13.5 ha
Nearest road	<i>Dumblenyung Lake Grace Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	1
< 2m from valley floor	10
Veg. Intactness	2
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	259Cb_3
Regolith unit	A Refer to electronic dataset for descriptions.
Geology	Qd
Landscape Position	93%
Rare & Priority Flora (within 5km)	P1 = 1 P2 = 1 P3 = 1 P4 = 1 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Mammals – 1 x S1
Flora species	No record
Fauna species	No record
Veg. formations	Woodland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.01652
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	23
Area of Freehold	567 ha
Number of Reserves	4
Area of Reserves	230 ha
Number of UCL	2
Area of UCL	50 ha

Criteria	Association number	Description	% remaining
Vegetation Associations	1023	Medium woodland; York gum, wandoo & salmon gum (<i>Eucalyptus salmonophloia</i>)	7.1

Vegetation Map

4.1.2 Dam Number 196 – Reserve Number 11230

Dumbleyung Town (Dumbleyung Shire)

Area Description

Criteria	Value
Reserve Number	11230
Parcel ID Number	654733, 654736, 654739, 654738, 654732, 654726.
Vesting	Water Corporation
Purpose	
Area	31.2 ha
Nearest road	<i>Dumbleyung Lake Grace Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	1
< 2m from valley floor	9
Veg. Intactness	2
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	259Cb_2 259Ek_1 259Cb_2c
Regolith unit	C Refer to electronic dataset for descriptions.
Geology	No record
Landscape Position	79%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 0 P3 = 0 P4 = 0 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Birds – 1 x P4 Mammals - 1 x S1 Reptiles – 1 x P4; 1 x S4
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & Shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	Yes
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.01739
Adj. Rem. Vegetation Reserve	10.512 ha
Landscape context	
Number of Freehold	59
Area of Freehold	1312 ha
Number of Reserves	13
Area of Reserves	323 ha
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	1023	Medium woodland; York gum, wandoo & salmon gum (Eucalyptus salmonophloia)	7.1

4.1.3 Dam Number 282 – Reserve Number 11442**Bullock Hills (Dumbleyung Shire)****Area Description**

Criteria	Value
Reserve Number	11442
Parcel ID Number	657633, 657639
Vesting	Waters & Rivers Commission
Purpose	
Area	29.9 ha
Nearest road	Katanning Dumbleyung Road

Threats

Criteria	Value
Introduced plants	No Record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	4
Veg. Intactness	1
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	259Ek_3 259Ek_2
Regolith unit	C Refer to electronic dataset for descriptions
Geology	Qc
Landscape Position	82%
Rare & Priority Flora (within 5km)	P1 = 1 P2 = 0 P3 = 6 P4 = 0 Rare = 0
TECs (within 5km)	No Record
Rare & Priority Fauna (within 5km)	None
Flora species	No Record
Fauna species	No Record
Veg. formations	Woodland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.01009
Adj. Rem. Vegetation	
Freehold	90.359 ha
Landscape context	
Number of Freehold	69
Area of Freehold	1992
Number of Reserves	15
Area of Reserves	1035
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	1023	Medium woodland; York gum, wandoo & salmon gum (Eucalyptus salmonophloia)	7.1

4.1.4 Dam Number 203, 204 – Reserve Number 12645**Datatine Old (Dumbleyung Shire)****Area Description**

Criteria	Value
Reserve Number	12645
Parcel ID Number	1063624, 1063623
Vesting	Waters & Rivers Commission
Purpose	
Area	33.6 ha
Nearest road	<i>Datatine Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	10
Veg. Intactness	4
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	259Cb_2 259Ek_3
Regolith unit	A, C Refer to electronic dataset for descriptions
Geology	Qc Qa
Landscape Position	84
Rare & Priority Flora (within 5km)	P1 = 2 P2 = 0 P3 = 2 P4 = 1 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	None
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & Shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve Uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.01261
Adj. Rem. Vegetation Reserve	15.208 ha
Landscape context	
Number of Freehold	44
Area of Freehold	908
Number of Reserves	6
Area of Reserves	224
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	1092	Medium woodland; wandoo, York gum & morrell	6.7

4.1.5 Dam Number 339 – Reserve Number 12665

Nippering Townsite (Dumblenyung Shire)

Area Description

Criteria	Value
Reserve Number	12665
Parcel ID Number	654905, 654871, 654904, 654903, 654869
Vesting	
Purpose	Waters & Rivers Commission
Area	10.7 ha
Nearest road	Wagin Dumblenyung Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	1
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	259Dt_3
Regolith unit	C Refer to electronic dataset for description.
Geology	Amf
Landscape Position	77%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 1 P3 = 6 P4 = 0 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Birds – 1 x S1; 1 x P4 Reptiles – 1 x P4; 1 x S4
Flora species	No record
Fauna species	No record
Veg. formations	Woodland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.01971
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	42
Area of Freehold	835
Number of Reserves	11
Area of Reserves	369
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	1023	Medium woodland; York gum, wandoo & salmon gum (Eucalyptus salmonophloia)	7.1

4.1.6 Dam Number 183 – Reserve Number 16344

Kukerin North Dumbleyung (Shire)

Area Description

Criteria	Value
Reserve Number	16344
Parcel ID Number	657729
Vesting	Water Corporation
Purpose	
Area	4.4 ha
Nearest road	Kukerin Road North

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	10
Veg. Intactness	1
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	259Cb_1
Regolith unit	A Refer to electronic dataset for description.
Geology	Czs
Landscape Position	77
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 2 P3 = 4 P4 = 0 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & Shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.01981
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	60
Area of Freehold	2601
Number of Reserves	4
Area of Reserves	601
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	1023	Medium woodland; York gum, wandoo & salmon gum (Eucalyptus salmonophloia)	7.1

4.1.7 Dam Number 202 – Reserve Number 23159**Kukerin Siding (Dumbleyung Shire)****Area Description**

Criteria	Value
Reserve Number	23159
Parcel ID Number	657934
Vesting	Water Corporation
Purpose	
Area	38.2 Ha
Nearest road	<i>Kukerin Road South</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	1
1989 – 1991	1
< 2m from valley floor	0
Veg. Intactness	3
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	259Kk_2 259Kk_1
Regolith unit	C Refer to electronic dataset for description.
Geology	Ang
Landscape Position	100
Rare & Priority Flora (within 5km)	P1 = 2 P2 = 3 P3 = 15 P4 = 10 Rare = 1
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Mammals – 1 x P4; 1 x P5
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & Shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, catchment.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00715
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	82
Area of Freehold	2875 ha
Number of Reserves	16
Area of Reserves	755 ha
Number of UCL	5
Area of UCL	261 ha

Criteria	Association number	Description	% remaining
Vegetation Associations	1075	Shrublands; mallee scrub, Eucalyptus eremophila & black marlock (Eucalyptus redunca)	11.9

4.2 Kent Shire

4.2.1 Dam Number 205 – Reserve Number 14417

Gabys (Rams) (Kent Shire)

Area Description

Criteria	Value
Reserve Number	14417
Parcel ID Number	651537, 651538
Vesting	Water Corporation
Purpose	
Area	43.8 ha
Nearest road	Mclaren Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	2
Veg. Intactness	3
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape units	259Ek_1 259Ek_2 259Dt_2
Regolith unit	S Refer to electronic dataset for description.
Geology	Czg
Landscape Position	78%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 0 P3 = 0 P4 = 0 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Mammals – 1 x S1
Flora species	No record
Fauna species	No record
Veg. formations	Woodland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, catchment.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00669
Adj. Rem. Vegetation Reserve	39.32 ha
Landscape context	
Number of Freehold	58
Area of Freehold	1690
Number of Reserves	4
Area of Reserves	391
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	1094	Mosaic: Medium woodland; York gum & salmon gum / Shrublands; mallee scrub Eucalyptus eremophila & black marlock	5.8
	1092	Medium woodland; wandoo, York gum & morrell	6.7

4.2.2 Dam Number 226 – Reserve Number 22444

Titicup (Kent Shire)

Area Description

Criteria	Value
Reserve Number	22444
Parcel ID Number	661267
Vesting	Water Corporation
Purpose	
Area	39.3 ha
Nearest road	<i>Titicup Road</i>

Threats

Criteria	Value
Introduced plants	No Record
Salinity Extent	
1995 – 1998	1
1989 – 1991	1
< 2m from valley floor	0
Veg. Intactness	4
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape units	250Ny_2 259Cb_1 250Ny_2
Regolith unit	C Refer to electronic dataset for description.
Geology	Agv
Landscape Position	61%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 1 P3 = 7 P4 = 3 Rare = 0
TECs (within 5km)	No Record
Rare & Priority Fauna (within 5km)	Birds – 5 x P4
Flora species	No Record
Fauna species	No Record
Veg. formations	Woodland & Shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00635
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	32
Area of Freehold	2483 ha
Number of Reserves	7
Area of Reserves	1779 ha
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	1200	Mosaic: Medium woodland; salmon gum & morrel / Shrublands; mallee scrub Eucalyptus eremophila & black marlock (E. redunca)	43.2

