



Review of Yellagonga Regional Park Wetlands Groundwater Data

2012 Report

By, Michelle Newport and Mark Lund

Prepared for,

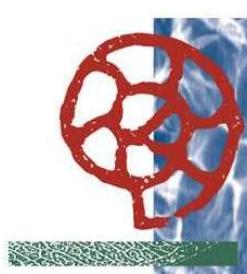
Cities of Joondalup and Wanneroo

Mine Water and
Environment Research
Centre



Centre for Ecosystem Management

Report No. 2012-14



CENTRE *for*
ECOSYSTEM
MANAGEMENT

1 MINE WATER AND ENVIRONMENT RESEARCH CENTRE

Founded at Edith Cowan University in 2008, the Mine Water and Environment Research (MiWER) Centre was formed by Dr Clint McCullough and Assoc. Prof. Mark Lund. The research group has a focus on pit lakes formed from mining, although research also covers all inland water bodies. Our research covers most aspects of rehabilitation, remediation and the ecology of inland waters.

MiWER is also a member of Edith Cowan University's research centre, the Centre for Ecosystem Management.

More information on MiWER and our projects can be found at www.miwer.org.

2 ACKNOWLEDGEMENTS

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2.1.1.1 FRONTISPICE



Plate 1. Lake Joondalup, north end.

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4 INTRODUCTION

Underlying part of the Swan Coastal Plain of Western Australia, between the Darling Range fault line and Indian Ocean is a shallow unconfined aquifer known as the Gnangara Mound (Appleyard & Cook, 2009). The Gnangara Mound covers an area of approximately 2200 km² and is the most significant water resource utilised by the population of Perth, providing 85% of its total domestic water requirements (Elmahdi & McFarlane, 2009).

The Gnangara Mound is one component of a highly interdependent and complex hydrological system named the Gnangara Groundwater system. It comprises of the Gnangara Mound, Leederville aquifer (confined and at a depth of 500 m), Yarragadee aquifer (confined and at a depth of 1000 m), rivers, wetlands (permanent and seasonal) and ocean (DEC, 2009). Consequently it is of paramount importance that the Gnangara hydrological system is maintained at a sustainable level in order to support water supply capacity, groundwater dependent ecosystems, vegetation communities and biodiversity on the Swan Coastal Plain (DEC, 2009).

Yellagonga Regional Park occupies an area of around 1,400 ha overlying the Gnangara Mound and consists of Lake Goollelal, Wallubuenup Swamp, Beenyup Swamp, and Lake Joondalup. This interdunal chain of wetlands is a surface expression of the unconfined aquifer which flows in a north-westerly direction through the park (Newport, Lund & McCullough, 2011).

Over the past thirty five years, numerous studies have been conducted around the Yellagonga wetlands, investigating nutrient enrichment, metal contamination and the presence of Acid Sulphate Soils (Congdon & McComb, 1976; Gordon et al., 1981; Congdon, 1985, 1986; Davis et al., 1993; Kinnear et al., 1997; Kinnear & Garnett, 1999; Lund et al., 2000; Lund, 2003; Cumbers, 2004). More recently, a water quality monitoring program has produced results that support previous findings of nutrient enrichment and metal contamination, which exceed ANZECC and ARMCANZ (2000) national water quality guidelines consistently (Newport, Lund & McCullough, 2011). A preliminary investigation in the southern section of Wallubuenup Swamp identified the presence of ASS (Newport, Lund, McCullough & Patel, 2011).

The aim of this desktop study was to review all available information pertaining to groundwater bores, to prepare for the development of a groundwater monitoring program.

5 METHODS

In Western Australia, the Department of Water collate data collected throughout the state into two databases (WIN & HYDSTRA) and indexed into the Water Resource Information Catalogue. A formal request to access information held within these databases was lodged with the Water Information Branch at the Department of Water, requesting all data collected within a 2 km radius of Yellagonga wetlands.

Firstly, all surface water, rainfall, stream and river data was removed from the dataset leaving only groundwater data. The locations of all bores were then plotted on a map illustrating the distribution of groundwater bores within the region.

Next step was to collate the information into a dataset suitable for the purpose of this review (Appendix 1). At this stage, groundwater bores officially listed as non-operational were removed from the map. The remaining groundwater bores were divided into two categories. One category “unknown operational status” was given for bores where operational information was not provided. The second category was “operational” based upon no operational termination date provided.

6 RESULTS AND DISCUSSION

The location of each bore recorded in the WIN and HYDSTRA databases within a two kilometre radius of the Yellagonga wetlands since 1933 is shown in Figure 1. Only bores that had a definite cessation date were excluded from this review.

The bores that had an “unknown operational status” are highlighted in red and were excluded after this point of the review (Figure 1.). Without conducting ground-truthing, it was impossible to ascertain with any certainty the serviceability of these bores. The assumption made throughout the review was that any bore with an operational start date but no cessation date was considered operational, regardless of the last recorded date of sampling. Again without ground-truthing this information could not be confirmed.

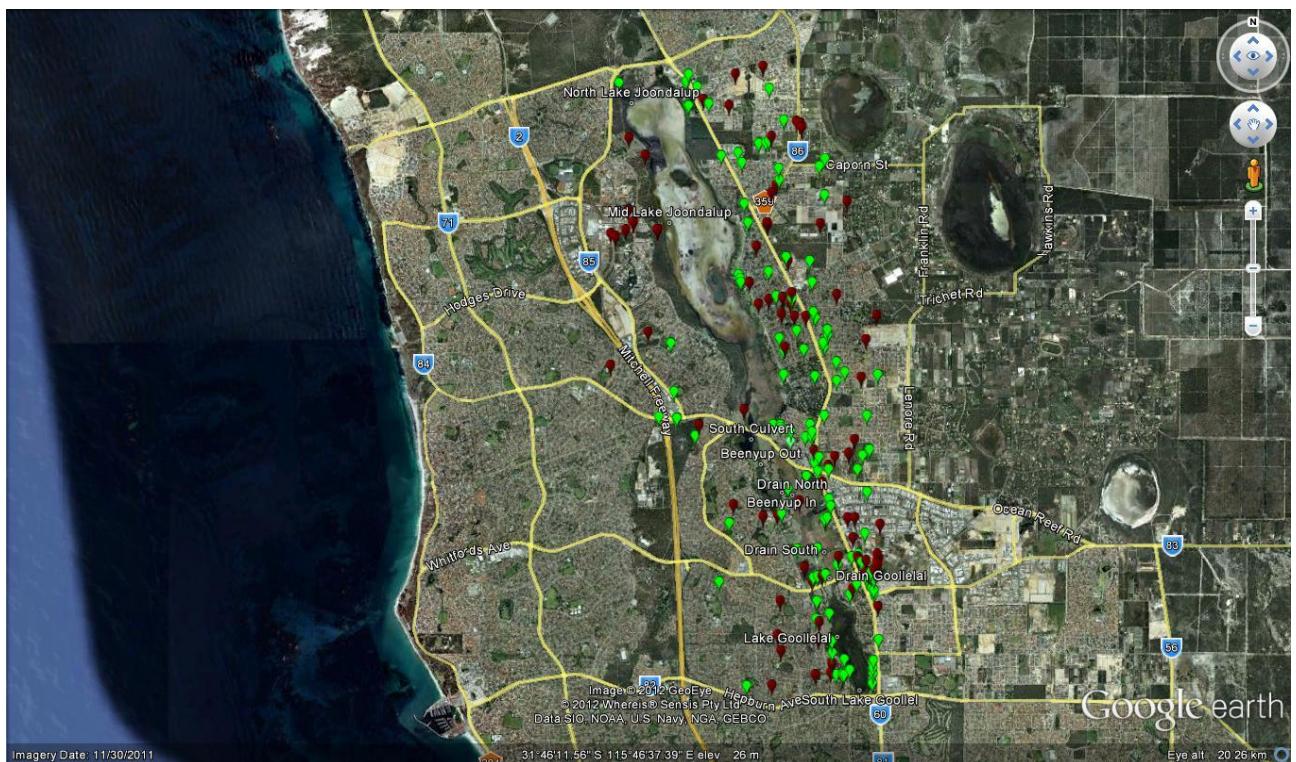


Figure 1: Map illustrating all groundwater bores that have “operational status” (green) and “unknown operational status”(red).

Bores in two areas around Yellagonga have not been actively monitored since 1980 and these areas have increased in size since 2002 (Figure 2). One of these gaps, located along the north-west of the Yellagonga wetland chain, fell within the path of groundwater flow through the park and therefore is of concern in monitoring any groundwater contamination sufficiently. The other gap was located in the south-east of the wetlands and also expanded

between 1980 and after 2002 (right) (Figure 2.). This gap is of concern in effectively monitoring a path of potential groundwater inputs into the lakes.

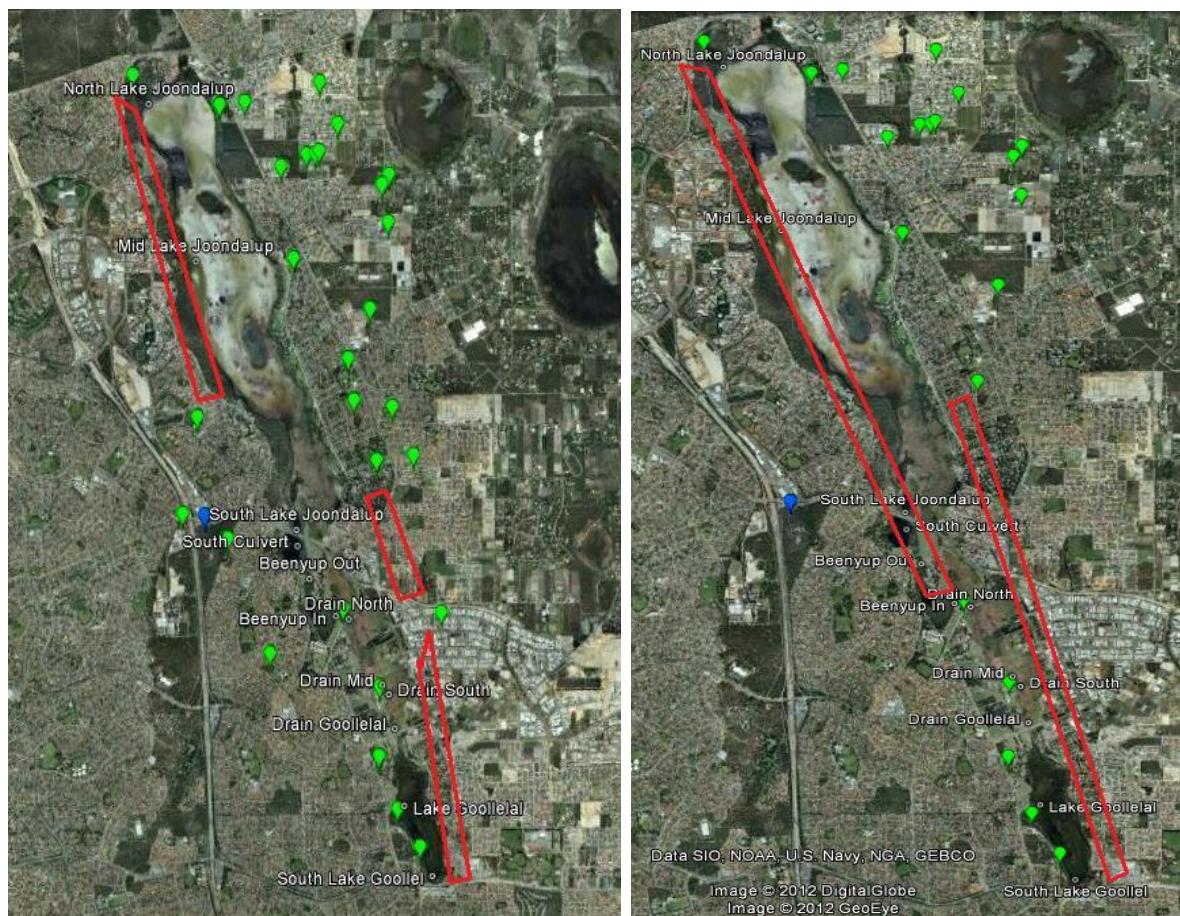


Figure 2 Maps of operational bores that have been sampled since 1980 (left) and since 2002 (right) with artesian bores in blue and gaps in bore sampling highlighted in red.

The majority of bores were only sampled for static water level and Total Dissolved Solids (TDS) as detailed in Appendix 1. The bores that were sampled for more than these three parameters are tabulated in Table 1 below. The parameters sampled were inconsistent across the bores and the sampling events were found to be sporadic and infrequent (Table 1 & Appendix 1).

As illustrated in Table 1, nutrients and metals were not comprehensively monitored over the duration of sampling for each of the twenty bores. The monitoring regime had a focus on buffering capacity, herbicides/pesticides and chemicals associated with these. This set of parameters is not sufficient given the current concerns relating to nutrient enrichment and metal contamination from ASS.

Table 1: All Analytes Sampled from Yellagonga Groundwater Bores With Artesian Bores Highlighted in Blue

Analyte	Site																			
	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616		
	106	106	150	150	150	034	042	106	106	106	106	106	034	034	034	035	035	114	118	
	27	79	63	64	65	33	69	28	29	61	62	77	83	52	57	81	01	68	23	70
Acidity (CaCO ₃)										✓	✓							✓	✓	
Al (total)										✓	✓							✓	✓	
Al (soluble)	✓									✓	✓		✓					✓	✓	
Aldrin (total)										✓	✓							✓	✓	
Alkalinity (CaCO ₃)	✓	✓	✓	✓	✓	✓				✓	✓		✓	✓	✓	✓	✓	✓	✓	
Alkalinity (CO ₃)	✓		✓	✓	✓	✓	✓			✓	✓		✓	✓	✓	✓	✓	✓	✓	
Alkalinity (CO ₃₋ CaCO ₃)											✓							✓	✓	
Alkalinity (HCO ₃)	✓	✓	✓	✓	✓	✓				✓	✓		✓	✓	✓	✓	✓	✓	✓	
Alkalinity (HCO ₃₋ CaCO ₃)											✓								✓	
As (soluble)	✓	✓	✓							✓	✓		✓							
As (total)										✓	✓							✓	✓	
Atrazine										✓	✓							✓	✓	
B (soluble)				✓	✓					✓	✓							✓	✓	
B (total)	✓	✓								✓	✓		✓							

Analyte	Site																			
	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616		
	106	106	150	150	150	034	042	106	106	106	106	106	034	034	034	035	035	114	118	
	27	79	63	64	65	33	69	28	29	61	62	77	83	52	57	81	01	68	23	70
y																				
Cr (total)										✓	✓						✓	✓		
Cu (soluble)	✓	✓	✓						✓	✓		✓								
D.O (mgL ⁻¹)									✓	✓						✓	✓			
D.O. (%)									✓	✓						✓	✓			
DDD (total)									✓	✓						✓	✓			
DDE (total)									✓	✓						✓	✓			
DDT (total)									✓	✓						✓	✓			
Depth to bottom of bore	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Diazinon (total)									✓	✓						✓	✓			
Dieldrin (total)									✓	✓						✓	✓			
Diuron (total)									✓	✓						✓	✓			
DOC									✓	✓		✓								
DON	✓	✓							✓	✓						✓	✓			
Eh {RP, Redox}									✓	✓						✓	✓			
Endosulf sulphate (total)									✓	✓						✓	✓			

Analyte	Site																			
	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616		
	106	106	150	150	150	034	042	106	106	106	106	106	034	034	034	035	035	114	118	
	27	79	63	64	65	33	69	28	29	61	62	77	83	52	57	81	01	68	23	70
Endosulf-a (total)								✓	✓								✓	✓		
Endosulf-b (total)								✓	✓							✓	✓			
Endrin (total)								✓	✓							✓	✓			
Ethion (total)								✓	✓							✓	✓			
F (soluble)	✓	✓	✓	✓	✓	✓		✓	✓		✓					✓	✓			
Fe (soluble)	✓	✓		✓		✓		✓	✓		✓		✓	✓	✓	✓	✓	✓		
Fe (total)	✓		✓		✓			✓	✓		✓					✓	✓			
Fenchlorph os (total)								✓	✓							✓	✓			
Fenitrothio n (total)								✓	✓							✓	✓			
H ₂ S																	✓			
Hardness (CaCO ₃)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
{Ca+Mg}																				
HCH (BHC) a,b,d (total)								✓	✓							✓	✓			
HCH (BHC) g (total)								✓	✓							✓	✓			
{Lindane}																				
Heptachlor (total)								✓	✓							✓	✓			