4.2.3 Dam Number 391 – Reserve Number 34518

Pingrup Townsite (Kent Shire)

Area Description

Criteria	Value
Reserve Number	34518
Parcel ID Number	643753
Vesting	Water Corporation
Purpose	
Area	30.5 ha
Nearest road	Holmes Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	4
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape units	250Nw_2 250Pg_2
Regolith unit	S Refer to electronic dataset for description.
Geology	Czg
Landscape Position	58%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 2 P3 = 9 P4 = 0 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Birds – 2 x P4
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, Catchment.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00772
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	62
Area of Freehold	2750 ha
Number of Reserves	19
Area of Reserves	1011 ha
Number of UCL	1
Area of UCL	16 ha
Comments	Mostly cleared

Criteria	Association number	Description	% remaining
Vegetation Associations	1075	Shrublands; mallee scrub, Eucalyptus eremophila & black marlock (Eucalyptus redunca)	11.9

4.3 Kondinin Shire

4.3.1 Dam Number 445 – Reserve Number 8390

King Rocks (& Bore) (Kondinin Shire)

Area Description

Criteria	Value
Reserve Number	8390
Parcel ID Number	641287
Vesting	Water Corporation
Purpose	
Area	472.8 ha
Nearest road	<i>Kings Rock Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	2
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape units	250Ka_1 250Ka
Regolith unit	S, X Refer to electronic dataset for description.
Geology	Czg Agv
Landscape Position	64%
Rare & Priority Flora (within 5km)	P1 = 1 P2 = 0 P3 = 0 P4 = 2 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Mammals – 1 x S1
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Recreation sites	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00225
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	38
Area of Freehold	3476 ha
Number of Reserves	3
Area of Reserves	1119 ha
Number of UCL	9
Area of UCL	614 ha

Criteria	Association number	Description	% remaining
Vegetation Associations	519	Shrublands; mallee scrub, <i>Eucalyptus eremophila</i>	86.8
	128	Bare areas; rock outcrops	-

4.3.2 Dam Number 420 – Reserve Number 17663

McGanns Rock (Kondinin Shire)

Area Description

Criteria	Value
Reserve Number	17663
Parcel ID Number	641079, 641081
Vesting	Water Corporation
Purpose	
Area	246.3 ha
Nearest road	<i>Spurr Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	2
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape units	250Co 250Ki 250Co_3r 250Co_3r
Regolith unit	A, X, S Refer to electronic dataset for description.
Geology	Czg Agv
Landscape Position	61%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 2 P3 = 7 P4 = 1 Rare = 1
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, quarry.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.0034
Adj. Rem. Vegetation	
Freehold	31.059 ha
Landscape context	
Number of Freehold	55
Area of Freehold	1894
Number of Reserves	7
Area of Reserves	691
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8
	128	Bare areas; rock outcrops	-

4.3.3 Dam Number 353 – Reserve Number 18593

Bendering New / Siding (Kondinin Shire)

Area Description

Criteria	Value
Reserve Number	18593
Parcel ID Number	975267
Vesting	Water Corporation
Purpose	
Area	66.7 ha
Nearest road	<i>Bendering Road East</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	1
Veg. Intactness	2
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	258Bn_1 258Bn_3u
Regolith unit	S Refer to electronic dataset for description.
Geology	Czg
Landscape Position	60%
Rare & Priority Flora (within 5km)	P1 = 8 P2 = 0 P3 = 24 P4 = 11 Rare = 3
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Recreation sites	Dam, catchment.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00508
Adj. Rem. Vegetation	
Freehold	34.966 ha
Reserve	13.952 ha
Landscape context	
Number of Freehold	55
Area of Freehold	1894
Number of Reserves	7
Area of Reserves	691
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	960	Shrublands; mallee scrub, redwood & black marlock	9.9

4.3.4 Dam Number 444 – Reserve Number 19929

Hyden TWS (Kondinin Shire)

Area Description

Criteria	Value
Reserve Number	19929
Parcel ID Number	641430
Vesting	Water Corporation
Purpose	
Area	107.4 ha
Nearest road	Hyden Lake King Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	2
Adjoining land use	Reserve, Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Ka 250Ka_1
Regolith unit	L, X Refer to electronic dataset for description.
Geology	Czg
Landscape Position	78%
Rare & Priority Flora (within 5km)	P1 = 15 P2 = 6 P3 = 3 P4 = 4 Rare = 3
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Birds – 1 x S1; 2 x P4
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	Yes
Reserve uses	Dam, Golf Course.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00504
Adj. Rem. Vegetation Reserve	183.223 ha
Landscape context	
Number of Freehold	109
Area of Freehold	4726
Number of Reserves	35
Area of Reserves	2424
Number of UCL	2
Area of UCL	87

Criteria	Association number	Description	% remaining
Vegetation Associations	945	Shrublands; mallee scrub, Eucalyptus eremophila	11.4
	128	Bare areas; rock outcrops	-

4.3.5 Dam Number 421 – Reserve Number 19981

Karlgarin Central (Llewellyn's) (Kondinin Shire)

Area Description

Criteria	Value
Reserve Number	19981
Parcel ID Number	640961
Vesting	Water Corporation
Purpose	
Area	21.8 ha
Nearest road	Church Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	2
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Hy
Regolith unit	S, X Refer to electronic dataset for description.
Geology	Czg
Landscape Position	73%
Rare & Priority Flora (within 5km)	P1 = 1 P2 = 3 P3 = 1 P4 = 1 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	None
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Tank

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00894
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	64
Area of Freehold	3168 ha
Number of Reserves	13
Area of Reserves	1333 ha
Number of UCL	3
Area of UCL	204 ha

Criteria	Association number	Description	% remaining
Vegetation Associations	945	Shrublands; mallee scrub, Eucalyptus eremophila	11.4

4.3.6 Dam Number 5012 – Reserve Number 22460

Allen Rocks & Bores (Kondinin Shire)

Area Description

Criteria	Value
Reserve Number	22460
Parcel ID Number	642080, 642081
Vesting	Water Corporation
Purpose	
Area	248.4 ha
Nearest road	<i>Allen Rocks Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	1
Veg. Intactness	1
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape units	250Ka 250Ka_1 250KaNS
Regolith unit	S, A, X Refer to electronic dataset for description.
Geology	Qc Agv
Landscape Position	75%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 0 P3 = 1 P4 = 0 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00275
Adj. Rem. Vegetation	
Freehold	34.307 ha
Landscape context	
Number of Freehold	57
Area of Freehold	5813
Number of Reserves	10
Area of Reserves	3082
Number of UCL	2
Area of UCL	277

Criteria	Association number	Description	% remaining
Vegetation Associations	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8

4.3.7 Dam Number 583 – Reserve Number 29369

Karlgarin/Karigann (Kondinin Shire)

Area Description

Criteria	Value
Reserve Number	29369
Parcel ID Number	640957
Vesting	Water Corporation
Purpose	
Area	60.6 ha
Nearest road	Church Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	4
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Hy
Regolith unit	S, X Refer to electronic dataset for description.
Geology	Czs
Landscape Position	77%
Rare & Priority Flora (within 5km)	P1 = 1 P2 = 3 P3 = 1 P4 = 1 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	None
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, catchment

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00559
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	59
Area of Freehold	2966
Number of Reserves	13
Area of Reserves	1333
Number of UCL	2
Area of UCL	131
Comments	Mostly cleared

Criteria	Association number	Description	% remaining
Vegetation Associations	945	Mosaic: Medium woodland; salmon gum / Shrublands; mallee scrub, redwood & black marlock	11.4

4.4 Kulin Shire

4.4.1 Dam Number 146 – Reserve Number 13836

Walyurin RPF (Kulin Shire)

Area Description

Criteria	Value
Reserve Number	13836
Parcel ID Number	659280
Vesting	Water Corporation
Purpose	
Area	4.3 ha
Nearest road	Muller Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	4
Adjoining land use	Agriculture, Remnant vegetation.

Asset Description

Criteria	Value
Soil/landscape unit	259Kk_1 259Kk_3dd
Regolith unit	C, X Refer to electronic dataset for description.
Geology	Cza Qc
Landscape Position	48%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 0 P3 = 0 P4 = 1 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Birds – 1 x P4
Flora species	No record
Fauna species	No record
Veg. formations	Shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.0193
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	61
Area of Freehold	2632
Number of Reserves	4
Area of Reserves	601
Number of UCL	0
Area of UCL	0
Comments	No stereopair or print

Criteria	Association number	Description	% remaining
Vegetation Associations	131	Mosaic: Medium woodland; salmon gum & gimlet / Shrublands; mallee scrub, redwood & black marlock	5.9

4.4.2 Dam Number 257 – Reserve Number 17312

Kulin (Kulin Shire)

Area Description

Criteria	Value
Reserve Number	17312
Parcel ID Number	971567, 975113
Vesting	Water Corporation
Purpose	
Area	4.2 ha
Nearest road	<i>Williams Kondinin Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	1
1989 – 1991	1
< 2m from valley floor	8
Veg. Intactness	4
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	259Co_3u 259Ki_4ns
Regolith unit	C, A Refer to electronic dataset for description.
Geology	Czs Czl
Landscape Position	69%
Rare & Priority Flora (within 5km)	P1 = 8 P2 = 9 P3 = 3 P4 = 14 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Mammals – 1 x S1; 1 x P4
Flora species	No record
Fauna species	No record
Veg. formations	Shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.03059
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	51
Area of Freehold	1675
Number of Reserves	10
Area of Reserves	627
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	960	Shrublands; mallee scrub, redwood & black marlock	9.9

4.4.3 Dam Number 462 – Reserve Number 45610

Holt Rock Lake Fox (Kulin Shire)

Area Description

Criteria	Value
Reserve Number	45610
Parcel ID Number	1253624
Vesting	Water Corporation
Purpose	
Area	27.7 ha
Nearest road	Holt Rock Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	2
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape units	250Ka 250Ki 250Ka_1
Regolith unit	S, X Refer to electronic dataset for description.
Geology	Ql Czg
Landscape Position	85%
Rare & Priority Flora (within 5km)	P1 = 6 P2 = 2 P3 = 4 P4 = 6 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	None
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Tank

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00724
Adj. Rem. Vegetation	
Reserve	19.028 ha
UCL	10.318 ha
Landscape context	
Number of Freehold	71
Area of Freehold	4862 ha
Number of Reserves	15
Area of Reserves	2957 ha
Number of UCL	9
Area of UCL	239 ha
Comments	Vegetation on granite is mostly peripheral

Criteria	Association number	Description	% remaining
Vegetation Associations	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8

4.5 Lake Grace Shire

4.5.1 Dam Number 186, 187 – Reserve Number White Tank Old (Lake Grace Shire)

Area Description

Criteria	Value
Reserve Number	13231
Parcel ID Number	658150, 660111, 660110, 660113, 660109.
Vesting	Water Corporation
Purpose	
Area	332.9 ha
Nearest road	<i>Dumbleyung Lake Grace Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	4
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	259Kk_1 259Kk_2 259Dt_2 259Dt_1
Regolith unit	S, C, R, X Refer to electronic dataset for description.
Geology	Qc Czg Agv Anv Qa
Landscape Position	69%
Rare & Priority Flora (within 5km)	P1 = 5 P2 = 5 P3 = 11 P4 = 1 Rare = 1
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Birds – 1 x S1; 1 x P4
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Quarry

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.0049
Adj. Rem. Vegetation	
Freehold	51.706 ha
Reserve	15.864 ha
Landscape context	
Number of Freehold	29
Area of Freehold	1140 ha
Number of Reserves	5
Area of Reserves	359 ha
Number of UCL	2
Area of UCL	101 ha

Criteria	Association number	Description	% remaining
Vegetation Associations	1200	Mosaic: Medium woodland; salmon gum & morrel / Shrublands; mallee scrub Eucalyptus eremophila & black marlock (E. redunca).	43.2
	511	Medium woodland; salmon gum & morel.	12
	2048	Shrublands; scrub-heath in the Mallee Region	13.2

4.5.2 Dam Number 385 – Reserve Number 17616

Newdegate TWS & Tank / Siding (Lake Grace Shire)

Area Description

Criteria	Value
Reserve Number	17616
Parcel ID Number	643375, 643389
Vesting	Water Corporation
Purpose	
Area	34.8 ha
Nearest road	Newdegate Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	2
Adjoining land use	Reserve, Air strip, Golf Course, Town.

Asset Description

Criteria	Value
Soil/landscape unit	250La_2 250Nw_2
Regolith unit	S, X Refer to electronic dataset for description.
Geology	Czg
Landscape Position	86%
Rare & Priority Flora (within 5km)	P1 = 7 P2 = 14 P3 = 19 P4 = 23 Rare = 2
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	None
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Airstrip, Golf Course, Dam.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.01007
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	25
Area of Freehold	862 ha
Number of Reserves	0
Area of Reserves	0
Number of UCL	2
Area of UCL	65 ha

Criteria	Association number	Description	% remaining
Vegetation Associations	945	Medium woodland; salmon gum & morrel	11.4
	511	Medium woodland; salmon gum & morel.	12
	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8

4.5.3 Dam Number 389 – Reserve Number 17648

Lake Grace 13 Mile (Lake Grace Shire)

Area Description

Criteria	Value
Reserve Number	17648
Parcel ID Number	643148, 643143
Vesting	Water & Rivers Commission
Purpose	
Area	332 ha
Nearest road	Lake Grace Newdegate Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	1
1989 – 1991	1
< 2m from valley floor	4
Veg. Intactness	3
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Nw_2 250Nw_6
Regolith unit	S, X Refer to electronic dataset for description.
Geology	Qa Czg
Landscape Position	50%
Rare & Priority Flora (within 5km)	P1 = 6 P2 = 13 P3 = 35 P4 = 4 Rare = 1
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Brids – 2 x S1; 1 x S4; 1 x P4
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, catchment

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.0025
Adj. Rem. Vegetation Reserve	431.5 ha
Landscape context	
Number of Freehold	33
Area of Freehold	3082 ha
Number of Reserves	10
Area of Reserves	2308 ha
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation	380	Shrublands; scrub-heath on sandplain	100
Associations	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8

4.5.4 Dam Number 377 – Reserve Number 18067

Lake Grace North (Lake Grace Shire)

Area Description

Criteria	Value
Reserve Number	18067
Parcel ID Number	972825
Vesting	Water Corporation
Purpose	
Area	38.2 ha
Nearest road	<i>Kulin Lake Grace Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	3
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Ck_1 250Ck_3u
Regolith unit	L, R Refer to electronic dataset for description.
Geology	Agg Czl
Landscape Position	62%
Rare & Priority Flora (within 5km)	P1 = 4 P2 = 1 P3 = 2 P4 = 1 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Mammals – 1 x S1
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00627
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	27
Area of Freehold	1190 ha
Number of Reserves	8
Area of Reserves	721 ha
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	511	Medium woodland; salmon gum & morrel	12
	131	Mosaic: Medium woodland; salmon gum & gimlet / Shrublands; mallee scrub, redwood & black marlock	5.9

4.5.5 Dam Number 378 – Reserve Number 18156

Lake Grace South 20 Miles (Lake Grace Shire)

Area Description

Criteria	Value
Reserve Number	18156
Parcel ID Number	1340507, 1340506
Vesting	Water & Rivers Commission
Purpose	
Area	34.14 ha
Nearest road	<i>Pingrup Lake Grace Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	1
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Nw_1a 250Nw_1 250Nw_2
Regolith unit	S Refer to electronic dataset for description.
Geology	Qd
Landscape Position	91%
Rare & Priority Flora (within 5km)	P1 = 1 P2 = 0 P3 = 0 P4 = 4 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	None
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00991
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	47
Area of Freehold	2024 ha
Number of Reserves	17
Area of Reserves	1049 ha
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	1098	Mosaic: Medium sparse woodland; salmon gum & morrel / Succulent steppe; samphire.	21.7

4.5.6 Dam Number 379 – Reserve Number 18384

Lake Grace East (Lake Grace Shire)

Area Description

Criteria	Value
Reserve Number	18384
Parcel ID Number	643050, 660156, 643042
Vesting	Water Corporation
Purpose	
Area	266.4 ha
Nearest road	Lake Grace Newdegate Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	1
< 2m from valley floor	1
Veg. Intactness	3
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Nw_1 250Nw_4 250Nw_6 250Nw_2
Regolith unit	S, X Refer to electronic dataset for description.
Geology	Czs Czg
Landscape Position	46%
Rare & Priority Flora (within 5km)	P1 = 4 P2 = 4 P3 = 17 P4 = 2 Rare = 2
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Birds – 4 x S1; 1 x S4; 1xP4 Mammals – 2 x S1
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, catchment.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00314
Adj. Rem. Vegetation	
Freehold	31.974 ha
Landscape context	
Number of Freehold	39
Area of Freehold	1078 ha
Number of Reserves	4
Area of Reserves	295 ha
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	519	Medium woodland; salmon gum & morrel	86.8

4.5.7 Dam Number 380 – Reserve Number 18981

Greys Lake Grey East (Lake Grace Shire)

Area Description

Criteria	Value
Reserve Number	18981
Parcel ID Number	643008
Vesting	Water Corporation
Purpose	
Area	31.8 ha
Nearest road	Beenong Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	4
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Sh_4 250La_1
Regolith unit	S Refer to electronic dataset for description.
Geology	Agg
Landscape Position	94%
Rare & Priority Flora (within 5km)	P1 x 4 P2 x 2 P3 x 12 P4 x 3 Rare x 2
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	None
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00846
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	54
Area of Freehold	2147
Number of Reserves	9
Area of Reserves	1115
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation	936	Medium woodland; salmon gum	100
Associations	1200	Mosaic: Medium woodland; salmon gum & morrel / Shrublands; mallee scrub Eucalyptus eremophila & black marlock (E. redunca)	43.2