Analyte	Site																			
	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616		
	106	106	150	150	150	034	042	106	106	106	106	106	034	034	034	035	035	114	118	
	27	79	63	64	65	33	69	28	29	61	62	77	83	52	57	81	01	68	23	70
Heptachlor epoxide (total)								✓	✓							✓	✓			
Hexachlorobenzene (total) {HCB}								✓	✓							✓	✓			
Hexazinone (total)								✓	✓							✓	✓			
Hg (total)																✓	✓			
K (soluble)	✓		✓	✓	✓	✓		✓	✓					✓	✓	✓	✓	✓	✓	
K (total)	✓				✓			✓	✓		✓	✓	✓							
Linuron (total)								✓	✓							✓	✓			
Malathion (total)								✓	✓							✓	✓			
Methoxychlor (total)								✓	✓							✓	✓			
Metolachlor (total)								✓	✓							✓	✓			
Mevinphos (total)								✓	✓							✓	✓			
Mg (soluble)	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mg {Mg A}%																✓	✓	✓	✓	

Analyte	Site																			
	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616		
	106	106	150	150	150	034	042	106	106	106	106	106	034	034	034	035	035	114	118	
	27	79	63	64	65	33	69	28	29	61	62	77	83	52	57	81	01	68	23	70
Mg {Mg KCl}%																		✓	✓	
Mg {Mg P}%																		✓	✓	
Mn (soluble)	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓			✓	✓		✓		
Mn (total)							✓		✓	✓		✓						✓	✓	
Moisture content (dry wt)%																		✓	✓	
Molinate (total)									✓	✓								✓	✓	
Na (soluble)	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	
NaCl			✓	✓	✓	✓	✓						✓	✓	✓	✓	✓	✓	✓	
NH _x (soluble)	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓	✓				✓	✓	
Ni (total)									✓	✓								✓	✓	
NO ₂ -N (soluble)		✓									✓	✓								
NO ₃ (soluble)	✓	✓	✓		✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓		
NO ₃ -N (soluble)		✓	✓	✓	✓	✓			✓	✓		✓								
NO _x (sum soluble O _x)	✓	✓			✓				✓	✓	✓	✓	✓	✓				✓	✓	

Analyte	Site																			
	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616		
	106	106	150	150	150	034	042	106	106	106	106	106	034	034	034	035	035	114	118	
	27	79	63	64	65	33	69	28	29	61	62	77	83	52	57	81	01	68	23	70
PO ₄ -P (soluble react) {SRP, FRP}	✓	✓						✓	✓	✓	✓	✓					✓	✓		
PO ₄ -P (total react)			✓																	
Pumping rate	✓	✓						✓	✓	✓	✓									
S {S CR, Scr}%																✓	✓			
S {S P}%															✓	✓				
S {S POS}%														✓	✓					
S {S[KCl]}%														✓	✓					
S ²⁻ (soluble)	✓											✓								
Saturation index		✓	✓	✓				✓	✓		✓									
Se (total)								✓	✓							✓	✓			
Simazine (total)								✓	✓							✓	✓			
SiO ₂ (soluble react)	✓	✓		✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓		
SO ₄ (soluble)			✓	✓	✓		✓	✓				✓	✓	✓		✓	✓	✓		

Analyte	Site																			
	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	
	106	106	150	150	150	034	042	106	106	106	106	106	034	034	034	035	035	114	118	
	27	79	63	64	65	33	69	28	29	61	62	77	83	52	57	81	01	68	23	70
SO ₄ (total)	✓	✓	✓	✓	✓			✓	✓		✓	✓								
Static water level	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
TAA (pH6.5) as H ⁺ ol/t																		✓	✓	
TDS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Temperature	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Tetrachlorvinphos (total)								✓	✓									✓	✓	
TKN	✓							✓	✓		✓							✓	✓	
TN	✓		✓	✓	✓			✓	✓		✓	✓	✓					✓	✓	
TP	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓				✓	✓	
TPA (pH6.5) as H ⁺ ol/t																		✓	✓	
TSA (Calc)ol/t																		✓	✓	
Trifluralin (total)							✓	✓										✓	✓	
TSS							✓	✓										✓	✓	
Turbidity	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓							
Volume	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓						

Analyte	Site																			
	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616
	106	106	150	150	150	034	042	106	106	106	106	106	106	034	034	034	035	035	114	118
	27	79	63	64	65	33	69	28	29	61	62	77	83	52	57	81	01	68	23	70
pumped																				
Zn (soluble)														✓	✓					
Zn (total)														✓	✓				✓	✓

7 RECOMMENDATIONS

1. Comparatively little groundwater data has been collected on nutrient and metal concentrations around Yellagonga. As groundwater is a significant contributor to the water balance of the Yellagonga Park wetlands and lakes, it is important to understand the quality and quantity of water entering and leaving the system. Therefore there is a need to establish a groundwater monitoring program for a network of bores to assess the impacts of groundwater discharge into the Yellagonga park. Given the large gaps in coverage of the park, it is suggested that irrigation bores (not listed here) need to be considered. A combination of new bores, irrigation bores and DOW bores will provide the required coverage for monitoring inflows and outflows of groundwater into Yellagonga
2. It is recommended that for any selected DOW bores that ground-truthing be undertaken prior to monitoring to confirm the bores operational status.

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9 APPENDIX 1

Data collated from Department of Water database.

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61610627	Ground - borehole/well (Whitfords - Groundwater monitoring)	DoW	50 384683 6483681	Al (soluble) Alkalinity (CaCO ₃) Alkalinity (CO ₃) Alkalinity (HCO ₃) Ca (soluble) Cl (soluble) Colour Conductivity Depth to bottom of bore Fe (total) Hardness (CaCO ₃) {Ca+Mg} K (total) Mg (soluble)	23/12/1991 7/04/1989 7/04/1989 7/04/1989 7/04/1989 7/04/1989 7/04/1989 7/04/1989 7/04/1989 7/04/1989 7/04/1989	23/12/1991 23/12/1991 7/04/1989 7/04/1989 23/12/1991 23/12/1991 23/12/1991 23/12/1991 1/06/2011 23/12/1991 23/12/1991	1 generally monthly 1 generally yearly 4 4 2 10 3 4 2 2	operational (7/03/1972 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Mn (soluble) N (NO _x -N, TON) Na (soluble) NH _x (soluble) NO ₃ (soluble) pH PO ₄ -P (sol react) {SRP, FRP} Pumping rate S ²⁻ (soluble) SiO ₂ (soil react) SO ₄ (total) Static water level TDS Temperature TKN (total) TN (total) TP (total) Turbidity	23/12/1991 7/04/1989 7/04/1989 23/12/1991 7/04/1989 7/04/1989 23/12/1991 23/12/1991 7/04/1989 7/04/1989 7/03/1972 30/06/1972 7/04/1989 23/12/1991 23/12/1991 23/12/1991 23/12/1991 7/04/1989	23/12/1991 23/12/1991 23/12/1991 23/12/1991 7/04/1989 23/12/1991 23/12/1991 23/12/1991 23/12/1991 23/12/1991 23/12/1991 2/02/2012 7/04/1989 23/12/1991 23/12/1991 23/12/1991 23/12/1991 23/12/1991	1 1 2 2 2 1 2 2 1 1 1 1 1 1	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Volume pumped	23/12/1991	23/12/1991	1	
61610660	Ground - borehole/well (Hooker Project - Groundwater monitoring)	None	50 385341 6482269	Static water level	14/08/1973	5/05/1983	generally monthly (14/08/1973 - 6/05/1983)	non-operational
61610679	Ground - borehole/well (Gnangarra Mound - Groundwater monitoring)	DoW	50 386714 6482424	Alkalinity (CaCO ₃) Alkalinity (HCO ₃) As (soluble) B (total) Ca (soluble) Cl (soluble) Colour Conductivity Cu (soluble) Depth to bottom of bore	14/04/1980 14/04/1980 14/04/1980 14/04/1980 14/04/1980 16/02/1978 16/02/1978 14/04/1980 14/04/1980 14/04/1980	14/04/1980 14/04/1980 14/04/1980 14/04/1980 14/04/1980 14/04/1980 14/04/1980 14/04/1980 14/04/1980 23/09/2011	1 generally monthly 1 generally yearly 1 2 1 2 1	operational (16/02/1978 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				F (soluble) Fe (soluble) Hardness (CaCO ₃) {Ca+Mg} Mg (soluble) Mn (soluble) N (NO _x -N, TON) Na (soluble) NH _x (soluble) NO ₂ -N (soluble) NO ₃ (soluble) NO ₃ -N (soluble) Odour P (soluble) Pb (soluble) pH PO ₄ -P (sol react) {SRP, FRP} Pumping rate Saturation index	14/04/1980 16/02/1978 14/04/1980 14/04/1980 14/04/1980 16/11/1994 14/04/1980 14/04/1980 16/11/1994 14/04/1980 14/04/1980 16/02/1978 14/04/1980 14/04/1980 16/11/1994 16/11/1994 14/04/1980	14/04/1980 14/04/1980 14/04/1980 14/04/1980 14/04/1980 16/11/1994 14/04/1980 14/04/1980 16/11/1994 14/04/1980 14/04/1980 14/04/1980 14/04/1980 14/04/1980 16/11/1994 16/11/1994 14/04/1980	1 3 1 1 1 1 1 1 2 1 1 2 1 1 1 1 1	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				SiO ₂ (soil react) SO ₄ (total) Static Water level TDS Temperature TP (total) Turbidity Volume pumped	14/04/1980 14/04/1980 27/11/1978 16/02/1978 16/11/1994 16/11/1994 14/04/1980 16/11/1994	14/04/1980 14/04/1980 18/11/2011 14/04/1980 16/11/1994 16/11/1994 14/04/1980 16/11/1994	1 1 1 1 1 1 1 1	
61610681	Ground - borehole/well (Wanneroo monitoring - Groundwater monitoring)	None	50 387162 6485047	Static water level	3/02/1975	6/02/1978	generally monthly	non-operational (3/02/1975 - 30/09/1981)
61610682	Ground - borehole/well (Wanneroo monitoring - Groundwater monitoring)	DoW	50 387195 6485046	Depth to bottom of bore Static water level	20/06/1990 16/10/1981	14/01/1993 26/04/1994	generally monthly 3	non-operational (16/10/1981 - 31/08/1994)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61615063	Ground - borehole/well (Yarragadee North - Artesian monitoring)	DoW	50 384682 6483683	Alkalinity (CaCO ₃) Alkalinity (CO ₃) Alkalinity (HCO ₃) As (soluble) B (soluble) Ca (sol) Cl (soluble) CO ₂ Colour Conductivity Cu (soluble) Depth to bottom of bore DON F (soluble) Fe (total) Hardness (CaCO ₃) {Ca+Mg} K (soluble)	19/07/1968 5/02/1975 5/02/1975 5/02/1975 5/02/1975 19/07/1968 5/02/1975 19/07/1968 5/02/1975 12/05/1993 5/02/1975 19/07/1968 19/07/1968 5/02/1975	19/10/1989 19/10/1989 19/10/1989 5/02/1975 19/10/1989 19/10/1989 19/10/1989 18/03/1986 19/10/1989 19/10/1989 5/02/1975 12/05/1993 5/02/1975 19/10/1989 19/10/1989 19/10/1989	generally monthly 5 1 2 8 5 5 7 2 5 10 6 6 5 5 2 4	operational (19/07/1968 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Mg (soluble) Mn (soluble) Na (soluble) NaCl NH _x (soluble) NO ₃ (soluble) NO ₃ -N (soluble) Odour Pb (soluble) pH PO ₄ -P (total react) Saturation index SO ₄ (total) Static water level TDS Temperature TN (filtered) TP	19/07/1968 5/02/1975 5/02/1975 24/08/1973 5/02/1975 19/07/1968 5/02/1975 24/08/1973 5/02/1975 19/07/1968 5/02/1975 19/07/1968 5/02/1975 23/08/1989 5/02/1975 5/02/1975	19/10/1989 19/10/1989 19/10/1989 24/08/1973 5/02/1975 19/10/1989 19/10/1989 19/09/2008 5/02/1975 19/10/1989 5/02/1975 18/03/1986 19/10/1989 8/02/2012 19/10/1989 19/10/1989 5/02/1975	6 5 4 1 2 4 6 4 6 4 5 1 2 6 5 1 2 5	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Turbidity Volume pumped	19/07/1968 5/02/1975	23/08/1989 19/10/1989	2 1	
61615064	Ground - borehole/well (Leederville - Artesian monitoring)	DoW	50 384684 6483681	Alkalinity (CaCO ₃) Alkalinity (CO ₃) Alkalinity (HCO ₃) As (soluble) B (soluble) Ca (soluble) Cl (soluble) CO ₂ Colour Conductivity Cu (soluble) Depth to bottom of bore DON F (soluble)	7/02/1975 7/02/1975 7/02/1975 7/02/1975 7/02/1975 7/02/1975 7/02/1975 7/02/1975 24/08/1973 7/02/1975 12/05/1993 7/02/1975 7/02/1975	19/10/1989 19/10/1989 19/10/1989 7/02/1975 19/10/1989 19/10/1989 19/10/1989 19/10/1989 19/10/1989 19/10/1989 12/05/1993 7/02/1975 19/10/1989	generally monthly 1 1 1 6 6 5 9 5 3 7 5 5	operational (24/08/1973 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Fe (soluble) Hardness (CaCO ₃) {Ca+Mg} K (soluble) Mg (soluble) Mn (soluble) N (organic) Na (soluble) NaCl NH _x (soluble) NO ₃ (soluble) NO ₃ -N (soluble) Odour Pb (soluble) pH Saturation index SiO ₂ (soluble react) SO ₄ (soluble) SO ₄ (total)	7/02/1975 7/02/1975 7/02/1975 7/02/1975 7/02/1975 7/02/1975 7/02/1975 24/08/1973 7/02/1975 7/02/1975 7/02/1975 7/02/1975 24/08/1973 7/02/1975 7/02/1975 7/02/1975 7/02/1975 7/02/1975 7/02/1975	19/10/1989 19/10/1989 19/10/1989 19/10/1989 19/10/1989 7/02/1975 19/10/1989 24/08/1973 7/02/1975 19/10/1989 1/01/1989 19/09/2008 7/02/1975 19/10/1989 7/02/1975 19/10/1989 1/01/1989	5 2 4 5 5 2 2 1 4 4 5 5 4 1 5 1 2 4	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Static water level TDS Temperature TN TN (filtered) TP Turbidity Volume pumped	7/11/1973 24/08/1973 7/02/1975 7/02/1975 7/02/1975 7/02/1975 24/08/1973 7/02/1975	8/02/2012 19/10/1989 19/10/1989 7/02/1975 7/02/1975 7/02/1975 19/10/1989 7/02/1975	3 2 3 2 3 1 1 1	
61615065	Ground - borehole/well (Leederville - Artesian monitoring)	DoW	50 384682 6483681	Alkalinity (CaCO ₃) Alkalinity (CO ₃) Alkalinity (HCO ₃) B (soluble) B (total) Ca (soluble) Cl (soluble) Colour	12/03/1987 12/03/1987 12/03/1987 19/10/1989 1/01/1989 12/03/1987 3/08/1979 24/08/1973	19/10/1989 19/10/1989 19/10/1989 19/10/1989 1/01/1989 19/10/1989 19/10/1989 19/10/1989	generally monthly 2 7 4 5 7 4 5	operational (14/08/1973 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Conductivity Depth to bottom of bore F (soluble) Fe (total) Hardness (CaCO3) {Ca+Mg} K (soluble) K (total) Mg (soluble) Mn (soluble) Mn (total) N (NOx-N, TON) Na (soluble) NaCl NH _x NO ₃ (soluble) NO ₃ -N (soluble) Odour P (soluble)	12/03/1987 21/11/1988 12/03/1987 12/03/1987 12/03/1987 19/10/1989 12/03/1987 1/01/1989 12/03/1987 12/03/1987 12/03/1987 12/03/1987 24/08/1973 12/03/1987 12/03/1987 12/03/1987 1/01/1989 24/08/1973 12/03/1987	19/10/1989 12/05/1993 19/10/1989 19/10/1989 19/10/1989 19/10/1989 1/01/1989 19/10/1989 12/03/1987 12/03/1987 12/03/1987 12/03/1987 24/08/1973 12/03/1987 19/10/1989 1/01/1989 9/04/2010 12/03/1987	9 3 3 3 3 1 1 3 3 3 3 3 1 3 1 2 1 3 1 2 1 3	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				pH SiO ₂ (soluble react) SO ₄ (soluble) SO ₄ (total) Static water level TDS Temperature Turbidity	24/08/1973 12/03/1987 19/10/1989 12/03/1987 14/08/1973 24/08/1973 12/03/1987 24/08/1973	19/10/1989 19/10/1989 19/10/1989 1/01/1989 8/02/2012 19/10/1989 19/10/1989 24/08/1989	1 1 2 1 1 3 1 2	
61618432	Ground - borehole/well (Wanneroo monitoring - Groundwater monitoing)	DoW	50 386838 6485293	Depth to bottom of bore Static water level	24/01/1997 20/07/1995	18/05/2011 17/10/2011	ranging from 3-7months 8	operational (24/04/1995 -)
61603410	Ground - borehole/well (Swan Coastal Catchment - ?)	None	50 386676 6485760	Borehole water supply Static water level TDS	10/07/1968 10/07/1968 10/07/1968	10/07/1968 10/07/1968 10/07/1968	1 1 1	non-operational