4.5.8 Dam Number 402 – Reserve Number 19649

Lake Biddy (Lake Grace Shire)

Area Description

Criteria	Value
Reserve Number	19649
Parcel ID Number	642245
Vesting	DPI
Purpose	
Area	32.2 ha
Nearest road	Whitham Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	2
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Sh 250Bg
Regolith unit	S, A Refer to electronic dataset for description.
Geology	Czg Qa
Landscape Position	73%
Rare & Priority Flora (within 5km)	P1 = 6 P2 = 1 P3 = 0 P4 = 0 Rare = 3
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	None
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter : Area ratio	0.00809
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	45
Area of Freehold	2792
Number of Reserves	12
Area of Reserves	2199
Number of UCL	6
Area of UCL	104

Criteria	Association number	Description	% remaining
Vegetation Associations	945	Shrublands; mallee scrub, Eucalyptus eremophila	11.4
	511	Mosaic: Medium woodland; salmon gum / Shrublands; mallee scrub, redwood & black marlock	12

4.5.9 Dam Number 427 – Reserve Number 19789

Wardercarrin Lake Grace (Lake Grace Shire)

Area Description

Criteria	Value
Reserve Number	19789
Parcel ID Number	642102
Vesting	Water Corporation
Purpose	
Area	46 Ha
Nearest road	North Lake Grace Kalgarin Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	1
Veg. Intactness	3
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Co 250Ki
Regolith unit	S, A, X Refer to electronic dataset for description.
Geology	Qa Czg Qd
Landscape Position	68%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 0 P3 = 0 P4 = 0 Rare = 4
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Birds – 2 x P4
Flora species	No record
Fauna species	No record
Veg. formations	Shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00723
Adj. Rem. Vegetation	
Freehold	11.902 ha
Landscape context	
Number of Freehold	49
Area of Freehold	1306
Number of Reserves	9
Area of Reserves	356
Number of UCL	0
Area of UCL	0
Comments	Drainage lines

Criteria	Association number	Description	% remaining
Vegetation Associations	945	Shrublands; mallee scrub, Eucalyptus eremophila	11.4

4.5.10 Dam Number 438 – Reserve Number 20274

Lake Magenta North (Lake Grace Shire)

Area Description

Criteria	Value
Reserve Number	20274
Parcel ID Number	644701, 644702
Vesting	Water Corporation
Purpose	
Area	345.8 ha
Nearest road	Giles Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	1
< 2m from valley floor	8
Veg. Intactness	3
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Nw_1 250La_2
Regolith unit	S Refer to electronic dataset for description.
Geology	Czl
Landscape Position	75%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 0 P3 = 10 P4 = 0 Rare = 7
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	None
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, quarry.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00355
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	58
Area of Freehold	4731 ha
Number of Reserves	14
Area of Reserves	2631 ha
Number of UCL	1
Area of UCL	31 ha
Comments	Drainage lines

Criteria	Association number	Description	% remaining
Vegetation Associations	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8
	511	Medium woodland; salmon gum & morrel	12
	936	Medium woodland; salmon gum	100

4.5.11 Dam Number 626 – Reserve Number 20282

Lake Romani (Lake Grace Shire)

Area Description

Criteria	Value
Reserve Number	20282
Parcel ID Number	645240
Vesting	Water Corporation
Purpose	
Area	37.7 ha
Nearest road	<i>Magenta Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	1
Veg. Intactness	4
Adjoining land use	Agriculture, Reserve.

Asset Description

Criteria	Value
Soil/landscape unit	250Sh_3
Regolith unit	S, L Refer to electronic dataset for description.
Geology	Qc Agv
Landscape Position	91%
Rare & Priority Flora (within 5km)	No record
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Lake

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00697
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	22
Area of Freehold	615 ha
Number of Reserves	1
Area of Reserves	20 ha
Number of UCL	0
Area of UCL	0
Comments	Salt lines present

Criteria	Association number	Description	% remaining
Vegetation Associations	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8
	511	Medium woodland; salmon gum & morrel	12

4.5.12 Dam Number 429 – Reserve Number 20710

Kents Dam (Lake Grace Shire)

Area Description

Criteria	Value
Reserve Number	20710
Parcel ID Number	642117
Vesting	Water Corporation
Purpose	
Area	88 ha
Nearest road	Burngup Road North

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	1
1989 – 1991	1
< 2m from valley floor	6
Veg. Intactness	3
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Ki
Regolith unit	S, A Refer to electronic dataset for description.
Geology	Amv Czs
Landscape Position	91%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 0 P3 = 2 P4 = 0 Rare = 1
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, Catchment.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00509
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	74
Area of Freehold	3791 ha
Number of Reserves	23
Area of Reserves	2108 ha
Number of UCL	0
Area of UCL	0
Comments	Drainage lines

Criteria	Association number	Description	% remaining
Vegetation Associations	945	Mosaic: Medium woodland; salmon gum / Shrublands; mallee scrub, redwood & black marlock	11.4

4.5.13 Dam Number 466 – Reserve Number 21523**Purnta Rock (Lake Grace Shire)****Area Description**

Criteria	Value
Reserve Number	21523
Parcel ID Number	642614
Vesting	Water Corporation
Purpose	
Area	45.6 ha
Nearest road	<i>Purnta Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	3
Veg. Intactness	2
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Ka
Regolith unit	S, X Refer to electronic dataset for description.
Geology	Tl Qc
Landscape Position	86%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 1 P3 = 4 P4 = 0 Rare = 5
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, Tanks

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00582
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	63
Area of Freehold	6432 ha
Number of Reserves	17
Area of Reserves	4121 ha
Number of UCL	0
Area of UCL	0
Comments	No Aerial Photo

Criteria	Association number	Description	% remaining
Vegetation	128	Bare areas; rock outcrops	100
Associations	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8

4.5.14 Dam Number 541 – Reserve Number 21828

Tarco/Newdegate Lake King (Lake Grace Shire)

Area Description

Criteria	Value
Reserve Number	21828
Parcel ID Number	643698
Vesting	DPI
Purpose	
Area	18.73 ha
Nearest road	Newdegate Ravensthorpe Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	3
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Nw_1 250Nw_4
Regolith unit	S Refer to electronic dataset for description.
Geology	Agv
Landscape Position	53%
Rare & Priority Flora (within 5km)	P1 = 2 P2 = 8 P3 = 3 P4 = 9 Rare = 3
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, catchment

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.01047
Adj. Rem. Vegetation	None
Landscape context	
Number of Freehold	43
Area of Freehold	2022 ha
Number of Reserves	1
Area of Reserves	221 ha
Number of UCL	0
Area of UCL	0
Comments	No aerial photo

Criteria	Association number	Description	% remaining
Vegetation Associations	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8

4.5.15 Dam Number 390 – Reserve Number 23140**Lake Biddy No 1 (Lake Grace Shire)****Area Description**

Criteria	Value
Reserve Number	23140
Parcel ID Number	342246
Vesting	Water Corporation
Purpose	
Area	484.4 Ha
Nearest road	Whitham Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	1
1989 – 1991	1
< 2m from valley floor	2
Veg. Intactness	3
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Sh 250Bg
Regolith unit	S, A Refer to electronic dataset for description.
Geology	Ang Qa
Landscape Position	67%
Rare & Priority Flora (within 5km)	P1 = 6 P2 = 1 P3 = 0 P4 = 0 Rare = 3
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, Catchment.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00207
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	58
Area of Freehold	4169 ha
Number of Reserves	13
Area of Reserves	2413 ha
Number of UCL	5
Area of UCL	93 ha
Comments	Distinct lateritic breakaway and topographically diverse.

Criteria	Association number	Description	% remaining
Vegetation Associations	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8
	945	Mosaic: Medium woodland; salmon gum / Shrublands; mallee scrub, redwood & black marlock	11.4

4.5.16 Dam Number 556 – Reserve Number 23598**Lake Grace South Tommy's (Lake Grace Shire)****Area Description**

Criteria	Value
Reserve Number	23598
Parcel ID Number	643175
Vesting	Water Corporation
Purpose	
Area	70.7 ha
Nearest road	Tommy's Dam Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	1
1989 – 1991	1
< 2m from valley floor	3
Veg. Intactness	4
Adjoining land use	Agriculture, dams.

Asset Description

Criteria	Value
Soil/landscape unit	250Nw_1
Regolith unit	S Refer to electronic dataset for description.
Geology	Czl Qcf
Landscape Position	79%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 0 P3 = 0 P4 = 1 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.0054
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	22
Area of Freehold	1110 ha
Number of Reserves	7
Area of Reserves	787 ha
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8

4.5.17 Dam Number 554 – Reserve Number 23842**Sugg Rock (Lake Grace Shire)****Area Description**

Criteria	Value
Reserve Number	23842
Parcel ID Number	642562
Vesting	Water Corporation
Purpose	
Area	154.19 ha
Nearest road	<i>Sugg Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	4
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Ln_6 250Ln_2 250La_2
Regolith unit	L, X Refer to electronic dataset for description.
Geology	Qcs Czgs
Landscape Position	70%
Rare & Priority Flora (within 5km)	No record
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, quarry.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00322
Adj. Rem. Vegetation	
Freehold	13.806 ha
Reserve	1182.663 ha
Landscape context	
Number of Freehold	58
Area of Freehold	3601 ha
Number of Reserves	24
Area of Reserves	2726 ha
Number of UCL	12
Area of UCL	485 ha

Criteria	Association number	Description	% remaining
Vegetation Associations	941	Mosaic: Medium woodland; salmon gum & morrel / Shrublands; mallee scrub, redwood	15.9

4.5.18 Dam Number 580 – Reserve Number 26317

Lake Grace (Lake Grace Shire)

Area Description

Criteria	Value
Reserve Number	26137
Parcel ID Number	659996, 660151, 660148
Vesting	Water Corporation
Purpose	
Area	112.6 ha
Nearest road	Lake Grace Newdegate Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	4
Adjoining land use	Agriculture, reserve

Asset Description

Criteria	Value
Soil/landscape unit	250Nw_1 250Nw_2
Regolith unit	S, R Refer to electronic dataset for description.
Geology	Qd Ang
Landscape Position	64%
Rare & Priority Flora (within 5km)	P1 = 5 P2 = 4 P3 = 18 P4 = 2 Rare = 2
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Birds – 4 x S1; 1 x S4; 1x P4 Mammals – 2 x S1
Flora species	No record
Fauna species	No record
Veg. formations	Shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, catchment.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.0056
Adj. Rem. Vegetation	
Freehold	31.936 ha
Landscape context	
Number of Freehold	38
Area of Freehold	1049 ha
Number of Reserves	4
Area of Reserves	295 ha
Number of UCL	0
Area of UCL	0
Comments	Cleared

Criteria	Association number	Description	% remaining
Vegetation Associations	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8

4.5.19 Dam Number 188 – Reserve Number 28449**Lake Grace Station/Newdegate East (Lake Grace Shire)****Area Description**

Criteria	Value
Reserve Number	28449
Parcel ID Number	643676
Vesting	DPI
Purpose	
Area	245.8 ha
Nearest road	Haigh Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	2
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Nw_4 250Nw_6 250Sh
Regolith unit	S, R, X Refer to electronic dataset for description.
Geology	Czg Czs Qd
Landscape Position	40%
Rare & Priority Flora (within 5km)	P1 = 1 P2 = 0 P3 = 4 P4 = 0 Rare = 5
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00257
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	44
Area of Freehold	1585 ha
Number of Reserves	5
Area of Reserves	399 ha
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8

4.5.20 Dam Number 190 – Reserve Number 16318

James (Lake Grace Shire)

Area Description

Criteria	Value
Reserve Number	16318
Parcel ID Number	660073
Vesting	Water Corporation
Purpose	
Area	14.15 ha
Nearest road	<i>Kulin Lake Grace Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	4
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Nw_2 250Nw_1
Regolith unit	S, X Refer to electronic dataset for description.
Geology	Qa Agl
Landscape Position	45%
Rare & Priority Flora (within 5km)	P1 = 6 P2 = 5 P3 = 18 P4 = 3 Rare = 1
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.01137
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	31
Area of Freehold	1178 ha
Number of Reserves	7
Area of Reserves	432 ha
Number of UCL	0
Area of UCL	0

Criteria	Association number	Description	% remaining
Vegetation Associations	1200	Mosaic: Medium woodland; salmon gum & morrel / Shrublands; mallee scrub Eucalyptus eremophila & black marlock (E. redunca).	43.2
	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8

4.5.21 Dam Number 463 – UCL**Newtown Rock (Lake Grace Shire)****Area Description**

Criteria	Value
Reserve Number	UCL
Parcel ID Number	642583
Vesting	DPI
Purpose	
Area	307.7 ha
Nearest road	Lake Newton Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	1
< 2m from valley floor	5
Veg. Intactness	2
Adjoining land use	Agriculture, Reserve.

Asset Description

Criteria	Value
Soil/landscape unit	250Nw 250Ln_2
Regolith unit	S, L, X Refer to electronic dataset for description.
Geology	Qd Qz Agv Agb
Landscape Position	76%
Rare & Priority Flora (within 5km)	No record
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, Lake

Viability

Criteria	Value
Salinity Extent	See above
Perimeter : Area ratio	0.00242
Adj. Rem. Vegetation	
Freehold	48.217 ha
UCL	61.475 ha
Landscape context	
Number of Freehold	34
Area of Freehold	4513 ha
Number of Reserves	7
Area of Reserves	3172 ha
Number of UCL	8
Area of UCL	313 ha
Comments	No aerial photo

Criteria	Association number	Description	% remaining
Vegetation Associations	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8
	128	Bare areas; rock outcrops	100
	511	Medium woodland; salmon gum & morrel	12
	125	Bare areas; salt lakes	100

4.5.22 Dam Number 393 – Reserve Number 18961**Newdegate South No 2 (Lake Grace Shire)****Area Description**

Criteria	Value
Reserve Number	18961
Parcel ID Number	643727, 643238, 643732, 643730.
Vesting	Water Corporation
Purpose	
Area	196 ha
Nearest road	Hoskins Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	1
1989 – 1991	1
< 2m from valley floor	0
Veg. Intactness	3
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	250Nw_1 250Nw_2
Regolith unit	L, S Refer to electronic dataset for description.
Geology	Czg Qd
Landscape Position	74%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 0 P3 = 1 P4 = 0 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, catchment, quarry.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00368
Adj. Rem. Vegetation	
Freehold	21.682 ha
Landscape context	
Number of Freehold	41
Area of Freehold	2310 ha
Number of Reserves	3
Area of Reserves	224 ha
Number of UCL	5
Area of UCL	111 ha

Criteria	Association number	Description	% remaining
Vegetation Associations	519	Shrublands; mallee scrub, Eucalyptus eremophila	86.8

4.6 Mukinbudin Shire

4.6.1 Dam Number 492 – Reserve Number 37863

Berringbooding (Mukinbudin Shire)

Area Description

Criteria	Value
Reserve Number	37863
Parcel ID Number	1004836, 735648
Vesting	DPI
Purpose	
Area	124 ha
Nearest road	<i>Berringbooding Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	3
Veg. Intactness	2
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	258KyKW
Regolith unit	C, X Refer to electronic dataset for description.
Geology	Age
Landscape Position	74%
Rare & Priority Flora (within 5km)	P1 = 1 P2 = 0 P3 = 0 P4 = 0 Rare = 0
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	Yes
Reserve uses	Tank

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00515
Adj. Rem. Vegetation	
Freehold	223.4 ha
UCL	5281.686 ha
Landscape context	
Number of Freehold	68
Area of Freehold	6991 ha
Number of Reserves	11
Area of Reserves	1937 ha
Number of UCL	6
Area of UCL	7484 ha

Criteria	Association number	Description	% remaining
Vegetation Associations	8	Shrublands; acacia, casuarina & melaleuca thicket	9.5
	1413	Medium woodland; salmon gum & gimlet	63.2
	128	Bare areas; rock outcrops	100

4.6.2 Dam Number 488 – UCL Arnolds (Mukinbudin Shire)

Area Description

Criteria	Value
Reserve Number	UCL
Parcel ID Number	642867, 642987, 642868, 642866.
Vesting	DPI
Purpose	
Area	103 Ha
Nearest road	Arnold Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	2
Adjoining land use	Agriculture, Dam.