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61603431	Ground - borehole/well (Swan Coastal Catchment - garden irrigation/domestic/household)	None	50 387319 6485078	Borehole water supply Static water level TDS	30/06/1962 30/06/1962 30/06/1962	30/06/1962 30/06/1962 30/06/1962	1 1 1	operational (30/06/1962 -)
61603433	Ground - borehole/well (Swan Coastal Catchment - livestock/domestic/household)	None	50 386561 6483538	Alkalinity (CaCO ₃) Alkalinity (CO ₃) Alkalinity (HCO ₃) Borehole water supply Ca (soluble) Cl (soluble) Colour Conductivity F (soluble) Fe (soluble) Hardness (CaCO ₃) {Ca+Mg}	25/09/1970 25/09/1970 25/09/1970 30/06/1963 25/09/1970 25/09/1970 25/09/1970 25/09/1970 25/09/1970 25/09/1970	25/09/1970 25/09/1970 25/09/1970 30/06/1963 25/09/1970 25/09/1970 25/09/1970 25/09/1970 25/09/1970 25/09/1970	1 1 1 1 1 1 3 1 1 1	operational (30/06/1963 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				K (soluble) Mg (soluble) Mn (soluble) Na (soluble) NaCl NO ₃ (soluble) Odour pH SiO ₂ (soluble react) SO ₄ (soluble) Static water level TDS Temperature	25/09/1970 25/09/1970 25/09/1970 25/09/1970 25/09/1970 25/09/1970 25/09/1970 25/09/1970 25/09/1970 30/06/1963 30/06/1963 25/09/1970	25/09/1970 25/09/1970 25/09/1970 25/09/1970 25/09/1970 25/09/1970 25/09/1970 25/09/1970 25/09/1970 30/06/1963 25/09/1970 25/09/1970	1 1 1 1 1 1 1 1 1 1 1 1	
61603434	Ground - borehole/well (Swan Coastal Catchment - livestock/domestic/household)	None	50 386563 6483582	Borehole water supply Static water level	30/06/1969 30/06/1969	30/06/1969 30/06/1969	1 1	operational (30/06/1969 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61606435	Ground - borehole/well (Swan Coastal Catchment - domestic/household)	None	50 386748 6483284	Borehole water supply Static water level TDS	30/06/1961 30/06/1961 30/06/1961	30/06/1961 30/06/1961 30/06/1961	1 1 1	operational (30/06/1961 -)
61603436	Ground - borehole/well (Swan Coastal Catchment - domestic/household/garden irrigation)	None	50 387015 6483366	Borehole water supply Static water level TDS	30/06/1961 30/06/1961 30/06/1961	30/06/1961 30/06/1961 30/06/1961	1 1 1	operational (30/06/1961 -)
61603470	Ground - borehole/well (Swan Coastal Catchment - domestic/household)	None	50 387251 6482758	Borehole water supply Static water level TDS	30/06/1958 30/06/1958 30/06/1958	30/06/1958 30/06/1958 30/06/1958	1 1 1	operational (30/06/1958 -)
61603471	Ground - borehole/well	None	50 387187 6482898	Borehole water supply	30/06/1962	30/06/1962	1	operational

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Swan Coastal Catchment - domestic/household)			Static water level TDS	30/06/1962 30/06/1962	30/06/1962 30/06/1962	1 1	(30/06/1962 -)
61603473	Ground - borehole/well (Swan Coastal Catchment - domestic/household)	None	50 387046 6482660	Borehole water supply Static water level TDS	30/06/1962 30/06/1962 30/06/1962	30/06/1962 30/06/1962 30/06/1962	1 1 1	operational (30/06/1962 -)
61603482	Ground - borehole/well (Swan Coastal Catchment - domestic/household/garden irrigation)	None	50 387344 6484999	Borehole water supply Static water level TDS	30/06/1953 30/06/1953 30/06/1953	30/06/1953 30/06/1953 30/06/1953	1 1 1	operational (30/06/1953 -)
61603483	Ground - borehole/well (Swan Coastal Catchment - garden irrigation/domestic/household)	None	50 387571 6484393	Borehole water supply Static water level	30/06/1954 30/06/1954	30/06/1954 30/06/1954	1 1	operational (30/06/1954 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				TDS	30/06/1954	30/06/1954	1	
61603484	Ground - borehole/well (Swan Coastal Catchment - domestic/household/garden irrigation)	None	50 387561 6484732	Borehole water supply Static water level	30/06/1951 30/06/1951	30/06/1951 30/06/1951	1 1	operational (30/06/1951 -)
61603485	Ground - borehole/well (Swan Coastal Catchment - domestic/household)	None	50 387138 6483461	Borehole water supply Static water level TDS	30/06/1960 30/06/1960 30/06/1960	30/06/1960 30/06/1960 30/06/1960	1 1 1	operational (30/06/1960 -)
61603486	Ground - borehole/well (Swan Coastal Catchment - domestic/household)	None	50 387133 6483366	Static water level TDS	30/06/1966 30/06/1966	30/06/1966 30/06/1966	1 1	operational (30/06/1966 -)
61603487	Ground - borehole/well	None	50 387098 6483597	Borehole water supply	30/06/1969	30/06/1969	1	operational

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Swan Coastal Catchment - ?)			Static water level TDS	30/06/1969 30/06/1969	30/06/1969 30/06/1969	1 1	(30/06/1969 -)
61603494	Ground - borehole/well (Swan Coastal Catchment - domestic/household)	None	50 386525 6485153	Borehole water supply Static water level TDS	30/06/1969 30/06/1969 30/06/1969	30/06/1969 30/06/1969 30/06/1969	1 1 1	operational (30/06/1969 -)
61603495	Ground - borehole/well (Swan Coastal Catchment - domestic/household)	None	50 386603 6484927	Borehole water supply Static water level TDS	30/06/1966 30/06/1966 30/06/1966	30/06/1966 30/06/1966 30/06/1966	1	operational (30/06/1966 -)
61603496	Ground - borehole/well (Swan Coastal Catchment - domestic/household)	None	50 386970 6484955	Static water level TDS	30/06/1968 30/06/1968	30/06/1968 30/06/1968	1 1	operational (30/06/1968 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61603499	Ground - borehole/well (Swan Coastal Catchment - ?)	None	50 387172 6483130	Borehole water supply Static water level TDS	n.d. n.d. n.d.	n.d. n.d. n.d.	1 1 1	operational (n.d. -)
61603578	Ground - borehole/well (Swan Coastal Catchment - domestic/household/garden irrigation)	None	50 386431 6483587	Static water level TDS	30/06/1968 30/06/1968	30/06/1968 30/06/1968	1	operational (30/06/1968 -)
61603579	Ground - borehole/well (Swan Coastal Catchment - ?)	None	50 386691 6483493	Borehole water supply Static water level TDS	30/06/1963 30/06/1963 30/06/1963	30/06/1963 30/06/1963 30/06/1963	1 1 1	operational (30/06/1963 -)
61603580	Ground - borehole/well (Swan Coastal Catchment - domestic/household/garden irrigation)	None	50 386755 6483465	Borehole water supply TDS	30/06/1953 30/06/1953	30/06/1953 30/06/1953	1 1	operational (30/06/1953 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61603581	Ground - borehole/well (Swan Coastal Catchment - garden irrigation)	None	50 387269 6483005	Static water level TDS	30/06/1969 30/06/1969	30/06/1969 30/06/1969	1 1	operational (30/06/1969 -)
61603594	Ground - borehole/well (Swan Coastal Catchment - domestic/household)	None	50 386612 6484494	Borehole water supply Static water level TDS	30/06/1967 30/06/1967 30/06/1967	30/06/1967 30/06/1967 30/06/1967	1 1 1	operational (30/06/1967 -)
61603495	Ground - borehole/well (Swan Coastal Catchment - domestic/household)	None	50 386603 6484927	Borehole water supply Static water level TDS	30/06/1966 30/06/1966 30/06/1966	30/06/1966 30/06/1966 30/06/1966	1 1 1	operational (30/06/1966 -)
61603496	Ground - borehole/well (Swan Coastal Catchment -	None	50 386970 6484955	Borehole water supply Static water level	30/06/1968 30/06/1968	30/06/1968 30/06/1968	1 1	operational (30/06/1968 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	domestic/household)							
61603499	Ground - borehole/well (Swan Coastal Catchment - ?)	None	50 387172 6483130	Static water level Borehole water supply TDS	n.d. n.d. n.d.	n.d. n.d. n.d.	1 1 1	operational (n.d. -)
61603578	Ground - borehole/well (Swan Coastal Catchment - domestic/household/garden irrigation)	None	50 386431 6483587	Static water level TDS	30/06/1968 30/06/1968	30/06/1968 30/06/1968	1 1	operational (30/06/1968 -)
61603579	Ground - borehole/well (Swan Coastal Catchment - ?)	None	50 386691 6483493	Borehole water supply Static water level TDS	30/06/1963 30/06/1963 30/06/1963	30/06/1963 30/06/1963 30/06/1963	1 1 1	operational (30/06/1963 -)
61603580	Ground - borehole/well (Swan Coastal Catchment - garden	None	50 386755 6483465	Borehole water supply Static water level	30/06/1953 30/06/1953	30/06/1953 30/06/1953	1 1	operational (30/06/1953 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	irrigation/domestic/household)							
61603581	Ground - borehole/well (Swan Coastal Catchment - garden irrigation)	None	50 387269 6483005	Static water level TDS	30/06/1969 30/06/1969	30/06/1969 30/06/1969	1 1	operational (30/06/1969 -)
61603594	Ground - borehole/well (Swan Coastal Catchment - domestic/household)	None	50 386612 6484494	Borehole water supply Static water level TDS	30/06/1967 30/06/1967 30/06/1967	30/06/1967 30/06/1967 30/06/1967	1 1 1	operational (30/06/1967 -)
61603607	Ground - borehole/well (Swan Coastal Catchment - domestic/household)	None	50 385899 6483849	Borehole water supply Static water level TDS	30/06/1952 30/06/1952 30/06/1952	30/06/1952 30/06/1952 30/06/1952	1 1 1	no status recorded ?
61603711	Ground - borehole/well	None	50 386142 6485764	Borehole water supply	30/06/1978	30/06/1978	1	no status recorded

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Swan Coastal Catchment - ?)			Static water level	30/06/1978	30/06/1978	1	?
61603828	Ground - borehole/well (Swan Coastal Catchment - ?)	None	50 387354 6483760	Borehole water supply Static water level	9/01/1979 9/01/1979	9/01/1979 9/01/1979	1 1	operational (9/01/1979 -)
61603908	Ground - borehole/well (Swan Coastal Catchment - ?)	None	50 384628 6484163	Borehole water supply Static water level	15/04/1979 15/04/1979	15/04/1979 15/04/1979	1 1	operational (15/04/1979 -)
61603939	Ground - borehole/well (Swan Coastal Catchment - ?)	None	50 386795 6485549	Borehole water supply Static water level	30/06/1980 30/06/1980	30/06/1980 30/06/1980	1 1	no status recorded ?
61604044	Ground - borehole/well (Swan Coastal Catchment - ?)	None	50 386628 6484988	Borehole water supply	1/03/1980	1/03/1980	1	no status recorded ?
61604045	Ground - borehole/well	None	50 386330 6485845	Static water level	n.d.	n.d.	1	no status recorded

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Swan Coastal Catchment - ?)							?
61604053	Ground - borehole/well (Swan Coastal Catchment - ?)	None	50 384558 6485036	Borehole water supply Static water level	15/08/1982 15/08/1982	15/08/1982 15/08/1982	1 1	operating (15/08/1982 -)
61604082	Ground - borehole/well (Swan Coastal Catchment - ?)	None	50 387002 6485547	Borehole water supply Static water level TDS	30/06/1978 30/06/1978 30/06/1978	30/06/1978 30/06/1978 30/06/1978	1 1 1	no status recorded ? ?
61615904	Ground - unknown (Swan Coastal Catchment - ?)	None	50 386563 6485586	Static water level TDS	n.d. n.d.	n.d. n.d.	1 1	no status recorded ? ?
61604123	Ground - borehole/well (Swan Coastal Catchment - ?)	None	50 385724 6482127	Static water level	15/06/1991	15/06/1991	1	no status recorded ?

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61604129	Ground - borehole/well (Swan Coastal Catchment - irrigation)	None	50 385086 6483559	Borehole water supply pH Static water level TDS	5/10/1992 5/10/1992 5/10/1992 5/10/1992	5/10/1992 5/10/1992 5/10/1992 5/10/1992	1 1 1 1	no status recorded ?
61604228	Ground - borehole/well (Swan Coastal Catchment - irrigation/domestic/household)	None	50 387178 6484472	Static water level	22/10/1994	22/10/1994	1	operational (22/10/1994 -)
61604269	Ground - borehole/well (Swan Coastal Catchment - irrigation)	None	50 385019 6483369	Borehole water supply pH Static water level TDS	30/10/1992 30/10/1992 30/10/1992 30/10/1992	30/10/1992 30/10/1992 30/10/1992 30/10/1992	1 1 1 1	operational (30/10/1992 -)
61604327	Ground - borehole/well	None	50 384355 6483702	Static water level	5/05/1999	5/05/1999	1	operational

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Swan Coastal Catchment - transport)							(5/05/1999 -)
61609872	Ground - borehole/well (Swan Coastal Catchment - irrigation)	None	50 387714 6484549	Static water level Supply	12/07/1999 12/07/1999	12/07/1999 12/07/1999	1 1	operational (12/07/1999 -)
61610041	Ground - borehole/well (Hooker Project)	None	50 385939 6480009	Static water level	8/08/1973	1/10/1982	monthly	non-operational (8/08/1973 - 2/10/1982)
61610042	Ground - borehole/well (Whitfords - observation/Groundwater Assessment Network)	DoW	50 386109 6479889	Static water level	8/09/1972	6/04/1983	monthly	non-operational (8/09/1972 - 21/12/1990)
61610112	Ground - borehole/well (Lakes and Wetlands -	DoW	50 387870 6479158	Depth to bottom of bore Static water level	7/09/1989 21/09/1965	21/02/2012 4/04/2012	monthly 12	operational (21/09/1965 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	observation/Groundwater Assessment Network/monitoring)							
61610628	Ground - borehole/well (Joondalup monitoring - investigation/Groundwater Assessment Network/monitoring)	DoW	50 384835 6489341	Acidity (CaCO ₃) AI (total) AI (soluble) Aldrin (total) Alkalinity (CaCO ₃) Alkalinity (CO ₃) Alkalinity (HCO ₃) As (soluble) As (total) Atrazine B (soluble) B (total) Bromophos-ethyl (total) Ca (soluble)	22/05/2007 2/08/2007 2/08/2007 20/08/2007 14/03/1983 9/03/1983 14/03/1983 14/03/1983 2/08/2007 20/08/2007 14/03/1983 20/08/2007 14/03/1983	19/09/2008 19/09/2008 19/09/2008 12/08/2008 19/09/2008 19/09/2008 19/09/2008 25/01/2008 19/09/2008 12/08/2008 19/09/2008 25/01/2008 12/08/2008 19/09/2008	sporadic/monthly 22 3 2 sporadic/monthly 8 8 2 13 17 9 2 18 2	operational (8/09/1981 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Cd (total) Chlordane (total) Chlorfenvinphos (total) Chlorpyrifos (total) Chlorpyrifos-methyl (total) Cl (soluble) CO ₂ Colour Conductivity Cr (total) Cu (soluble) D.O (mgL ⁻¹) D.O. (%) DDD (total) DDE (total) DDT (total) Depth to bottom of bore Diazinon (total)	2/08/2007 20/08/2007 20/08/2007 20/08/2007 20/08/2007 14/03/1983 14/03/1983 14/03/1983 14/03/1983 2/08/2007 14/03/1983 2/08/2007 20/08/2007 20/08/2007 20/08/2007 20/10/1987 20/08/2007	19/09/2008 12/08/2008 12/08/2008 12/08/2008 12/08/2008 19/09/2008 25/01/2008 15/03/1983 19/09/2008 19/09/2008 25/01/2008 19/09/2008 12/08/2008 12/08/2008 12/08/2008 19/09/2008 12/08/2008	10 12 12 12 10 10 2 2 10 2 10 2 12 10 2 2	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Dieldrin (total) Diuron (total) DOC DON Eh {RP, Redox} Endosulf sulphate (total) Endosulf-a (total) Endosulf-b (total) Endrin (total) Ethion (total) F (soluble) Fe (soluble) Fe (total) Fenchlorphos (total) Fenitrothion (total) Hardness (CaCO ₃) {Ca+Mg} HCH (BHC) a,b,d (total) HCH (BHC) g (total) {Lindane}	20/08/2007 20/08/2007 2/08/2007 2/08/2007 2/08/2007 20/08/2007 20/08/2007 20/08/2007 20/08/2007 20/08/2007 14/03/1983 14/03/1983 2/08/2007 20/08/2007 20/08/2007 14/03/1983 20/08/2007 20/08/2007	12/08/2008 12/08/2008 19/09/2008 19/09/2008 19/09/2008 12/08/2008 12/08/2008 12/08/2008 12/08/2008 12/08/2008 19/09/2008 19/09/2008 19/09/2008 12/08/2008 12/08/2008 25/01/2008 12/08/2008 12/08/2008	2 12 2 10 2 2 2 2 2 2 2 9 9 8 2 2 2 2	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Heptachlor (total) Heptachlor epoxide (total) Hexachlorobenzene (total) {HCB} Hexazinone (total) K (soluble) K (total) Linuron (total) Malathion (total) Methoxychlor (total) Metolachlor (total) Mevinphos (total) Mg (soluble) Mn (soluble) Mn (total) Molinate (total) Na (soluble) NH _x (soluble)	20/08/2007 20/08/2007 20/08/2007 20/08/2007 2/08/2007 14/03/1983 20/08/2007 20/08/2007 20/08/2007 20/08/2007 20/08/2007 20/08/2007 20/08/2007 14/03/1983 14/03/1983 2/08/2007 20/08/2007 14/03/1983 14/03/1983	12/08/2008 12/08/2008 12/08/2008 12/08/2008 19/09/2008 25/01/2008 12/08/2008 12/08/2008 12/08/2008 12/08/2008 12/08/2008 12/08/2008 12/08/2008 19/09/2008 25/01/2008 19/09/2008 12/08/2008 19/03/2010 21/10/2009	2 12 12 10 2 2 2 2 2 2 2 2 2 2 2 10 2 2 2 2	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Ni (total) NO ₃ (soluble) NO ₃ -N (soluble) NO _x (sum soluble O _x) {NO _x -N, TON} Odour organic carbons (total) organic phosphorous (total) Oxyfluorofen (total) P (soluble) Parathion-ethyl (total) Parathion-methyl (total) Pb (soluble) Pendimethalin (total) pH PO ₄ -P (soluble react) {SRP, FRP} Saturation index Se (total)	2/08/2007 14/03/1983 14/03/1983 2/08/2007 14/03/1983 20/08/2007 20/08/2007 20/08/2007 14/03/1983 20/08/2007 20/08/2007 14/03/1983 20/08/2007 14/03/1983 2/08/2007 14/03/1983 2/08/2007	3/05/2010 25/01/2008 25/01/2008 1/10/2008 25/01/2008 12/08/2008 12/08/2008 12/08/2008 25/01/2008 12/08/2008 12/08/2008 25/01/2008 19/09/2008 19/09/2008 18/05/2011 29/02/2008 19/09/2008	2 2 12 2 10 2 6 10 11 2 2 9 2 2 2 2	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Simazine (total) SiO ₂ (soluble react) SO ₄ (soluble) SO ₄ (total) Static water level TDS Temperature Tetrachlorvinphos (total) TKN TN TP Trifluralin (total) TSS Turbidity Zn (soluble) Zn (total)	20/08/2007 14/03/1983 2/08/2007 14/03/1983 8/09/1981 14/03/1983 2/08/2007 20/08/2007 2/08/2007 2/08/2007 20/08/2007 2/08/2007 14/03/1983 14/03/1983 2/08/2007	19/09/2008 19/09/2008 18/05/2011 29/02/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 23/02/2009 26/05/2009 18/10/2010 19/09/2008 19/09/2008 29/02/2008 29/02/2008 19/09/2008	2 2 2 9 9 2 11 10 2 2 9 9 9 2 2 9	
61610629	Ground - borehole/well	DoW	50 384819	Acidity (CaCO ₃)	10/11/1982	19/09/2008	collected on forty	operational