Asset Description

Criteria	Value
Soil/landscape unit	258KyKW 258BrWI 258BrKO 258BrKO
Regolith unit	R, X Refer to electronic dataset for description.
Geology	Agv Czgs
Landscape Position	16%
Rare & Priority Flora (within 5km)	No record
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Tank

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00393
Adj. Rem. Vegetation	
Freehold	39.936 ha
Landscape context	
Number of Freehold	76
Area of Freehold	4852 ha
Number of Reserves	3
Area of Reserves	146 ha
Number of UCL	3
Area of UCL	7013 ha

Criteria	Association number	Description	% remaining
Vegetation Associations	1413	Medium woodland; salmon gum & gimlet	63.2

4.7 Westonia Shire

4.7.1 Dam Number 450 – Reserve Number 1378

Warralakin (Geeleakin) (Westonia Shire)

Area Description

Criteria	Value
Reserve Number	1378
Parcel ID Number	970219
Vesting	Water Corporation
Purpose	
Area	141.7 ha
Nearest road	<i>English East Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	4
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	258KyKW 258KyWI
Regolith unit	C, X Refer to electronic dataset for description.
Geology	Qd Agv
Landscape Position	63%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 2 P3 = 7 P4 = 2 Rare = 18
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Tank

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00341
Adj. Rem. Vegetation	
Freehold	23.838 ha
Landscape context	
Number of Freehold	88
Area of Freehold	9352 ha
Number of Reserves	10
Area of Reserves	4464 ha
Number of UCL	2
Area of UCL	33 ha

Criteria	Association number	Description	% remaining
Vegetation	1413	Medium woodland; salmon gum & gimlet	63.2
Associations	511	Medium woodland; salmon gum & morrel	12

4.8 Wongan Ballidu Shire

4.8.1 Dam Number 568 – Reserve Number 15702

Mocardy (Wongan Ballidu Shire)

Area Description

Criteria	Value
Reserve Number	15702
Parcel ID Number	737793, 732521
Vesting	Water Corporation
Purpose	
Area	240.7 ha
Nearest road	Koorda Wongan Hills Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	1
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	256Wg_1 256Wg_4
Regolith unit	R, X Refer to electronic dataset for description.
Geology	Qc Qz
Landscape Position	28%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 18 P3 = 34 P4 = 10 Rare = 43
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Tank, dam.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00362
Adj. Rem. Vegetation	
Freehold	226.993 ha
Landscape context	
Number of Freehold	71
Area of Freehold	3318 ha
Number of Reserves	22
Area of Reserves	2115 ha
Number of UCL	2
Area of UCL	53 ha

Criteria	Association number	Description	% remaining
Vegetation Associations	1024	Shrublands; mallee & casuarina thicket	7.5
	128	Bare areas; rock outcrops	100
	352	Medium woodland; York gum	100

4.8.2 Dam Number 294 – Reserve Number 17068

Elphin Siding (Wongan Ballidu Shire)

Area Description

Criteria	Value
Reserve Number	17068
Parcel ID Number	732250
Vesting	Waters & Rivers Commission
Purpose	
Area	19.4 ha
Nearest road	<i>Elphin Korraling Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	1
1989 – 1991	0
< 2m from valley floor	5
Veg. Intactness	4
Adjoining land use	Agriculture, reserve.

Asset Description

Criteria	Value
Soil/landscape unit	256Wg_2
Regolith unit	R, C Refer to electronic dataset for description.
Geology	Ang Czl Czg
Landscape Position	66%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 74 P3 = 66 P4 = 108 Rare = 177
TECs (within 5km)	1
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.01145
Adj. Rem. Vegetation	
Reserve	557.633 ha
UCL	334.682 ha
Landscape context	
Number of Freehold	97
Area of Freehold	5206 ha
Number of Reserves	29
Area of Reserves	2798 ha
Number of UCL	2
Area of UCL	53 ha
Comments	Cleared

Criteria	Association number	Description	% remaining
Vegetation Associations	1024	Shrublands; mallee & casuarina thicket	7.5
	2047	Shrublands; tamma & dryandra thicket	64.6
	1049	Medium woodland; wandoo, York gum, salmon gum, morrel & gimlet	4.1

4.9 Wyalkatchem Shire

4.9.1 Dam Number 51 – Reserve Number 9570

Red Tank (Wyalkatchem Shire)

Area Description

Criteria	Value
Reserve Number	9570
Parcel ID Number	965223, 951809
Vesting	DPI
Purpose	
Area	36.5 ha
Nearest road	Wyalkatchem North Rd

Threats

Criteria	Value
Introduced plants	See Appendix 2
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	1
Veg. Intactness	3
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	258KbKU
Regolith unit	C Refer to electronic dataset for description.
Geology	No record
Landscape Position	77%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 5 P3 = 5 P4 = 0 Rare = 23
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Reptiles – 1 x S1
Flora species	See Appendix 2
Fauna species	See Appendix 3
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam, catchment.

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00882
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	10
Area of Freehold	229 ha
Number of Reserves	5
Area of Reserves	117 ha
Number of UCL	1
Area of UCL	10 ha

Criteria	Association number	Description	% remaining
Vegetation Associations	1049	Medium woodland; wandoo, York gum, salmon gum, morrel & gimlet	4.1

4.9.2 Dam Number 76 – Reserve Number 15543

Wallambin Tank (Wyalkatchem Shire)

Area Description

Criteria	Value
Reserve Number	15543
Parcel ID Number	951773
Vesting	Waters & Rivers Commission
Purpose	
Area	24 ha
Nearest road	Wallambin Road

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	6
< 2m from valley floor	3
Veg. Intactness	4
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	258Wa 258TaYE 258TaNE
Regolith unit	L, C Refer to electronic dataset for description.
Geology	Cza
Landscape Position	93%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 5 P3 = 5 P4 = 0 Rare = 23
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00997
Adj. Rem. vegetation	
Landscape context	
Number of Freehold	14
Area of Freehold	357 ha
Number of Reserves	5
Area of Reserves	88 ha
Number of UCL	0
Area of UCL	0
Comments	Mostly cleared.

Criteria	Association number	Description	% remaining
Vegetation Associations	1049	Medium woodland; wandoo, York gum, salmon gum, morrel & gimlet	4.1
	676	Succulent steppe; samphire	100

4.9.3 Dam Number 77 – Reserve Number 18668

Nalkain (Wyalkatchem Shire)

Area Description

Criteria	Value
Reserve Number	18668
Parcel ID Number	965250
Vesting	Water Corporation
Purpose	
Area	14.2 ha
Nearest road	Wyalkatchem North Road

Threats

Criteria	Value
Introduced plants	See Appendix 2
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	4
Veg. Intactness	4
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	258KbKU
Regolith unit	L,S,X
Geology	Qc
Landscape Position	91%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 6 P3 = 5 P4 = 0 Rare = 20
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	Reptiles – 1 x S1
Flora species	See Appendix 2
Fauna species	See Appendix 3
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.01111
Adj. Rem. vegetation	None
Landscape context	
Number of Freehold	4
Area of Freehold	96 ha
Number of Reserves	1
Area of Reserves	23 ha
Number of UCL	0
Area of UCL	0
Comments	Mostly cleared.

Criteria	Association number	Description	% remaining
Vegetation Associations	1049	Medium woodland; wandoo, York gum, salmon gum, morrel & gimlet	4.1

4.10 Yilgarn Shire

4.10.1 Dam Number 2017 – Reserve Number 20212

Dulyalbin Jilbadji Rock (Yilgarn Shire)

Area Description

Criteria	Value
Reserve Number	20212
Parcel ID Number	962001
Vesting	Water Corporation
Purpose	
Area	637 Ha
Nearest road	<i>Dulyalbin Rock Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	2
Veg. Intactness	2
Adjoining land use	Agriculture

Asset Description

Criteria	Value
Soil/landscape unit	258Ho 258Ka 258Ka_1 258TaNS
Regolith unit	C, S, X Refer to electronic dataset for description.
Geology	Agg Tl Agv Qc
Landscape Position	45%
Rare & Priority Flora (within 5km)	No record
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Tank

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00167
Adj. Rem. Vegetation	
Freehold	138.029 ha
Landscape context	
Number of Freehold	73
Area of Freehold	3741 ha
Number of Reserves	3
Area of Reserves	622 ha
Number of UCL	3
Area of UCL	1439 ha

Criteria	Association number	Description	% remaining
Vegetation Associations	8	Shrublands; acacia, casuarina & melaleuca thicket	63.2
	1413	Medium woodland; salmon gum & gimlet	100
	128	Bare areas; rock outcrops	100

4.10.2 Dam Number 5008 – Reserve Number 2863**Moorine Rock (Yilgarn Shire)****Area Description**

Criteria	Value
Reserve Number	2863
Parcel ID Number	969290, 969277, 969276, 969282, 969294.
Vesting	
Purpose	
Area	839.4 ha
Nearest road	<i>Great Eastern Highway</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	2
Adjoining land use	Remnant vegetation, agriculture.