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Joondalup monitoring - investigation/Groundwater Assessment Network/monitoring)		6489337	AI (total) AI (soluble) Aldrin (total) Alkalinity (CaCO ₃) Alkalinity (CO ₃) Alkalinity (CO ₃ -CaCO ₃) Alkalinity (HCO ₃) Alkalinity (HCO ₃ -CaCO ₃) As (soluble) As (total) Atrazine B (soluble) B (total) Bromophos-ethyl (total)	10/01/1983 7/12/1982 13/09/2007 13/04/1983 12/01/1994 9/02/1983 26/04/1994 9/03/1983 27/10/1994 11/05/1983 18/10/2007 13/06/1983 27/01/1995 18/10/2007	19/09/2008 19/09/2008 19/09/2008 19/09/2008 14/05/2008 19/09/2008 14/05/2008 19/09/2008 14/05/2008 19/09/2008 19/09/2008 19/09/2008 14/05/2008 19/09/2008	two occasions/multiple collections on same date collected on five occasions/multiple collections on same date 2 2 32 8 8 2 14 18 10 2 20 2 10	(8/09/1981 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Ca (soluble) Cd (total) Chlordane (total) Chlorfenvinphos (total) Chlorpyrifos (total) Chlorpyrifos-methyl (total) Cl (soluble) CO ₂ Colour Conductivity Cr (total) Cu (soluble) D.O (mgL ⁻¹) D.O. (%) DDD (total) DDE (total) DDT (total) Depth to bottom of bore	8/08/1983 9/09/1983 18/10/2007 18/10/2007 18/10/2007 18/10/2007 11/10/1983 18/04/1995 19/01/1996 10/05/1982 9/01/1984 23/07/1996 6/08/1982 12/07/1982 18/10/2007 18/10/2007 18/10/2007 20/08/2007	19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 14/05/2008 14/05/2008 19/09/2008 19/09/2008 14/05/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008	12 2 10 2 10 10 10 2 2 10 2 10 2 2 12 10 2 2	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Diazinon (total) Dieldrin (total) Diuron (total) DOC DON Eh {RP, Redox} Endosulf sulphate (total) Endosulf-a (total) Endosulf-b (total) Endrin (total) Ethion (total) F (soluble) Fe (soluble) Fe (total) Fenchlorphos (total) Fenitrothion (total) Hardness (CaCO_3) {Ca+Mg} HCH (BHC) a,b,d (total)	18/10/2007 18/10/2007 18/10/2007 11/07/1983 10/08/1984 9/06/1982 18/10/2007 18/10/2007 18/10/2007 18/10/2007 18/10/2007 10/02/1984 12/03/1984 5/04/1984 18/10/2007 18/10/2007 24/01/1997 18/10/2007	19/09/2008 19/09/2008 19/09/2008 19/09/2008 18/05/2011 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 14/05/2008 19/09/2008	2 2 12 2 10 2 2 2 2 2 2 2 2 8 8 8 2 2	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				HCH (BHC) g (total) {Lindane}	18/10/2007	19/09/2008	2	
				Heptachlor (total)	18/10/2007	19/09/2008	2	
				Heptachlor epoxide (total)	18/10/2007	19/09/2008	12	
				Hexachlorobenzene (total) {HCB}	18/10/2007	19/09/2008	12	
				Hexazinone (total)	18/10/2007	19/09/2008	10	
				K (soluble)	8/05/1984	19/09/2008	2	
				K (total)	28/04/1997	14/05/2008	2	
				Linuron (total)	18/10/2007	1/10/2008	2	
				Malathion (total)	18/10/2007	23/02/2009	2	
				Methoxychlor (total)	18/10/2007	26/05/2009	2	
				Metolachlor (total)	18/10/2007	21/10/2009	2	
				Mevinphos (total)	18/10/2007	19/03/2010	2	
				Mg (soluble)	13/06/1984	3/05/2010	2	
				Mn (soluble)	23/10/1997	14/05/2008	10	
				Mn (total)	11/07/1984	18/10/2010	2	
				Molinate (total)	18/10/2007	18/05/2011	2	
				Na (soluble)	10/01/1985	14/05/2008	2	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				NH _x (soluble) Ni (total) NO ₃ (soluble) NO ₃ -N (soluble) NO _x (sum soluble O _x) {NO _x -N, TON} Odour organic carbons (total) organic phosphorous (total) Oxyfluorofen (total) P (soluble) Parathion-ethyl (total) Parathion-methyl (total) Pb (soluble) Pendimethalin (total) pH PO ₄ -P (soluble react) {SRP, FRP} Saturation index	11/12/1984 8/02/1985 20/04/1998 27/07/1998 11/09/1984 21/10/1998 29/11/2007 29/11/2007 29/11/2007 21/01/1999 29/11/2007 29/11/2007 13/10/1999 29/11/2007 9/03/1982 10/04/1985 27/10/2000	19/09/2008 19/09/2008 14/05/2008 14/05/2008 17/10/2011 14/05/2008 29/11/2007 29/11/2007 29/11/2007 14/05/2008 29/11/2007 29/11/2007 14/05/2008 29/11/2007 19/09/2008 19/09/2008 14/05/2008	2 2 2 12 2 10 2 7 9 9 2 2 1 8 1 1 1 2	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Se (total) Simazine (total) SiO ₂ (soluble react) SO ₄ (soluble) SO ₄ (total) Static water level TDS Temperature Tetrachlorvinphos (total) TKN TN TP Trifluralin (total) TSS Turbidity Zn (soluble) Zn (total)	8/09/1981 29/11/2007 9/10/1981 7/05/1985 23/06/2000 8/09/1981 10/11/1981 9/01/1982 29/11/2007 10/10/1984 7/11/1984 12/03/1985 29/11/2007 8/12/1981 13/11/2002 26/05/2003 10/02/1982	19/09/2008 29/11/2007 19/09/2008 19/09/2008 14/05/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 14/05/2008 19/09/2008 19/09/2008 19/09/2008	1 1 2 1 7 9 1 12 9 2 1 7 7 1 2 10	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61610655	Ground - borehole/well (Hooker Project/observation)	None	50 385454 6480409	Acidity (total) (CaCO ₃) Al (soluble) Al (total) Alkalinity (CO ₃ -CaCO ₃) Alkalinity (HCO ₃ -CaCO ₃) Alkalinity (total) (CaCO ₃) As (total) B (soluble) Ca (soluble) Cd (total) Cl (soluble) conductivity Cr (total) D.O.% D.O.mgL ⁻¹ Depth to bottom of bore	8/09/1976 4/10/1976 2/11/1976 12/04/1977 2/05/1977 31/08/1977 4/10/1977 3/11/1977 8/03/1978 1/05/1978 31/05/1978 6/11/1975 1/02/1979 5/04/1976 3/05/1976 5/09/1975	8/09/1976 4/10/1976 2/11/1976 12/04/1977 2/05/1977 31/08/1977 4/10/1977 3/11/1977 8/03/1978 1/05/1978 31/05/1978 7/08/1978 1/02/1979 5/04/1976 3/05/1976 5/09/1975	1 1 1 1 1 1 1 1 1 1 1 3 1 1 1 1	non-operational (8/08/1973 - 2/02/1979)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				DOC Eh {RP, Redox} NHx (soluble) Ni (total) Organic Carbons (total) Organic Phosphorous (total) Oxyfluorofen (total) Parathion (total) {Ethyl par.} Parathion-methyl (total) Pendimethalin (total) pH PO4-P (sol react) {SRP, FRP} Se (total) Simazine (total) SiO2 (sol react) SO4 (soluble) Static water level TDS	3/02/1978 8/03/1976 19/10/1973 7/11/1973 10/12/1973 31/01/1974 26/02/1974 30/05/1974 1/07/1974 30/07/1974 5/08/1975 1/05/1974 3/10/1974 28/11/1974 1/11/1974 2/09/1974 7/10/1975 29/01/1975	3/02/1978 8/03/1976 19/10/1973 7/11/1973 10/12/1973 31/01/1974 26/02/1974 30/05/1974 1/07/1974 30/07/1974 1/07/1976 1/05/1974 3/10/1974 28/11/1974 1/11/1974 2/09/1974 7/10/1975 29/01/1975	1 1 1 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Temperature Tetrachlorvinphos (total) TKN TN TP Trifluralin (total) TSS Zn (total)	3/04/1975 9/05/1975 8/08/1973 28/08/1973 28/03/1974 4/06/1975 5/03/1975 4/07/1975	2/06/1976 9/05/1975 8/08/1973 28/08/1973 28/03/1974 4/06/1975 5/03/1975 4/07/1975	2 1 1 1 1 1 1 1	
61610656	Ground - borehole/well (Hooker Project/observation)	None	50 385868 6480818	Acidity (total) (CaCO3) Al (total) Alkalinity (CO3-CaCO3) Alkalinity (HCO3-CaCO3) Alkalinity (total) (CaCO3) As (total) B (soluble) Ca (soluble)	6/09/1976 3/11/1976 12/04/1977 2/05/1977 31/08/1977 4/10/1977 3/11/1977 8/03/1978	29/07/1981 1/09/1981 30/10/1981 23/11/1981 1/12/1981 4/01/1982 24/02/1982 30/04/1982	2 2 2 2 2 2 2 2	non-operational (8/08/1973 - 6/05/1983)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Cd (total) Cl (soluble) conductivity Cr (total) D.O.% D.O.mgL-1 DOC DON Eh {RP, Redox} F (soluble) Fe (soluble) Fe (total) K (soluble) Mg (soluble) Mn (total) Na (soluble) NHx (soluble) Ni (total)	1/05/1978 31/05/1978 6/10/1975 1/09/1978 8/03/1976 5/04/1976 3/02/1978 26/02/1974 5/11/1975 8/08/1973 28/08/1973 24/10/1973 7/11/1973 10/12/1973 1/02/1974 3/12/1979 31/07/1974 2/09/1974	4/05/1982 1/07/1982 2/11/1982 1/12/1982 4/03/1981 24/04/1981 2/03/1982 1/06/1979 3/02/1981 4/01/1983 2/02/1983 2/03/1983 6/04/1983 5/05/1983 1/05/1979 3/12/1979 1/11/1979 2/01/1980	2 2 6 2 2 2 2 2 2 3 3 3 3 2 1 2 2	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				NOx (sum sol Ox) {NOx-N, TON} pH PO4-P (sol react) {SRP, FRP} Se (total) SiO2 (sol react) SO4 (soluble) Static water level TDS Temperature TKN TN TP TSS Zn (total)	28/03/1974 5/08/1975 1/11/1974 29/01/1975 5/03/1975 28/11/1974 5/09/1975 3/04/1975 4/06/1975 1/05/1974 1/07/1974 3/10/1974 9/05/1975 4/07/1975	1/08/1979 2/06/1981 4/03/1980 2/05/1980 3/06/1980 1/04/1980 1/12/1980 1/07/1980 1/05/1981 3/09/1979 1/10/1979 1/02/1980 1/08/1980 1/10/1980	2 4 2 2 2 2 3 2 4 2 2 2 2 2	
61610657	Ground - borehole/well (Hooker Project/observation)	None	50 385729 6481289	Acidity (total) (CaCO3) Al (soluble)	6/11/1975 8/03/1976	6/11/1975 8/03/1976	1 1	non-operational (8/08/1973 - 15/11/1990)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Al (total) Alkalinity (CO3-CaCO3) Alkalinity (HCO3-CaCO3) Alkalinity (total) (CaCO3) As (total) B (soluble) Ca (soluble) Cd (total) Cl (soluble) conductivity D.O.% D.O.mgL-1 DON Eh {RP, Redox} Mn (total) Na (soluble) NHx (soluble) Ni (total)	5/04/1976 3/05/1976 2/06/1976 1/07/1976 6/09/1976 4/10/1976 2/11/1976 1/03/1979 2/07/1979 9/05/1975 4/07/1975 5/08/1975 28/08/1973 4/06/1975 8/08/1973 26/02/1974 1/02/1974 28/03/1974	5/04/1976 3/05/1976 2/06/1976 1/07/1976 6/09/1976 4/10/1976 2/11/1976 1/03/1979 2/07/1979 9/05/1975 4/07/1975 5/08/1975 28/08/1973 4/06/1975 8/08/1973 26/02/1974 1/02/1974 28/03/1974	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				NOx (sum sol Ox) {NOx-N, TON} pH PO4-P (sol react) {SRP, FRP} Se (total) SiO2 (sol react) SO4 (soluble) Static water level TDS Temperature TKN TN TP TSS Zn (total)	24/10/1973 5/03/1975 30/05/1974 31/07/1974 2/09/1974 1/07/1974 3/04/1975 3/10/1974 28/11/1974 7/11/1973 10/12/1973 1/05/1974 1/11/1974 29/01/1975	24/10/1973 6/10/1975 30/05/1974 31/07/1974 2/09/1974 1/07/1974 3/04/1975 3/10/1974 5/09/1975 7/11/1973 10/12/1973 1/05/1974 1/11/1974 29/01/1975	1 2 1 1 1 1 1 1 2 1 1 1 1 1 1	
61610658	Ground - borehole/well (Hooker Project/observation)	None	50 385616 6481823	Alkalinity (CO3-CO3) Alkalinity (HCO3-HCO3)	8/03/1978 5/05/1978	8/03/1978 5/05/1978	1 1	non-operational (14/08/1973 - 5/05/1982)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Alkalinity (total) (CaCO3) As (soluble) B (total) Ca (soluble) Cl (soluble) CO2 Colour conductivity Cr (total) Cu (soluble) F (soluble) Fe (soluble) Fe (total) Hardness (total) (CaCO3) {Ca+Mg} K (soluble) K (total) Mg (soluble)	31/05/1978 11/07/1978 7/08/1978 2/10/1978 1/11/1978 1/09/1978 1/12/1978 14/08/1973 24/10/1973 2/04/1979 7/11/1973 10/12/1973 8/02/1974 2/07/1979 26/02/1974 1/08/1979 29/03/1974	31/05/1978 11/07/1978 7/08/1978 2/10/1978 1/11/1978 1/09/1978 1/12/1978 1/02/1979 24/10/1973 2/04/1979 1/05/1979 1/06/1979 8/02/1974 2/07/1979 26/02/1974 1/08/1979 3/09/1979	1 1 1 1 1 1 1 4 1 1 2 2 1 1 2	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Mn (soluble) Mn (total) Na (soluble) NHx (soluble) Ni (total) NO3 (soluble) NO3-N (soluble) Odour P (soluble) Pb (soluble) pH Saturation index Se (total) SiO2 (sol react) SO4 (soluble) SO4 (total) Static water level TDS	1/10/1979 2/05/1974 30/05/1974 1/11/1979 1/07/1974 3/12/1979 2/01/1980 4/03/1980 1/04/1980 2/05/1980 3/04/1975 1/07/1980 2/09/1974 3/10/1974 31/07/1974 3/06/1980 5/05/1975 1/11/1974	1/10/1979 2/05/1974 1/02/1980 1/11/1979 1/07/1974 3/12/1979 2/01/1980 4/03/1980 1/04/1980 2/05/1980 1/05/1981 1/07/1980 2/09/1974 1/08/1980 31/07/1974 3/06/1980 4/05/1982 3/11/1980	1 1 2 1 1 1 1 1 1 1 2 1 1 2 1 1 31 3	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Temperature TSS Turbidity Zn (soluble) Zn (total)	29/01/1975 28/11/1974 1/12/1980 24/04/1981 5/03/1975	29/01/1975 28/11/1974 1/12/1980 24/04/1981 5/03/1975	1 1 1 1 1	
61610659	Ground - borehole/well (Hooker Project/observation)	None	50 385073 6481909	Depth to bottom of bore Static water level	7/08/1978 14/08/1973	29/07/1981 4/05/1982	4 83	non-operational (14/08/1973 - 31/8/1987)
61610661	Ground - borehole/well (Lakes and Wetlands - observation/Groundwater Assessment Network/monitoring)	DoW	50 385935 6487238	Depth to bottom of bore NO2-N (soluble) NOx (sum sol Ox) {NOx-N, TON} pH PO4-P (sol react) {SRP, FRP} Pumping rate	7/09/1989 16/11/1994 16/11/1994 16/11/1994 16/11/1994	21/02/2012 16/11/1994 16/11/1994 16/11/1994 16/11/1994	13 1 1 1	operational (30/06/1970 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Static water level Temperature TP Volume pumped	30/06/1970 16/11/1994 16/11/1994 16/11/1994	4/04/2012 16/11/1994 16/11/1994 16/11/1994	506 1 1 1	
61610662	Ground - borehole/well (Wanneroo monitoring - Groundwater Assessment Network/monitoring)	DoW	50 385199 6489383	AI (soluble) Alkalinity (CO3-CO3) Alkalinity (HCO3-HCO3) Alkalinity (total) (CaCO3) As (soluble) B (total) Ca (soluble) Cl (soluble) CO2 Colour conductivity	29/11/1991 24/10/1978 24/10/1978 24/10/1978 24/10/1978 24/10/1978 24/10/1978 24/10/1978 24/10/1978	29/11/1991 22/11/1990 22/11/1990 29/11/1991 24/10/1978 24/10/1978 29/11/1991 29/11/1991 24/10/1978 29/11/1991	1 3 3 4 1 1 4 4 1 6 6	operational (4/02/1975 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Cu (soluble) Depth to bottom of bore DOC F (soluble) Fe (soluble) Fe (total) Hardness (total) (CaCO3) {Ca+Mg} K (total) Mg (soluble) Mn (soluble) Mn (total) Na (soluble) NHx (soluble) NO2-N (soluble) NO3 (soluble) NO3-N (soluble) NOx (sum sol Ox) {NOx-N, TON}	24/10/1978 2/11/1987 29/11/1991 24/10/1978 24/10/1978 27/11/1986 24/10/1978 24/10/1978 24/10/1978 24/10/1978 24/10/1978 24/10/1978 29/11/1991 29/11/1991 29/11/1991 29/11/1991 29/11/1991 29/11/1991 29/11/1991 29/11/1991	24/10/1978 28/06/2004 29/11/1991 29/11/1991 29/11/1991 27/11/1986 29/11/1991 29/11/1991 29/11/1991 29/11/1991 27/11/1986 29/11/1991 29/11/1991 29/11/1991 29/11/1991 29/11/1991 29/11/1991 29/11/1991	1 9 1 3 2 1 4 4 4 2 1 4 4 1 3 1 1	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Odour P (soluble) Pb (soluble) pH PO4-P (sol react) {SRP, FRP} Pumping rate S (soluble) Saturation index SiO2 (sol react) SO4 (total) Static water level TDS Temperature TKN TN TP Turbidity Volume pumped	24/10/1978 24/10/1978 24/10/1978 24/10/1978 22/11/1990 22/11/1990 29/11/1991 24/10/1978 24/10/1978 24/10/1978 4/02/1975 24/10/1978 27/11/1986 29/11/1991 29/11/1991 22/11/1990 22/11/1990 24/10/1978 22/11/1990 29/11/1991 24/10/1978 22/11/1990	24/10/1978 27/11/1986 24/10/1978 29/11/1991 22/11/1990 29/11/1991 29/11/1991 24/10/1978 29/11/1991 22/11/1990 30/03/2006 22/11/1990 29/11/1991 29/11/1991 29/11/1991 29/11/1991 29/11/1991 29/11/1991 29/11/1991	1 2 1 7 1 2 1 1 4 3 280 5 7 1 2 2 5 2	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61610663	Ground - borehole/well (Marigniup monitoring - observation/Groundwater Assessment Network/monitoring)	DoW	50 386282 6489663	Alkalinity (CO3-CO3) Alkalinity (HCO3-HCO3) Alkalinity (total) (CaCO3) As (soluble) B (total) Borehole water supply Ca (soluble) Cl (soluble) CO2 Colour conductivity Cu (soluble) Depth to bottom of bore F (soluble) Fe (soluble)	15/05/1979 15/05/1979 15/05/1979 15/05/1979 15/05/1979 15/05/1979 15/12/1978 15/05/1979 15/12/1978 15/05/1979 15/05/1979 16/04/1991 15/05/1979 15/05/1979	28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 18/12/1978 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 22/06/2004 28/05/1982 28/05/1982	3 3 3 3 3 1 3 4 3 4 3 9 3 3	non-operational (15/12/1978 - 8/07/2007)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Hardness (total) (CaCO ₃) {Ca+Mg} K (total) Mg (soluble) Mn (soluble) Na (soluble) NHx (soluble) NO ₃ (soluble) NO ₃ -N (soluble) Odour P (soluble) Pb (soluble) pH Saturation index SiO ₂ (sol react) SO ₄ (total) Static water level TDS	15/05/1979 15/05/1979 15/05/1979 15/05/1979 15/05/1979 15/05/1979 15/05/1979 15/05/1979 15/12/1978 15/05/1979 15/05/1979 15/12/1978 15/05/1979 15/05/1979 18/12/1978 18/12/1978	28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 15/12/2006 28/05/1982	3 3 3 3 3 3 3 3 4 3 3 5 3 3 3 196 7	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Turbidity	15/12/1978	28/05/1982	4	
61610677	Ground - borehole/well (Whitfords - observation/Groundwater Assessment Network/monitoring)	DoW	50 387257 6480402	Alkalinity (CO3-CO3) Alkalinity (HCO3-HCO3) Alkalinity (total) (CaCO3) Ca (soluble) Cl (soluble) Colour conductivity Depth to bottom of bore Hardness (total) (CaCO3) {Ca+Mg} K (total) Mg (soluble) Na (soluble) NHx (soluble)	28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991	28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 18/05/2011 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991	1 1 1 1 1 2 2 12 1 1 1 1	operational (3/10/1972 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				NO3 (soluble) NOx (sum sol Ox) {NOx-N, TON} pH PO4-P (sol react) {SRP, FRP} Pumping rate SiO2 (sol react) SO4 (total) Static water level TDS Temperature TN TP Turbidity Volume pumped	28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 3/10/1972 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991	28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 17/10/2011 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991 28/02/1991	1 1 2 1 1 1 1 201 1 4 1 1 1 1	
61610678	Ground - borehole/well (Whitfords - observation/Groundwater	DoW	50 387689 6482899	Alkalinity (CO3-CO3) Alkalinity (HCO3-HCO3)	17/01/1991 17/01/1991	17/01/1991 17/01/1991	1 1	non-operational (7/03/1972 - 18/10/2010)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	Assessment Network/monitoring)			Alkalinity (total) (CaCO3) Borehole water supply Ca (soluble) Cl (soluble) Colour conductivity Depth to bottom of bore Hardness (total) (CaCO3) {Ca+Mg} K (total) Mg (soluble) Na (soluble) NO3 (soluble) pH SiO2 (sol react) SO4 (total) Static water level TDS	17/01/1991 1/01/1972 17/01/1991 17/01/1991 17/01/1991 17/01/1991 21/03/1990 17/01/1991 17/01/1991 17/01/1991 17/01/1991 17/01/1991 17/01/1991 17/01/1991 7/03/1972 17/01/1991	17/01/1991 1/01/1972 17/01/1991 17/01/1991 17/01/1991 17/01/1991 20/07/2004 17/01/1991 17/01/1991 17/01/1991 17/01/1991 17/01/1991 17/01/1991 17/01/1991 10/10/2006 17/01/1991	1 1 1 1 2 2 7 1 1 1 1 1 1 1 189 1	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Temperature Turbidity Volume pumped	17/01/1991 17/01/1991 17/01/1991	17/01/1991 17/01/1991 17/01/1991	4 1 1	
61610680	Ground - borehole/well (Whitfords - Groundwater Assessment Network)	None	50 387713 6482925	no data supplied	n.d.	n.d.	n/a	non-operational (1/01/1975 - 28/03/1990)
61610683	Ground - borehole/well (Wanneroo monitoring - Groundwater Assessment Network/monitoring)	DoW	50 387060 6486556	Alkalinity (CO3-CO3) Alkalinity (HCO3-HCO3) Alkalinity (total) (CaCO3) Ca (soluble) Cl (soluble) Colour conductivity Depth to bottom of bore	11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 2/11/1987	11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 18/05/2011	1 1 1 1 1 2 2 13	operational (3/02/1975 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Hardness (total) (CaCO3) {Ca+Mg} K (total) Mg (soluble) Na (soluble) NHx (soluble) NO3 (soluble) NOx (sum sol Ox) {NOx-N, TON} pH PO4-P (sol react) {SRP, FRP} Pumping rate SiO2 (sol react) SO4 (total) Static water level TDS Temperature TN TP	11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 3/02/1975 11/02/1991 11/02/1991 11/02/1991 11/02/1991	11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 11/02/1991 18/11/2011 11/02/1991 11/02/1991 11/02/1991 11/02/1991	1 1 1 1 1 1 1 1 1 1 269 1 4 1 1	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Turbidity Volume pumped	11/02/1991 11/02/1991	11/02/1991 11/02/1991	1 1	
61610686	Ground - borehole/well (Marigniup monitoring - observation/Groundwater Assessment Network/monitoring)	DoW	50 386625 6488378	Alkalinity (CO3-CO3) Alkalinity (HCO3-HCO3) Alkalinity (total) (CaCO3) As (soluble) B (total) Ca (soluble) Cl (soluble) CO2 Colour conductivity Cu (soluble) Depth to bottom of bore F (soluble)	28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 2/02/1979 28/05/1982 2/02/1979 28/05/1982 28/05/1982 28/05/1982 8/03/1990 28/05/1982	28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 23/06/1999 28/05/1982	1 1 1 1 1 2 1 2 1 1 7 1	non-operational (2/021979 - 24/06/1999)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Fe (soluble) Hardness (total) (CaCO3) {Ca+Mg} K (total) Mg (soluble) Mn (soluble) Na (soluble) NHx (soluble) NO3 (soluble) NO3-N (soluble) Odour P (soluble) Pb (soluble) pH Saturation index SiO2 (sol react) SO4 (total) Static water level	28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 29/01/1979	28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 28/05/1982 23/06/1999	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 158	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				TDS Turbidity	2/02/1979 2/02/1979	28/05/1982 28/05/1982	3 2	
61615068	Ground - borehole/well (Wanneroo production - production)	None	50 387603 6486020	Groundwater level (AHD) Groundwater level (SLE) Volume pumped	6/08/1976 8/10/1976 31/10/1978	27/02/1980 29/04/1977 30/09/1986	28 11 84	non-operational (6/08/1976 - 1/10/1986)
61615069	Ground - borehole/well (Wanneroo production - production)	None	50 387614 6486010	Groundwater level (AHD) Volume pumped	10/09/1927 31/10/1978	27/02/1980 30/09/1986	36 84	non-operational (10/09/1927 - 1/10/1986)
61615070	Ground - borehole/well (Wanneroo production - production)	None	50 387615 6485973	Groundwater level (AHD) Groundwater level (SLE) Volume pumped	6/08/1976 20/12/1979 31/10/1978	27/02/1980 25/01/1980 30/09/1986	37 2 84	non-operational (6/08/1976 - 1/10/1986)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61619061	Ground - borehole/well (Wanneroo Reservoir)	None	50 387317 6487379	Alkalinity (CO3-CO3) Alkalinity (HCO3-HCO3) Alkalinity (total) (CaCO3) Borehole water supply Ca (soluble) Cl (soluble) Colour conductivity Hardness (total) (CaCO3) {Ca+Mg} K (total) Mg (soluble) Na (soluble) NO3 (soluble) pH SiO2 (sol react) SO4 (total)	17/04/1978 17/04/1978 17/04/1978 30/06/1970 17/04/1978 17/04/1978 17/04/1978 17/04/1978 17/04/1978 17/04/1978 30/06/1970 17/04/1978 17/04/1978 17/04/1978 17/04/1978 17/04/1978	19/10/1979 19/10/1979 19/10/1979 30/06/1970 19/10/1979 19/10/1979 19/10/1979 19/10/1979 19/10/1979 19/10/1979 19/10/1979 19/10/1979 19/10/1979 19/10/1979	4 4 4 1 4 4 4 4 4 4 5 4 4	non-operational (20/03/1978 - 20/10/1979)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Static water level TDS Temperature	30/06/1970 30/06/1970 17/04/1978	30/06/1970 19/10/1979 19/10/1979	1 5 4	
61625040	Ground - borehole/well (Stevens farm - monitoring)	None	50 385965 6489116	no data supplied	n.d.	n.d.	n/a	non-operational (5/02/1991 - 6/02/1991)
61625041	Ground - borehole/well (Stevens farm - monitoring)	None	50 385869 6489071	no data supplied	n.d.	n.d.	n/a	non-operational (6/02/1991 - 7/02/1991)
61625042	Ground - borehole/well (Stevens farm - monitoring)	None	50 385779 6489027	no data supplied	n.d.	n.d.	n/a	non-operational (7/02/1991 - 8/02/1991)
61625043	Ground - borehole/well	None	50 385673 6488991	no data supplied	n.d.	n.d.	n/a	non-operational

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Stevens farm - monitoring)							(8/02/1991 - 9/02/1991)
61625044	Ground - borehole/well (Stevens farm - monitoring)	None	50 385603 6488943	no data supplied	n.d.	n.d.	n/a	non-operational (8/02/1991 - 9/02/1991)
61625045	Ground - borehole/well (Stevens farm - monitoring)	None	50 385968 6489276	no data supplied	n.d.	n.d.	n/a	non-operational (11/02/1991 - 12/02/1991)
61625046	Ground - borehole/well (Stevens farm - monitoring)	None	50 385822 6489177	no data supplied	n.d.	n.d.	n/a	non-operational (12/02/1991 - 13/02/1991)
61625047	Ground - borehole/well (Stevens farm - monitoring)	None	50 386068 6489264	no data supplied	n.d.	n.d.	n/a	non-operational (12/02/1991 - 13/02/1991)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61625048	Ground - borehole/well (Stevens farm - monitoring)	None	50 386052 6489159	no data supplied	n.d.	n.d.	n/a	non-operational (12/02/1991 - 13/02/1991)
61625049	Ground - borehole/well (Stevens farm - monitoring)	None	50 385982 6489051	no data supplied	n.d.	n.d.	n/a	non-operational (13/02/1991 - 14/02/1991)
61625050	Ground - borehole/well (Stevens farm - monitoring)	None	50 385746 6489098	no data supplied	n.d.	n.d.	n/a	non-operational (14/02/1991 - 15/02/1991)
61625051	Ground - borehole/well (Stevens farm - monitoring)	None	50 385652 6489069	no data supplied	n.d.	n.d.	n/a	non-operational (15/02/1991 - 16/02/1991)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61625052	Ground - borehole/well (Stevens farm - monitoring)	None	50 386597 6489483	no data supplied	n.d.	n.d.	n/a	non-operational (7/03/1990 - 8/03/1990)
61625053	Ground - borehole/well (Stevens farm - monitoring)	None	50 386640 6489483	no data supplied	n.d.	n.d.	n/a	non-operational (7/03/1990 - 8/03/1990)
61625054	Ground - borehole/well (Stevens farm - monitoring)	None	50 386640 6489303	no data supplied	n.d.	n.d.	n/a	non-operational (7/03/1990 - 8/03/1990)
61625100	Ground - borehole/well (Beenyup WWTP - monitoring)	None	50 384139 6482449	no data supplied	n.d.	n.d.	n/a	non-operational (17/10/1993 - 18/10/1993)
61625101	Ground - borehole/well	None	50 384139 6482449	no data supplied	n.d.	n.d.	n/a	non-operational

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Beenyup WWTP - monitoring							(21/10/1993 - 22/10/1993)
61625102	Ground - borehole/well (Beenyup WWTP - monitoring	None	50 384139 6482449	no data supplied	n.d.	n.d.	n/a	non-operational (30/10/1993 - 31/10/1993)
61602623	Ground - borehole/well (Swan Coastal Catchment - livestock)	None	50 387244 6487228	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61602624	Ground - borehole/well (Swan Coastal Catchment)	None	50 386477 6488222	Borehole water supply Static water level	30/06/1968 30/06/1968	30/06/1968 30/06/1968	1 1	operational (30/06/1968 -)
61602625	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 386437 6487916	Borehole water supply Static water level	n.d. n.d.	n.d. n.d.	1 1	no status recorded ?

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				TDS	n.d.	n.d.		
61602626	Ground - borehole/well (Swan Coastal Catchment - Domestic/household/livestock)	None	50 386491 6488013	Borehole water supply Static water level TDS	30/06/1965 30/06/1965 30/06/1965	30/06/1965 30/06/1965 30/06/1965	1 1 1	operational (30/06/1965 -)
61602631	Ground - borehole/well (Swan Coastal Catchment)	None	50 384058 6488428	Borehole water supply Static water level TDS	30/06/1958 30/06/1958 30/06/1958	30/06/1958 30/06/1958 30/06/1958	1 1 1	no status recorded ?
61602632	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 385811 6488319	Static water level	30/06/1961	30/06/1961	1	operational (30/06/1961 -)
61602633	Ground - borehole/well	None	50 385436 6488441	Borehole water supply	30/06/1969	30/06/1969	1	operational

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Swan Coastal Catchment - Domestic/household/garden irrigation)			Static water level TDS	30/06/1969 30/06/1969	30/06/1969 30/06/1969	1 1	(30/06/1969 -)
61602634	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 385100 6489458	Borehole water supply Static water level	n.d. n.d.	n.d. n.d.	1 1	no status recorded ?
61615762	Unknown (Swan Coastal Catchment - Domestic/household/livestock)	None	50 384985 6489687	Borehole water supply Static water level TDS	30/06/1969 30/06/1969 30/06/1969	30/06/1969 30/06/1969 30/06/1969	1 1 1	operational (30/06/1969 -)
61615763	Unknown (Swan Coastal Catchment - Domestic/household/livestock)	None	50 384828 6489909	Borehole water supply Static water level TDS	30/06/1950 30/06/1950 30/06/1950	30/06/1950 30/06/1950 30/06/1950	1 1 1	operational (30/06/1950 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61602635	Ground - borehole/well (Swan Coastal Catchment - Domestic/household/livestock)	None	50 384784 6489778	Borehole water supply Static water level	30/06/1966 30/06/1966	30/06/1966 30/06/1966	1 1	operational (30/06/1966 -)
61602643	Ground - borehole/well (Swan Coastal Catchment - Project bore)	DoW	50 384296 6487090	TDS	30/06/1973	30/06/1973	1	no status recorded ?
61602644	Ground - borehole/well (Swan Coastal Catchment - Project bore)	DoW	50 384297 6487090	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61602645	Ground - borehole/well (Swan Coastal Catchment - Project bore)	DoW	50 384297 6487090	no data supplied	n.d.	n.d.	n/a	no status recorded ?

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61602646	Ground - borehole/well (Swan Coastal Catchment)	None	50 383758 6488745	Borehole water supply Static water level	30/06/1978 30/06/1978	30/06/1978 30/06/1978	1 1	no status recorded ?
61602647	Ground - borehole/well (Swan Coastal Catchment)	None	50 386094 6486807	Static water level	14/02/1978	14/02/1978	1	no status recorded ?
61615764	Unknown (Swan Coastal Catchment)	None	50 385862 6487578	Static water level	1/07/1977	1/07/1977	1	operational (1/07/1977 -)
61602649	Unknown (Swan Coastal Catchment)	None	50 386278 6487238	Borehole water supply Static water level	n.d. n.d.	n.d. n.d.	1 1	no status recorded ?
61615765	Unknown (Swan Coastal Catchment)	None	50 386278 6487238	no data supplied	n.d.	n.d.	n/a	no status recorded ?

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61602655	Ground - borehole/well (Swan Coastal Catchment)	None	50 383760 6487441	Borehole water supply Static water level	15/01/1980 15/01/1980	15/01/1980 15/01/1980	1 1	no status recorded ?
61602662	Ground - borehole/well (Swan Coastal Catchment)	None	50 387725 6487631	Borehole water supply Static water level TDS	15/08/1980 15/08/1980 15/08/1980	15/08/1980 15/08/1980 15/08/1980	1 1 1	no status recorded ?
61602664	Ground - borehole/well (Swan Coastal Catchment)	None	50 386294 6487202	Borehole water supply Static water level	30/06/1983 30/06/1983	30/06/1983 30/06/1983	1 1	no status recorded ?
61602668	Ground - borehole/well (Swan Coastal Catchment)	None	50 386791 6489067	Static water level	13/12/1988	13/12/1988	1	no status recorded ?
61602671	Ground - borehole/well (Swan Coastal Catchment -	None	50 385676 6489916	Static water level	30/06/1988	30/06/1988	1	no status recorded ?

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	Irrigation)							
61602675	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 386355 6487779	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61602681	Ground - borehole/well (Swan Coastal Catchment - Irrigation)	None	50 383720 6487073	Borehole water supply Static water level TDS	20/12/1991 27/12/1991 20/12/1991	20/12/1991 27/12/1991 20/12/1991	1 1 1	no status recorded ?
61602682	Ground - borehole/well (Swan Coastal Catchment - Irrigation)	None	50 383446 6487008	Borehole water supply pH Static water level TDS	28/01/1992 28/01/1992 3/02/1992 28/01/1992	28/01/1992 28/01/1992 3/02/1992 28/01/1992	1 1 1 1	no status recorded ?
61615771	Unknown	None	50 386856	no data supplied	n.d.	n.d.	n/a	no status

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Swan Coastal Catchment)		6489035					recorded ?
61602718	Ground - borehole/well (Swan Coastal Catchment)	None	50 386855 6489035	Static water level	5/07/1994	5/07/1994	1	no status recorded ?
61602720	Ground - borehole/well (Swan Coastal Catchment - Irrigation)	None	50 383855 6487220	Borehole water supply Static water level	20/12/1991 20/12/1991	20/12/1991 20/12/1991	1 1	no status recorded ?
61602721	Ground - borehole/well (Swan Coastal Catchment - Irrigation)	None	50 383855 6487220	Borehole water supply Static water level TDS	28/01/1992 28/01/1992 28/01/1992	28/01/1992 28/01/1992 28/01/1992	1 1 1	no status recorded ?
61602731	Ground - borehole/well (Swan Coastal Catchment)	None	50 383534 6486953	TDS pH	6/01/1992 6/01/1992	6/01/1992 6/01/1992	1 1	no status recorded ?

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61602732	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 386341 6488791	Static water level	24/05/1996	24/05/1996	1	no status recorded ?
61603406	Ground - borehole/well (Swan Coastal Catchment - Domestic/household/livestock)	None	50 388161 6480942	Borehole water supply Static water level	n.d. n.d.	n.d. n.d.	1 1	operational (n.d. -)
61603407	Ground - borehole/well (Swan Coastal Catchment - Irrigation/vegetables)	None	50 388184 6480881	Borehole water supply Static water level	30/06/1962 30/06/1962	30/06/1962 30/06/1962	1 1	operational (30/06/1962 -)
61615821	Ground - borehole/well (Swan Coastal Catchment - Viticulture/industry)	None	50 387978 6480715	Borehole water supply Static water level TDS	30/06/1955 30/06/1955 30/06/1955	30/06/1955 30/06/1955 30/06/1955	1 1 1	operational (30/06/1955 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61603408	Ground - borehole/well (Swan Coastal Catchment - Irrigation)	None	50 388251 6480655	Borehole water supply Static water level	15/04/1957 15/04/1957	15/04/1957 15/04/1957	1 1	operational (30/06/1957 -)
61603409	Ground - borehole/well (Swan Coastal Catchment)	None	50 387941 6480819	Static water level TDS	n.d. n.d.	n.d. n.d.	1 1	operational (n.d. -)
61603411	Ground - borehole/well (Swan Coastal Catchment)	None	50 386721 6485782	Borehole water supply Cl (soluble) pH Static water level TDS	31/07/1968 31/07/1968 31/07/1968 31/07/1968 31/07/1968	31/07/1968 31/07/1968 31/07/1968 31/07/1968 31/07/1968	1 1 1 1	operational (n.d. -)
61603415	Ground - borehole/well (Swan Coastal Catchment -	None	50 386633 6486622	Borehole water supply Static water level	30/06/1957 30/06/1957	30/06/1957 30/06/1957	1 1	operational (30/06/1957 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	Domestic/household)			TDS	30/06/1957	30/06/1957	1	
61615822	Unknown (Swan Coastal Catchment - Domestic/household)	None	50 386666 6486547	Borehole water supply Static water level TDS	n.d. n.d. n.d.	n.d. n.d. n.d.	1 1 1	operational (n.d. -)
61603430	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 388091 6485140	Borehole water supply Static water level	n.d. n.d.	n.d. n.d.	1 1	operational (n.d. -)
61603432	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 387393 6485312	Borehole water supply Static water level	30/06/1961 30/06/1961	30/06/1961 30/06/1961	1 1	operational (30/06/1961 -)
61603443	Ground - borehole/well	None	50 388307 6484510	Borehole water supply	30/06/1963	30/06/1963	1	operational

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Swan Coastal Catchment - Livestock/domestic/household)			Static water level TDS	30/06/1963 30/06/1963	30/06/1963 30/06/1963	1 1	(30/06/1963 -)
61603445	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 388120 6483770	Borehole water supply Static water level TDS	30/06/1956 30/06/1956 30/06/1956	30/06/1956 30/06/1956 30/06/1956	1 1 1	operational (30/06/1956 -)
61603449	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 387966 6482797	Borehole water supply Static water level TDS	30/06/1967 30/06/1967 30/06/1967	30/06/1967 30/06/1967 30/06/1967	1 1 1	operational (30/06/1967 -)
61603450	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 387803 6483077	Borehole water supply Static water level TDS	30/06/1966 30/06/1966 30/06/1966	30/06/1966 30/06/1966 30/06/1966	1 1 1	operational (n.d. -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61603451	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 388176 6483154	Static water level TDS	30/06/1969 30/06/1969	30/06/1969 30/06/1969	1 1	operational (30/06/1969 -)
61603452	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 387444 6482791	Alkalinity (HCO3-HCO3) Alkalinity (total) (CaCO3) Borehole water supply Ca (soluble) Cl (soluble) Colour conductivity Fe (soluble) Hardness (total) (CaCO3) {Ca+Mg} K (soluble) Mg (soluble)	15/09/1970 15/09/1970 30/06/1969 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970	15/09/1970 15/09/1970 30/06/1969 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970	1 1 1 1 1 1 1 1 1 1	operational (30/06/1969 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Na (soluble) NaCl NO3 (soluble) pH SiO2 (sol react) SO4 (soluble) Static water level TDS Temperature	15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 30/06/1969 30/06/1969 15/09/1970	15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 30/06/1969 15/09/1970 15/09/1970	1 1 1 1 1 1 1 3 1	
61603453	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 387440 6482857	Borehole water supply Static water level TDS	n.d. n.d. n.d.	n.d. n.d. n.d.	1 1 1	no status recorded ?
61603454	Ground - borehole/well (Swan Coastal Catchment - Garden)	None	50 388113 6481639	Borehole water supply Static water level	30/06/1963 30/06/1963	30/06/1963 30/06/1963	1 1	operational (30/06/1963 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	irrigation/domestic/household)			TDS	30/06/1963	30/06/1963	1	
61603457	Ground - borehole/well (Swan Coastal Catchment - Domestic/household/livestock)	None	50 387876 6481211	Alkalinity (CO3-CO3)	15/09/1970	15/09/1970	1	operational
				Alkalinity (HCO3-HCO3)	15/09/1970	15/09/1970	1	(30/06/1966 -)
				Alkalinity (total) (CaCO3)	15/09/1970	15/09/1970	1	
				Borehole water supply	30/06/1963	30/06/1966	2	
				Ca (soluble)	15/09/1970	15/09/1970	1	
				Cl (soluble)	15/09/1970	15/09/1970	1	
				Colour	15/09/1970	15/09/1970	1	
				conductivity	15/09/1970	15/09/1970	1	
				Fe (soluble)	15/09/1970	15/09/1970	1	
				Hardness (total) (CaCO3) {Ca+Mg}	15/09/1970	15/09/1970	1	
				K (soluble)	15/09/1970	15/09/1970	1	
				Mg (soluble)	15/09/1970	15/09/1970	1	
				Mn (soluble)	15/09/1970	15/09/1970	1	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Na (soluble) NaCl NO3 (soluble) pH SiO2 (sol react) SO4 (soluble) Static water level TDS Temperature	15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 30/06/1966 30/06/1963 15/09/1970	15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 30/06/1966 15/09/1970 15/09/1970	1 1 1 1 1 1 1 3 1	
61603458	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 388354 6481082	Borehole water supply Static water level TDS	30/06/1964 30/06/1964 30/06/1964	30/06/1964 30/06/1964 30/06/1964	1 1 1	no status recorded ?
61603459	Ground - borehole/well (Swan Coastal Catchment - Garden	None	50 388339 6481259	Borehole water supply Static water level	30/06/1963 30/06/1963	30/06/1963 30/06/1963	1 1	no status recorded ?