Asset Description

Criteria	Value
Soil/landscape unit	258No_2 258Go_1 258No_1
Regolith unit	C, S, X Refer to electronic dataset for description.
Geology	Alp Aiw TI
Landscape Position	50%
Rare & Priority Flora (within 5km)	P1 = 0 P2 = 1 P3 = 2 P4 = 0 Rare = 3
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	Yes
Reserve uses	Nature Reserve

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00232
Adj. Rem. Vegetation	
Freehold	13.206 ha
Reserve	74.792 ha
UCL	11.758 ha
Landscape context	
Number of Freehold	112
Area of Freehold	7744 ha
Number of Reserves	13
Area of Reserves	1915 ha
Number of UCL	8
Area of UCL	138 ha

Criteria	Association number	Description	% remaining
Vegetation Associations	8	Shrublands; acacia, casuarina & melaleuca thicket	63.2
	1413	Medium woodland; salmon gum & gimlet	100
	128	Bare areas; rock outcrops	100

4.10.3 Dam Number 448 – Reserve Number 13524**Mt Holland (Yilgarn Shire)****Area Description**

Criteria	Value
Reserve Number	13524
Parcel ID Number	642867, 642987, 642868, 642866
Vesting	
Purpose	
Area	244 Ha
Nearest road	<i>Forestania Southern Cross Road</i>

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	0
Veg. Intactness	No data
Adjoining land use	No data

Asset Description

Criteria	Value
Soil/landscape unit	No record
Regolith unit	S, X Refer to electronic dataset for description.
Geology	Czs Anh Ahf
Landscape Position	No data
Rare & Priority Flora (within 5km)	P1 = 14 P2 = 15 P3 = 6 P4 = 5 Rare = 16 X = 6
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	No data
Veg. associations	No data
Veg. system assoc.	No data
Sensitive sites	None
Reserve uses	No record

Viability

Criteria	Value
Salinity Extent	See above
Perimeter : Area ratio	0.00552
Adj. Rem. vegetation	No data
Landscape context	No data
Number of Freehold	
Area of Freehold	
Number of Reserves	
Area of Reserves	
Number of UCL	
Area of UCL	
Comments	No print or photo and no ecw in arcview.

4.10.4 Dam Number 5006 – Reserve Number 28291

Bodallin Dam (Yilgarn Shire)

Area Description

Criteria	Value
Reserve Number	28291
Parcel ID Number	962084
Vesting	
Purpose	
Area	546 ha
Nearest road	Great Eastern Highway

Threats

Criteria	Value
Introduced plants	No record
Salinity Extent	
1995 – 1998	0
1989 – 1991	0
< 2m from valley floor	1
Veg. Intactness	1
Adjoining land use	Nature Reserve, Agriculture.

Asset Description

Criteria	Value
Soil/landscape unit	258Ta 258Ta_3r 258Ho
Regolith unit	S, C, X Refer to electronic dataset for description.
Geology	Am Agg Czg
Landscape Position	42%
Rare & Priority Flora (within 5km)	P2 x 1 P3 x 5
TECs (within 5km)	No record
Rare & Priority Fauna (within 5km)	No record
Flora species	No record
Fauna species	No record
Veg. formations	Woodland & shrubland
Veg. associations	See below
Veg. system assoc.	See below
Sensitive sites	None
Reserve uses	Dam

Viability

Criteria	Value
Salinity Extent	See above
Perimeter (m) : Area ratio (m ²)	0.00171
Adj. Rem. Vegetation	
Freehold	166.415 ha
Reserve	1051.002 ha
UCL	27.304 ha
Landscape context	
Number of Freehold	95
Area of Freehold	10,154 ha
Number of Reserves	24
Area of Reserves	4489 ha
Number of UCL	10
Area of UCL	1038 ha

Criteria	Association number	Description	% remaining
Vegetation	8	Shrublands; acacia, casuarina & melaleuca thicket	63.2
Associations	36	Shrublands; thicket, acacia-casuarina alliance	91.5

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Appendix One: AA Dams Assessed

Preliminary Assessment of 53 Priority AA Wheatbelt Dams

Dam No	Dam Name	Reserve No	Location Description	Shire	Responsible Authority	Area (ha)
573	Moulyinning	9447		Dumbleyung	WC	18
196	Dumbleyung Town	11230		Dumbleyung	WC	31
282	Bullock Hills	11442	Williams Loc 6665, Diag SP462	Dumbleyung	W&RC	29
203, 204	Datatine Old	12645	Williams Loc 9496	Dumbleyung	W&RC	35
339	Nippering	12665	Nippering Townsite	Dumbleyung	W&RC	13
183	Kukerin N	16344	Williams Loc 11608	Dumbleyung	WC	4
202	Kukerin Siding	23159	Kukerin Town Lot 172, OP:1579	Dumbleyung	WC	38
205	Gabys (Rams)	14417	Williams Loc 8982 & 13828	Kent	WC	47
226	Titicup	22444	Kojonup Loc 8759	Kent	WC	39
391	Pingrup Townsite	34518	Kent Loc 2017	Kent	WC	32
445	King Rocks (& bore)	8390	Roe Loc 1482 King Rocks Road	Kondinin	WC	258
420	McGanns Rock	17663	Avon Loc 22485 McGanns Rock Road	Kondinin	WC	257
353	Bendering New / Siding	18593	Bendering Town Lot 9	Kondinin	WC	65
444	Hyden TWS	19929	Roe Loc 2888, SD47069	Kondinin	WC	107
421	Karlgarin C (Llewellyn's)	19981	Roe Loc 977 Karlgarin Road East	Kondinin	WC	23
5012	Allen Rocks & Bores	22460	Roe Loc 2037 Allen Rocks Road	Kondinin	WC	252
583	Karlgarin/Karigann	29369	Roe Loc 2807, SD72457	Kondinin	WC	61
146	Walyurin RPF	13836	Williams Loc 10261, NAR854	Kulin	WC	4
257	Kulin	17312	Williams Loc 7583 & 11884 Diag SD41195	Kulin	WC	4
462	Holt Rock Lake Fox	45610	Roe Loc 3141	Kulin	WC	26
186, 187	White Tank Old	13231	Williams Loc 15658, Dumbleyung-Lake Grace Rd	Lake Grace	WC	331

Dam No	Dam Name	Reserve No	Location Description	Shire	Responsible Authority	Area (ha)
385	Newdegate TWS & Tank / Sliding	17616	Newdegate Town Lot 198, May St	Lake Grace	WC	36
389	Lake Grace 13 Mile	17648	Roe, 30, 1005. Lake Grace - Newdegate Rd.	Lake Grace	WRC	337
377	Lake Grace North	18067	Williams Loc 12561 Kulin-Lake Grace Rd	Lake Grace	WC	40
378	Lake Grace South 20 Miles	18156	Williams Loc 15968, 15969 Lake Grace-Pingrup Rd	Lake Grace	W&RC	34
379	Lake Grace East	18384	Williams Loc 12722, 15546, 1 Ch Rd to Loc 9530 Oldham Rd	Lake Grace	WC	266
380	Greys Lake Grace East	18981	Williams Loc 13057, Beenong Rd North	Lake Grace	WC	32
402	Lake Biddy	19649	Roe 881, Witham Rd	Lake Grace	DPI	32
427	Wardercarrin Lake Grace	19789	Williams Loc 14365, Commonwealth Rd	Lake Grace	WC	47
438	Lake Magenta North	20274	Roe Loc 2682, 3032, Magenta - Giles Rd.	Lake Grace	WC	342
626	Lake Romani	20282	Kent Location, off Old Ravensthorpe Rd	Lake Grace	WC	40
429	Kents Dam	20710	Roe Loc 1294, Burngup Rd North.	Lake Grace	WC	90
466	Purnta Rock	21523	Roe Loc 1320 Purnta Rd	Lake Grace	WC	45
541	Tarco / Newdegate Lake King	21828	Roe, 1268D, 1878D, 1926, Newdegate Ravensthorpe Rd.	Lake Grace	DPI	19
390	Lake Biddy No 1	23140	Roe Loc 2079, Witham Rd	Lake Grace	WC	494
556	Lake Grace South Tommy's	23598	Williams Loc 13936, Minelup Tommy's Dam Rd	Lake Grace	WC	71
554	Sugg Rock	23842	Roe Loc 1710, Sugg Rd	Lake Grace	WC	155
580	Lake Grace	26137	Williams Loc 15248, 15554, Lake Grace-Newdegate Rd	Lake Grace	WC	113
188	Lake Grace Station / Newdegate East	28449	Roe Loc 2647, Haigh Rd.	Lake Grace	DPI	243
190	James	16318	Williams Loc 15882 Kulin-Lake Grace Rd	Lake Grace	WC	14
463	Newton Rock	UCL	Roe Loc 1683 Sugg Rock Rd	Lake Grace	DPI	307
393	Newdegate South No 2	18961	Roe Loc 798, 1314, Hoskins Rd	Lake Grace	WC	198
492	Berringbooding	27863	Ninghan 3083	Mukinbudin	DPI	123

488	Arnolds	UCL	Ninghan Loc. 3182	Mukinbudin	DPI	103
450	Warralakin (Geeleakin RK)	1378	Yilgarn Loc 347	Westonia	WC	142
568	Mocardy	15702	Avon Loc 6418, SD42458	Wongan Ballidu	WC	301
294	Elphin Siding	17068	Melbourne Loc 1976, N3186	Wongan Ballidu	W&RC	19
51	Red Tank	9570		Wyalkatchem	DPI	140
76	Wallambin Tank	15543	Cowcowing AA233	Wyalkatchem	W&RC	24
77	Nalkain	18668	Cowcowing Agr Area lot 272, D48497	Wyalkatchem	WC	14
2017	Dulyalbin Jilbadji Rock	20212	Jabadji loc 545	Yilgarn	WC	637
Dam No	Dam Name	Reserve No	Location Description	Shire	Responsible Authority	Area (ha)
5008	Moorine Rock	2863		Yilgarn		811
448	Mt Holland	13524		Yilgarn		259
5006	Bodallin Dam	28291		Yilgarn		547
					Total area (ha)	7749

Appendix Two: List of Vascular Plant Species

Preliminary Assessment of 53 Priority AA Wheatbelt Dams

Dam 51 – From Safrom, True and Coates (1996) *Conservation values and other values of selected agricultural area dams in the central wheatbelt of WA*. Volume 1.