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	irrigation/domestic/household)			TDS	30/06/1963	30/06/1963	1	
61603462	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation)	None	50 388287 6480801	Static water level TDS	30/06/1965 30/06/1965	30/06/1965 30/06/1965	1 1	operational (30/06/1965 -)
61603463	Ground - borehole/well (Swan Coastal Catchment)	None	50 388316 6480934	Static water level TDS	30/06/1969 30/06/1969	30/06/1969 30/06/1969	1 1	no status recorded ?
61603469	Ground - borehole/well (Swan Coastal Catchment - Horticulture)	None	50 388367 6480319	Static water level	n.d.	n.d.	1	no status recorded ?
61603472	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 386600 6481976	Borehole water supply Static water level	30/06/1965 30/06/1965	30/06/1965 30/06/1965	1 1	operational (30/06/1965 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				TDS	30/06/1965	30/06/1965	1	
61603474	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 386525 6481949	Borehole water supply Static water level TDS	30/06/1968 30/06/1968 30/06/1968	30/06/1968 30/06/1968 30/06/1968	1 1 1	no status recorded ?
61603480	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 387136 6485631	Borehole water supply Static water level	30/06/1967 30/06/1967	30/06/1967 30/06/1967	1 1	operational (30/06/1967 -)
61603481	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 387172 6485523	Alkalinity (CO3-CO3) Alkalinity (HCO3-HCO3) Alkalinity (total) (CaCO3) Borehole water supply Ca (soluble)	15/09/1970 15/09/1970 15/09/1970 30/06/1967 15/09/1970	15/09/1970 15/09/1970 15/09/1970 30/06/1967 15/09/1970	1 1 1 1	operational (30/06/1967 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Cl (soluble) Colour conductivity Fe (soluble) Hardness (total) (CaCO3) {Ca+Mg} K (soluble) Mg (soluble) Mn (soluble) Na (soluble) NaCl NO3 (soluble) pH SiO2 (sol react) SO4 (soluble) Static water level TDS Temperature	15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 30/06/1967 30/06/1967 15/09/1970	15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 30/06/1967 15/09/1970 15/09/1970	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 3 1	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61603488	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 387457 6482255	Static water level TDS	30/06/1938 30/06/1938	30/06/1938 30/06/1938	1 1	operational (30/06/1938 -)
61603489	Ground - borehole/well (Swan Coastal Catchment - Livestock)	None	50 387488 6482125	Borehole water supply Static water level TDS	30/06/1966 30/06/1966 30/06/1966	30/06/1966 30/06/1966 30/06/1966	1 1 1	operational (30/06/1966 -)
61603490	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 387332 6482552	Borehole water supply Static water level TDS	n.d. n.d. n.d.	n.d. n.d. n.d.	1 1 1	operational (n.d. -)
61603491	Ground - borehole/well (Swan Coastal Catchment - Garden)	None	50 387430 6481916	Borehole water supply Static water level	30/06/1966 30/06/1966	30/06/1966 30/06/1966	1 1	operational (30/06/1966 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	irrigation)			TDS	30/06/1966	30/06/1966	1	
61603492	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation)	None	50 387378 6481886	Borehole water supply Static water level TDS	30/06/1967 30/06/1967 30/06/1967	30/06/1967 30/06/1967 30/06/1967	1 1 1	operational (30/06/1967 -)
61603493	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation)	None	50 387400 6481856	Borehole water supply Static water level	30/06/1968 30/06/1968	30/06/1968 30/06/1968	1 1	no status recorded ?
61603497	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 388164 6480810	Borehole water supply Static water level TDS	30/06/1961 30/06/1961 30/06/1961	30/06/1961 30/06/1961 30/06/1961	1 1 1	operational (30/06/1961 -)
61603498	Ground - borehole/well	None	50 388138	Borehole water supply	n.d.	n.d.	1	operational

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Swan Coastal Catchment - Domestic/household)		6480902	Static water level TDS	n.d. n.d.	n.d. n.d.	1 1	(n.d. -)
61603500	Ground - borehole/well (Swan Coastal Catchment - Domestic/household/livestock)	None	50 388287 6480604	Static water level TDS	30/06/1960 30/06/1960	30/06/1960 30/06/1960	1 1	operational (30/06/1960 -)
61603501	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 388296 6480543	conductivity NaCl Static water level TDS Temperature pH	15/10/1971 15/10/1971 30/06/1967 30/06/1967 15/10/1971 15/10/1971	15/10/1971 15/10/1971 30/06/1967 15/10/1971 15/10/1971 15/10/1971	1 1 1 3 1 1	operational (30/06/1967 -)
61603502	Ground - borehole/well	None	50 387854 6480531	Borehole water supply	30/06/1958	30/06/1958	1	operational

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Swan Coastal Catchment)			Static water level TDS	30/06/1958 30/06/1958	30/06/1958 30/06/1958	1 1	(30/06/1958 -)
61603505	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 388385 6479717	Borehole water supply Static water level TDS	30/06/1965 30/06/1965 30/06/1965	30/06/1965 30/06/1965 30/06/1965	1 1 1	operational (30/06/1965 -)
61603527	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 388288 6479194	Borehole water supply Static water level TDS	30/06/1969 30/06/1969 30/06/1969	30/06/1969 30/06/1969 30/06/1969	1 1 1	operational (30/06/1969 -)
61603528	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation)	None	50 388292 6479091	Borehole water supply Static water level TDS	30/06/1965 30/06/1965 30/06/1965	30/06/1965 30/06/1965 30/06/1965	1 1 1	operational (30/06/1965 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61603529	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 388297 6479334	Static water level TDS	30/06/1960 30/06/1960	30/06/1960 30/06/1960	1 1	operational (30/06/1960 -)
61603530	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 388281 6478918	Borehole water supply Static water level TDS	30/06/1955 30/06/1955 30/06/1955	30/06/1955 30/06/1955 30/06/1955	1 1 1	operational (30/06/1955 -)
61603565	Ground - borehole/well (Swan Coastal Catchment)	None	50 387550 6479265	Borehole water supply Static water level TDS	n.d. n.d. n.d.	n.d. n.d. n.d.	1 1 1	no status recorded ?
61603566	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 387770 6479352	Borehole water supply Static water level	30/06/1955 30/06/1955	30/06/1955 30/06/1955	1 1	operational (30/06/1955 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				TDS	30/06/1955	30/06/1955	1	
61603567	Ground - borehole/well (Swan Coastal Catchment - Livestock)	None	50 387549 6479466	Static water level TDS	30/06/1933 30/06/1933	30/06/1933 30/06/1933	1 1	operational (30/06/1933 -)
61603568	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 387241 6480083	Alkalinity (CO3-CO3) Alkalinity (HCO3-HCO3) Alkalinity (total) (CaCO3) Ca (soluble) Cl (soluble) Colour conductivity Fe (soluble) Hardness (total) (CaCO3) {Ca+Mg} K (soluble)	15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970	15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970	1 1 1 1 1 1 1 1 1	operational (30/06/1960 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Mg (soluble) Mn (soluble) Na (soluble) NaCl NO3 (soluble) pH SiO2 (sol react) SO4 (soluble) Static water level TDS Temperature	15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 30/06/1960 30/06/1960 15/09/1970	15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 30/06/1960 15/09/1970 15/09/1970	1 1 1 1 1 1 1 1 1 3 1	
61615825	Ground - borehole/well (Swan Coastal Catchment)	None	50 387304 6480021	Static water level	30/06/1956	30/06/1956	1	no status recorded ?
61603569	Ground - borehole/well (Swan Coastal Catchment - Garden)	None	50 387265 6480854	Borehole water supply Static water level	30/06/1967 30/06/1967	30/06/1967 30/06/1967	1 1	operational (30/06/1967 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	irrigation/domestic/household)			TDS	30/06/1967	30/06/1967	1	
61603570	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 387406 6480890	Borehole water supply Static water level TDS	30/06/1966 30/06/1966 30/06/1966	30/06/1966 30/06/1966 30/06/1966	1 1 1	operational (30/06/1966 -)
61603571	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation)	None	50 387347 6480852	Borehole water supply Static water level	n.d. n.d.	n.d. n.d.	1 1	operational (n.d. -)
61615826	Ground - borehole/well (Swan Coastal Catchment)	None	50 387168 6480762	Static water level	n.d.	n.d.	1	no status recorded ?
61603572	Ground - borehole/well (Swan Coastal Catchment - Garden	None	50 387188 6480825	Borehole water supply Static water level	30/06/1958 30/06/1958	30/06/1958 30/06/1958	1 1	operational (30/06/1958 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	irrigation)			TDS	30/06/1958	30/06/1958	1	
61603573	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation)	None	50 386887 6481341	Static water level TDS	30/06/1968 30/06/1968	30/06/1968 30/06/1968	1 1	operational (30/06/1968 -)
61603574	Ground - borehole/well (Swan Coastal Catchment)	None	50 387028 6481005	Static water level TDS	n.d. n.d.	n.d. n.d.	1 1	no status recorded ?
61603575	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 387640 6481211	Borehole water supply Static water level	n.d. n.d.	n.d. n.d.	1 1	operational (n.d. -)
61603576	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation)	None	50 388059 6481116	Static water level TDS	30/06/1967 30/06/1967	30/06/1967 30/06/1967	1 1	operational (30/06/1967 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61603577	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 387995 6481265	Static water level TDS	30/06/1964 30/06/1964	30/06/1964 30/06/1964	1 1	operational (30/06/1964 -)
61603582	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 387768 6479073	Borehole water supply Static water level	30/06/1968 30/06/1968	30/06/1968 30/06/1968	1 1	operational (30/06/1968 -)
61603583	Ground - borehole/well (Swan Coastal Catchment)	None	50 387734 6479078	Borehole water supply Static water level TDS	30/06/1963 30/06/1963 30/06/1963	30/06/1963 30/06/1963 30/06/1963	1 1 1	operational (30/06/1963 -)
61603584	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 387623 6479075	Borehole water supply Static water level TDS	30/06/1961 30/06/1961 30/06/1961	30/06/1961 30/06/1961 30/06/1961	1 1 1	operational (30/06/1961 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61603587	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 386317 6486353	Borehole water supply Static water level TDS	30/06/1962 30/06/1962 30/06/1962	30/06/1962 30/06/1962 30/06/1962	1 1 1	operational (30/06/1962 -)
61603588	Ground - borehole/well (Swan Coastal Catchment - Irrigation)	None	50 386575 6485882	Static water level TDS	n.d. n.d.	n.d. n.d.	1 1	operational (n.d. -)
61603589	Ground - borehole/well (Swan Coastal Catchment - Domestic/household)	None	50 388051 6483048	Borehole water supply Static water level	30/06/1967 30/06/1967	30/06/1967 30/06/1967	1 1	operational (30/06/1967 -)
61603590	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation/domestic/household)	None	50 386459 6485915	Borehole water supply Static water level	30/06/1967 30/06/1967	30/06/1967 30/06/1967	1 1	operational (30/06/1967 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				TDS	30/06/1967	30/06/1967	1	
61603591	Ground - borehole/well (Swan Coastal Catchment - Domestic/household/livestock)	None	50 385816 6486159	Static water level TDS	30/06/1964 30/06/1964	30/06/1964 30/06/1964	1 1	operational (30/06/1964 -)
61603592	Ground - borehole/well (Swan Coastal Catchment - Livestock)	None	50 385805 6486225	Static water level	30/06/1966	30/06/1966	1	operational (30/06/1966 -)
61603593	Ground - borehole/well (Swan Coastal Catchment - Livestock)	None	50 385772 6486294	Static water level TDS	30/06/1969 30/06/1969	30/06/1969 30/06/1969	1 1	operational (30/06/1969 -)
61603595	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation)	None	50 387622 6481066	Static water level TDS	30/06/1969 30/06/1969	30/06/1969 30/06/1969	1 1	operational (30/06/1969 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61603599	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation)	None	50 388387 6481799	Static water level TDS	n.d. n.d.	n.d. n.d.	1 1	operational (n.d. -)
61603600	Ground - borehole/well (Swan Coastal Catchment - Garden irrigation)	None	50 387899 6481554	Borehole water supply Static water level TDS	n.d. n.d. n.d.	n.d. n.d. n.d.	1 1 1	operational (n.d. -)
61603601	Ground - borehole/well (Swan Coastal Catchment)	None	50 383469 6484624	Alkalinity (CO3-CO3) Alkalinity (HCO3-HCO3) Alkalinity (total) (CaCO3) Borehole water supply Ca (soluble) Cl (soluble) Colour	15/09/1970 15/09/1970 15/09/1970 n.d. 15/09/1970 15/09/1970 15/09/1970	15/09/1970 15/09/1970 15/09/1970 n.d. 15/09/1970 15/09/1970 15/09/1970	1 1 1 1 1	operational (n.d. -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				conductivity Fe (soluble) Hardness (total) (CaCO3) {Ca+Mg} K (soluble) Mg (soluble) Mn (soluble) Na (soluble) NaCl NO3 (soluble) pH SiO2 (sol react) SO4 (soluble) Static water level TDS Temperature	15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 n.d. n.d. 15/09/1970	15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 15/09/1970 n.d. n.d. 15/09/1970	1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1	
61603605	Ground - borehole/well	None	50 386553 6479775	Borehole water supply	30/06/1967	30/06/1967	1	no status recorded

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Swan Coastal Catchment)			Static water level	30/06/1967	30/06/1967	1	?
61603670	Ground - borehole/well (Swan Coastal Catchment)	None	50 387553 6485946	Borehole water supply Static water level	30/06/1970 30/06/1970	30/06/1970 30/06/1970	1 1	no status recorded ?
61603688	Ground - borehole/well (Swan Coastal Catchment)	None	50 387290 6479715	Static water level	30/06/1972	1/07/1972	1	no status recorded ?
61603689	Ground - borehole/well (Swan Coastal Catchment)	None	50 387486 6480180	Borehole water supply Static water level TDS	30/06/1972 30/06/1972 30/06/1972	30/06/1972 30/06/1972 30/06/1972	1 1 1	operational (30/06/1972 -)
61603717	Ground - borehole/well (Swan Coastal Catchment)	None	50 387151 6485595	Borehole water supply Static water level	30/06/1978	30/06/1978	1	no status recorded ?

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61603725	Ground - borehole/well (Swan Coastal Catchment)	None	50 388260 6480788	Static water level	5/12/1977	5/12/1977	1	no status recorded ?
61603737	Ground - borehole/well (Swan Coastal Catchment)	None	50 387747 6479024	Static water level	14/03/1978	14/03/1978	1	no status recorded ?
61603738	Ground - borehole/well (Swan Coastal Catchment)	None	50 387247 6479063	Static water level	22/05/1978	22/05/1978	1	no status recorded ?
61603809	Ground - borehole/well (Swan Coastal Catchment)	None	50 386003 6478850	Static water level	9/03/1978	9/03/1978	1	operational (9/03/1978 -)
61603833	Ground - borehole/well (Swan Coastal Catchment)	None	50 387523 6479105	Static water level	30/06/1978	30/06/1978	1	no status recorded ?

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61603897	Ground - borehole/well (Swan Coastal Catchment)	None	50 385482 6480732	Borehole water supply	9/01/1979	9/01/1979	1	operational (9/01/1979 -)
61603949	Ground - borehole/well (Swan Coastal Catchment)	None	50 385970 6486148	Borehole water supply Static water level	15/02/1978 15/02/1978	15/02/1978 15/02/1978	1 1	no status recorded ?
61603951	Ground - borehole/well (Swan Coastal Catchment)	None	50 386459 6478866	Borehole water supply Static water level	15/07/1980 15/07/1980	15/07/1980 15/07/1980	1 1	no status recorded ?
61603952	Ground - borehole/well (Swan Coastal Catchment)	None	50 386615 6479493	Static water level	15/08/1980	15/08/1980	1	no status recorded ?
61604046	Ground - borehole/well (Swan Coastal Catchment)	None	50 387796 6481913	Static water level	n.d.	n.d.	1	no status recorded ?

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61604051	Ground - borehole/well (Swan Coastal Catchment)	None	50 385654 6481796	Borehole water supply Static water level	15/03/1981 15/03/1981	15/03/1981 15/03/1981	1 1	operational (15/03/1981 -)
61615901	Unknown (Swan Coastal Catchment)	None	50 386268 6481918	Static water level	15/08/1984	15/08/1984	1	no status recorded ?
61604087	Ground - borehole/well (Swan Coastal Catchment)	None	50 386594 6480397	Borehole water supply Static water level	15/10/1985 15/10/1985	15/10/1985 15/10/1985	1 1	no status recorded ?
61615903	Unknown (Swan Coastal Catchment - Irrigation)	None	50 386743 6485974	TDS	n.d.	n.d.	1	no status recorded ?
61604126	Ground - borehole/well (Swan Coastal Catchment - Irrigation)	None	50 384143 6485231	Borehole water supply Static water level	25/11/1992 25/11/1992	25/11/1992 25/11/1992	1 1	no status recorded ?