LIST OF VASCULAR PLANT SPECIES (* denotes introduced species)

FAMILY	GENUS	SPECIES	
POACEAE	* <i>Avena</i>	<i>fatua</i>	Wild oats
	<i>Danthonia</i>	<i>caespitosa</i>	
	* <i>Hordeum</i>	<i>leporinum</i>	Barley grass
	* <i>Lolium</i>	<i>rigidum</i>	Rye grass
	<i>Stipa</i>	<i>elegantissima</i>	
CYPERACEAE	<i>Lepidosperma</i>	<i>angustatum</i>	
RESTIONACEAE	<i>Ecdeiocolea</i>	<i>monostachya</i>	
PHORMIACEAE	<i>Dianella</i>	<i>revoluta</i>	
ANTHERICACEAE	<i>Borya</i>	<i>sphaerocephala</i>	
	<i>Thysanotus</i>	<i>multiflorus</i>	
ORCHIDACEAE	<i>Thelymitra</i>	SP.	
CASUARINACEAE	<i>Allocasuarina</i>	<i>campestris</i>	
PROTEACEAE	<i>Grevillea</i>	<i>eristachya</i>	
	<i>Grevillea</i>	<i>paniculata</i>	
	<i>Grevillea</i>	<i>paradoxa</i>	
	<i>Hakea</i>	<i>invaginata</i>	
	<i>Santalum</i>	<i>acuminatum</i>	
SANTALACEAE			
CHENOPODIACEAE	<i>Maireana</i>	<i>carnosa</i>	
	<i>Maireana</i>	<i>tomentosa</i>	
	<i>Rhagodia</i>	<i>eremaea</i>	
	* <i>Raphanus</i>	<i>raphanistrum</i>	Wild radish
BRASSICACEAE			
DROSERACEAE	<i>Drosera</i>	SP.	
PITTOSPORACEAE	<i>Pittosporum</i>	<i>phylliraeoides</i>	
MIMOSACEAE	<i>Acacia</i>	<i>acuaria</i>	
	<i>Acacia</i>	<i>acuminata</i>	
	<i>Acacia</i>	<i>beauverdiana</i>	
	<i>Acacia</i>	<i>coolgardiensis</i>	
	<i>Acacia</i>	<i>erinacea</i>	
	<i>Acacia</i>	<i>resinomarginea</i>	
	<i>Acacia</i>	<i>sericocarpa</i>	
	<i>Senna</i>	<i>artemisioides</i>	
	<i>Daviesia</i>	<i>nematophylla</i>	
CAESALPINIACEAE			
PAPILIONACEAE	* <i>Trifolium</i>	Sp.	
SAPINDACEAE	<i>Dodonaea</i>	<i>inaequifolia</i>	
RHAMNACEAE	<i>Trymalium</i>	<i>angustifolium</i>	
STERCULIACEAE	<i>Lysiosepalum</i>	<i>rugosum</i>	
DILLENIACEAE	<i>Hibbertia</i>	<i>glomerosa</i>	
MYRTACEAE	<i>Baeckea</i>	<i>elderiana</i>	
	<i>Eucalyptus</i>	<i>brachycorys</i>	
	<i>Eucalyptus</i>	<i>loxophleba</i>	
	<i>Eucalyptus</i>	<i>salmonophloia</i>	
	<i>Eucalyptus</i>	<i>salubris</i>	
	<i>Leptospermum</i>	<i>erubescens</i>	
	<i>Malleostemon</i>	<i>tuberculatus</i>	
	<i>Melaleuca</i>	<i>adnata</i>	
	<i>Melaleuca</i>	<i>cordata</i>	
	<i>Melaleuca</i>	<i>pauperiflora</i>	

SOLANACEAE	<i>Melaleuca</i>	<i>radula</i>	
MYOPORACEAE	<i>Melaleuca</i>	<i>uncinata</i>	
GOODENIACEAE	<i>Scholtzia</i>	<i>drummondii</i>	
	<i>Lycium</i>	<i>australe</i>	
ASTERACEAE	<i>Eremophila</i>	<i>ionantha</i>	
	<i>Dampiera</i>	<i>lavandulacea</i>	
	<i>Scaevola</i>	<i>restiacea</i>	
	<i>Actinobole</i>	<i>uliginosum</i>	
	* <i>Arctotheca</i>	<i>calendula</i>	Cape weed
	<i>Chthonocephalus</i>	<i>pseudevax</i>	
	<i>Gilbertia</i>	<i>tenuifolia</i>	
	<i>Olearia</i>	<i>muelleri</i>	
	<i>Podolepis</i>	<i>canescens</i>	
	<i>Schoenia</i>	<i>cassiniana</i>	
	<i>Waitzia</i>	<i>acuminata</i>	

Dam 77 – From Safrom, True and Coates (1996) *Conservation values and other values of selected agricultural area dams in the central wheatbelt of WA*. Volume 2.

LIST OF VASCULAR PLANT SPECIES (* denotes introduced species)

FAMILY	GENUS	SPECIES	
POACEAE	* <i>Avena</i>	<i>fatua</i>	Wild oats
	* <i>Bromus</i>	<i>diandrus</i>	Brome grass
	* <i>Bromus</i>	<i>rubens</i>	Red Brome
	<i>Danthonia</i>	<i>caespitosa?</i>	
	* <i>Hordeum</i>	<i>leporinum</i>	Barley grass
	* <i>Lolium</i>	<i>rigidum</i>	Rye grass
	<i>Stipa</i>	<i>trichophylla</i>	
	* <i>Vulpia</i>	<i>bromoides</i>	Silver grass
PROTEACEAE	<i>Hakea</i>	<i>recurva</i>	
CHENOPODIACEAE	<i>Maireana</i>	<i>carnosa</i>	
	<i>Sclerolaena</i>	<i>diacantha</i>	
BRASSICACEAE	* <i>Raphanus</i>	<i>raphanistrum</i>	Wild radish
PITTOSPORACEAE	<i>Pittosporum</i>	<i>phylliraeoides</i>	
MIMOSACEAE	<i>Acacia</i>	<i>acuminata</i>	
	<i>Acacia</i>	<i>coolgardiensis</i>	
	<i>Acacia</i>	<i>erinacea</i>	
	<i>Acacia</i>	<i>mackeyana</i>	
	<i>Acacia</i>	<i>saxatilis</i>	
PAPILIONACEAE	<i>Templetonia</i>	<i>sulcata</i>	
	* <i>Trifolium</i>	<i>sp.</i>	Clover
MYRTACEAE	<i>Eucalyptus</i>	<i>loxophleba</i>	
	<i>Eucalyptus</i>	<i>salmonophloia</i>	
	<i>Melaleuca</i>	<i>uncinata</i>	
SOLANACEAE	<i>Duboisia</i>	<i>hopwoodii</i>	
ASTERACEAE	* <i>Arctotheca</i>	<i>calendula</i>	Cape weed
	<i>Calocephalus</i>	<i>multiflorus</i>	
	<i>Chrysocephalum</i>	<i>puteale</i>	
	<i>Podolepis</i>	<i>kendallii</i>	
	<i>Schoenia</i>	<i>cassiniana</i>	
	<i>Waitzia</i>	<i>acuminata</i>	

Appendix Three: List of Fauna Species

Preliminary Assessment of 53 Priority AA Wheatbelt Dams

Dam 51 – From Safrom, True and Coates (1996) *Conservation values and other values of selected agricultural area dams in the central Wheatbelt of WA*. Volume 1.

Dam 51 – Fauna Species	
Birds	White-browed Babbler, Grey Fantail, Pied Honeyeater, Whistling Kite, Australian Ringneck Parrot, Elegant Parrot, Raven, Songlark, Willie Wagtail
<i>Rare Species</i>	No records
Mammals	No records
<i>Introduced</i>	Fox, Rabbits
Reptiles	No records
Invertebrates	No records

Dam 77 – From Safrom, True and Coates (1996) *Conservation values and other values of selected agricultural area dams in the central Wheatbelt of WA*. Volume 2.

Dam 77 – Fauna Species	
Birds	Little Corella, Galah, Magpie, Australian Ringneck Parrot, Shelduck.
<i>Rare Species</i>	No records
<i>Introduced</i>	Feral Pigeon
Mammals	No records
<i>Introduced</i>	No records
Reptiles	No records
Invertebrates	No records