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				TDS	25/11/1992	25/11/1992	1	
61604140	Ground - borehole/well (Swan Coastal Catchment - Irrigation)	None	50 387904 6480635	Static water level	4/03/1994	4/03/1994	1	no status recorded ?
61604222	Ground - borehole/well (Swan Coastal Catchment)	None	50 387107 6486171	no data supplied	n.d.	n.d.	n/a	operational (20/11/1990 -)
61604245	Ground - borehole/well (Swan Coastal Catchment)	None	50 388143 6482386	Borehole water supply Static water level	29/06/1995 29/06/1995	29/06/1995 29/06/1995	1 1	operational (29/06/1995 -)
61604268	Ground - borehole/well (Swan Coastal Catchment)	None	50 387928 6481916	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61604300	Ground - borehole/well	None	50 387399	Borehole water supply	3/03/1998	3/03/1998	1	operational

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Swan Coastal Catchment - Irrigation)		6485209					(3/03/1998 -)
61604301	Ground - borehole/well (Swan Coastal Catchment - Irrigation)	None	50 386749 6485869	Static water level	14/08/1996	14/08/1996	1	operational (14/08/1996 -)
61604323	Ground - borehole/well (Swan Coastal Catchment)	None	50 387905 6483329	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61609871	Ground - borehole/well (Swan Coastal Catchment - Irrigation)	None	50 386923 6482202	Static water level	17/12/1998	17/12/1998	1	no status recorded ?
61609875	Ground - borehole/well (Swan Coastal Catchment)	None	50 385739 6488499	no data supplied	n.d.	n.d.	n/a	operational (26/02/2000 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61622004	Ground - borehole/well (Tapping - Irrigation)	Peet & Co	50 386173 6490058	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61611423	Ground - borehole/well (Lake Joondalup - Monitoring/project bore)	DoW	50 383566 6489734	Acidity (total) (CaCO ₃) Al (soluble) Al (total) Aldrin (total) Alkalinity (CO ₃ -CaCO ₃) Alkalinity (HCO ₃ -CaCO ₃) Alkalinity (total) (CaCO ₃) As (total) Atrazine B (soluble) Bromophos-ethyl (total) Ca (soluble)	22/06/2007 22/06/2007 18/06/2007 21/08/2007 22/06/2007 22/06/2007 22/06/2007 18/06/2007 21/08/2007 22/06/2007 21/08/2007	22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008	14 14 21 3 14 14 14 21 3 14 3 14	operational (19/06/2007 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Ca {Ca A}% Ca {Ca KCl}% Ca {Ca P}% Cd (total) Chlordane (total) Chlорfenvinphos (total) Chlorpyrifos (total) Chlorpyrifos-methyl (total) Cl (soluble) conductivity Cr (total) D.O.% D.O.mgL-1 DDD (total) DDE (total) DDT (total) Depth to bottom of bore Diazinon (total)	18/06/2007 18/06/2007 18/06/2007 18/06/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 22/06/2007 22/06/2007 18/06/2007 11/07/2007 11/07/2007 21/08/2007 21/08/2007 21/08/2007 22/06/2007 21/08/2007	18/06/2007 18/06/2007 18/06/2007 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 3/06/2011 22/09/2008	7 7 7 21 3 3 3 3 14 42 21 13 13 3 3 3 4 3	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Dieldrin (total) Diuron (total) DON Eh {RP, Redox} Endosulf sulfate (total) Endosulf-a (total) Endosulf-b (total) Endrin (total) Ethion (total) F (soluble) Fe (soluble) Fe (total) Fenchlorphos (total) Fenitrothion (total) H2S HCH (BHC) a,b,d (total) HCH (BHC) g (total) {Lindane} Heptachlor (total)	21/08/2007 21/08/2007 22/06/2007 22/06/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 22/06/2007 22/06/2007 18/06/2007 21/08/2007 21/08/2007 24/10/2007 21/08/2007 21/08/2007	22/09/2008 22/09/2008 22/09/2008 13/08/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 21/05/2008 22/09/2008 22/09/2008	3 3 10 13 3 3 3 3 3 14 14 21 3 3 4 3 3	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Heptachlor epoxide (total) Hexachlorobenzene (total) {HCB} Hexazinone (total) Hg (total) K (soluble) Linuron (total) Malathion (total) Material reaction Methoxychlor (total) Metolachlor (total) Mevinphos (total) {Phosdrin} Mg (soluble) Mg {Mg A}% Mg {Mg KCl}% Mg {Mg P}% Mn (total) Moisture content (dry wt)%	21/08/2007 21/08/2007 21/08/2007 13/08/2008 22/06/2007 21/08/2007 21/08/2007 18/06/2007 21/08/2007 21/08/2007 21/08/2007 18/06/2007 18/06/2007 18/06/2007 18/06/2007	22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 18/06/2007 22/09/2008 22/09/2008 22/09/2008 18/06/2007 18/06/2007 18/06/2007 18/06/2007	3 3 3 2 14 3 3 8 3 3 14 7 7 7 21 7	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Molinate (total) Na (soluble) NHx (soluble) Ni (total) NOx (sum sol Ox) {NOx-N, TON} Organic Carbons (total) Organic Phosphorous (total) ORP Oxyfluorofen (total) Parathion (total) {Ethyl par.} Parathion-methyl (total) Pendimethalin (total) pH PO4-P (sol react) {SRP, FRP} S {S CR, Scr}% S {S P}% S {S POS}% S {S[KCl]}%	21/08/2007 19/10/2007 22/06/2007 18/06/2007 22/06/2007 21/08/2007 21/08/2007 22/09/2008 21/08/2007 21/08/2007 21/08/2007 21/08/2007 18/06/2007 22/06/2007 18/06/2007 18/06/2007 18/06/2007	22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 18/06/2007 22/09/2008 18/06/2007 18/06/2007 18/06/2007	3 10 10 21 10 3 3 1 3 3 3 3 3 53 10 7 7 7	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Se (total) Simazine (total) SiO2 (sol react) SO4 (soluble) Static water level TAA (pH6.5) as H+ol/t TDS Temperature Tetrachlorvinphos (total) TKN TN TP TPA (pH6.5) as H+ol/t Trifluralin (total) TSA (Calc)ol/t TSS Zn (total)	18/06/2007 21/08/2007 22/06/2007 22/06/2007 22/06/2007 21/08/2007 22/06/2007 22/06/2007 21/08/2007 11/07/2007 11/07/2007 11/07/2007 18/06/2007 21/08/2007 18/06/2007 22/06/2007 18/06/2007	22/09/2008 22/09/2008 22/09/2008 22/09/2008 4/04/2012 21/08/2007 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 18/06/2007 22/09/2008 18/06/2007 22/09/2008 22/09/2008	21 3 13 14 57 7 14 30 3 9 9 9 7 3 7 14 21	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61611424	Ground - borehole/well (Lake Joondalup - Monitoing/project bore)	DoW	50 383566 6489736	Acidity (total) (CaCO3) AI (soluble) AI (total) Aldrin (total) Alkalinity (CO3-CaCO3) Alkalinity (HCO3-CaCO3) Alkalinity (total) (CaCO3) As (total) Atrazine B (soluble) Bromophos-ethyl (total) Ca (soluble) Cd (total) Chlordane (total) Chlorfenvinphos (total) Chlorpyrifos (total) Chlorpyrifos-methyl (total)	20/06/2007 20/06/2007 20/06/2007 21/08/2007 20/06/2007 20/06/2007 20/06/2007 20/06/2007 21/08/2007 20/06/2007 21/08/2007 20/06/2007 21/08/2007 21/08/2007 21/08/2007	22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008	14 14 14 3 14 14 14 14 14 14 14 14 3 3 3 3	non-operational (15/06/2007 - 15/11/2008)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Cl (soluble) conductivity Cr (total) D.O.% D.O.mgL-1 DDD (total) DDE (total) DDT (total) Depth to bottom of bore Diazinon (total) Dieldrin (total) Diuron (total) DON Eh {RP, Redox} Endosulf sulfate (total) Endosulf-a (total) Endosulf-b (total) Endrin (total)	20/06/2007 20/06/2007 20/06/2007 20/06/2007 20/06/2007 21/08/2007 21/08/2007 21/08/2007 20/06/2007 21/08/2007 21/08/2007 21/08/2007 20/06/2007 20/06/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007	22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 11/07/2007 22/09/2008 22/09/2008 22/09/2008 22/09/2008 13/08/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008	14 42 14 14 14 3 3 3 2 3 3 3 10 13 3 3 3 3	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Ethion (total) F (soluble) Fe (soluble) Fe (total) Fenchlorphos (total) Fenitrothion (total) HCH (BHC) a,b,d (total) HCH (BHC) g (total) {Lindane} Heptachlor (total) Heptachlor epoxide (total) Hexachlorobenzene (total) {HCB} Hexazinone (total) Hg (total) K (soluble) Linuron (total) Malathion (total) Methoxychlor (total)	21/08/2007 20/06/2007 20/06/2007 20/06/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 13/08/2008 20/06/2007 21/08/2007 21/08/2007 21/08/2007	22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008	3 14 14 14 3 3 3 3 3 3 3 3 2 14 3 3 3 3	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Metolachlor (total) Mevinphos (total) {Phosdrin} Mg (soluble) Mn (total) Molinate (total) Na (soluble) NHx (soluble) Ni (total) NOx (sum sol Ox) {NOx-N, TON} Organic Carbons (total) Organic Phosphorous (total) ORP Oxyfluorofen (total) Parathion (total) {Ethyl par.} Parathion-methyl (total) Pendimethalin (total) pH PO4-P (sol react) {SRP, FRP}	21/08/2007 21/08/2007 20/06/2007 20/06/2007 21/08/2007 19/10/2007 20/06/2007 20/06/2007 21/08/2007 21/08/2007 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008	22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008	3 3 14 14 3 10 10 14 10 3 1 3 3 3 3 3 28 10	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Se (total) Simazine (total) SiO2 (sol react) SO4 (soluble) Static water level TDS Temperature Tetrachlorvinphos (total) TKN TN TP Trifluralin (total) TSS Zn (total)	20/06/2007 21/08/2007 20/06/2007 20/06/2007 20/06/2007 20/06/2007 20/06/2007 21/08/2007 11/07/2007 11/07/2007 11/07/2007 21/08/2007 20/06/2007 20/06/2007	22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008	14 3 13 14 14 14 28 3 9 9 9 3 14 14	
61611425	Ground - borehole/well (Lake Joondalup - Monitoing/project bore)	DoW	50 383568 6489738	Acidity (total) (CaCO3) Al (soluble)	20/06/2007 20/06/2007	22/09/2008 22/09/2008	14 14	non-operational (15/06/2007 - 15/11/2008)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				AI (total) Aldrin (total) Alkalinity (CO3-CaCO3) Alkalinity (HCO3-CaCO3) Alkalinity (total) (CaCO3) As (total) Atrazine B (soluble) Bromophos-ethyl (total) Ca (soluble) Cd (total) Chlordane (total) Chlorfenvinphos (total) Chlorpyrifos (total) Chlorpyrifos-methyl (total) Cl (soluble) conductivity Cr (total)	20/06/2007 21/08/2007 20/06/2007 20/06/2007 20/06/2007 20/06/2007 21/08/2007 20/06/2007 21/08/2007 20/06/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 20/06/2007 20/06/2007 20/06/2007	22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008	14 3 14 14 14 14 3 14 3 14 14 3 14 3 3 14 42 14	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				D.O.% D.O.mgL-1 DDD (total) DDE (total) DDT (total) Depth to bottom of bore Diazinon (total) Dieldrin (total) Diuron (total) DON Eh {RP, Redox} Endosulf sulfate (total) Endosulf-a (total) Endosulf-b (total) Endrin (total) Ethion (total) F (soluble) Fe (soluble)	20/06/2007 20/06/2007 21/08/2007 21/08/2007 21/08/2007 20/06/2007 21/08/2007 21/08/2007 21/08/2007 20/06/2007 20/06/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 20/06/2007 20/06/2007	22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 11/07/2007 22/09/2008 22/09/2008 22/09/2008 22/09/2008 13/08/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008	14 14 3 3 3 2 3 3 3 10 13 3 3 3 3 3 3 14 14	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Fe (total) Fenchlorphos (total) Fenitrothion (total) HCH (BHC) a,b,d (total) HCH (BHC) g (total) {Lindane} Heptachlor (total) Heptachlor epoxide (total) Hexachlorobenzene (total) {HCB} Hexazinone (total) Hg (total) K (soluble) Linuron (total) Malathion (total) Methoxychlor (total) Metolachlor (total) Mevinphos (total) {Phosdrin} Mg (soluble)	20/06/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 20/06/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007 21/08/2007	22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008	14 3 3 3 3 3 3 3 3 2 14 3 3 3 3 3 14	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Mn (total) Molinate (total) Na (soluble) NHx (soluble) Ni (total) NOx (sum sol Ox) {NOx-N, TON} Organic Carbons (total) Organic Phosphorous (total) ORP Oxyfluorofen (total) Parathion (total) {Ethyl par.} Parathion-methyl (total) Pendimethalin (total) pH PO4-P (sol react) {SRP, FRP} Se (total) Simazine (total) SiO2 (sol react)	20/06/2007 21/08/2007 19/10/2007 20/06/2007 20/06/2007 20/06/2007 21/08/2007 21/08/2007 22/09/2008 21/08/2007 21/08/2007 21/08/2007 21/08/2007 20/06/2007 20/06/2007 21/08/2007 20/06/2007	22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008	14 3 10 10 14 10 3 3 1 3 3 3 3 28 10 14 3 13	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				SO4 (soluble) Static water level TDS Temperature Tetrachlorvinphos (total) TKN TN TP Trifluralin (total) TSS Zn (total)	20/06/2007 20/06/2007 20/06/2007 20/06/2007 21/08/2007 11/07/2007 11/07/2007 11/07/2007 21/08/2007 20/06/2007 20/06/2007	22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008 22/09/2008	14 14 14 28 3 9 9 9 3 14 14	
61611426	Ground - borehole/well (Lake Joondalup - Groundwater Assessment Network/monitoing)	Dow	50 384831 6489333	Acidity (total) (CaCO3) Al (soluble) Al (total) Aldrin (total) Alkalinity (CO3-CaCO3)	22/06/2007 22/06/2007 22/06/2007 20/08/2007 22/06/2007	19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008	14 14 14 3 14	non-operational (13/06/2007 - 15/11/2008)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Alkalinity (HCO3-CaCO3) Alkalinity (total) (CaCO3) As (total) Atrazine B (soluble) Bromophos-ethyl (total) Ca (soluble) Cd (total) Chlordane (total) Chlorfenvinphos (total) Chlorpyrifos (total) Chlorpyrifos-methyl (total) Cl (soluble) conductivity Cr (total) D.O.% D.O.mgL-1 DDD (total)	22/06/2007 22/06/2007 22/06/2007 20/08/2007 22/06/2007 20/08/2007 22/06/2007 22/06/2007 20/08/2007 20/08/2007 20/08/2007 22/06/2007 22/06/2007 22/06/2007 2/08/2007 2/08/2007 20/08/2007	19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008	14 14 14 3 14 3 14 14 3 3 3 3 14 42 14 13 13 3	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				DDE (total) DDT (total) Depth to bottom of bore Diazinon (total) Dieldrin (total) Diuron (total) DON Eh {RP, Redox} Endosulf sulfate (total) Endosulf-a (total) Endosulf-b (total) Endrin (total) Ethion (total) F (soluble) Fe (soluble) Fe (total) Fenchlorphos (total) Fenitrothion (total)	20/08/2007 20/08/2007 22/06/2007 20/08/2007 20/08/2007 20/08/2007 22/06/2007 22/06/2007 20/08/2007 20/08/2007 20/08/2007 20/08/2007 20/08/2007 22/06/2007 22/06/2007 20/08/2007 20/08/2007	19/09/2008 19/09/2008 20/08/2007 19/09/2008 19/09/2008 19/09/2008 19/09/2008 12/08/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008	3 3 3 3 3 3 10 12 3 3 3 3 3 3 3 14 14 14 3 3	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				HCH (BHC) a,b,d (total) HCH (BHC) g (total) {Lindane} Heptachlor (total) Heptachlor epoxide (total) Hexachlorobenzene (total) {HCB} Hexazinone (total) Hg (total) K (soluble) Linuron (total) Malathion (total) Methoxychlor (total) Metolachlor (total) Mevinphos (total) {Phosdrin} Mg (soluble) Mn (total) Molinate (total) Na (soluble)	20/08/2007 20/08/2007 20/08/2007 20/08/2007 20/08/2007 20/08/2007 12/08/2008 22/06/2007 20/08/2007 20/08/2007 20/08/2007 20/08/2007 20/08/2007 20/08/2007 22/06/2007 22/06/2007 20/08/2007 18/10/2007	19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008	3 3 3 3 3 3 2 14 3 3 3 3 3 3 3 14 14 3 10	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				NHx (soluble) Ni (total) NOx (sum sol Ox) {NOx-N, TON} Organic Carbons (total) Organic Phosphorous (total) ORP Oxyfluorofen (total) Parathion (total) {Ethyl par.} Parathion-methyl (total) Pendimethalin (total) pH PO4-P (sol react) {SRP, FRP} Se (total) Simazine (total) SiO2 (sol react) SO4 (soluble) Static water level TDS	22/06/2007 22/06/2007 20/08/2007 20/08/2007 20/08/2007 26/06/2008 20/08/2007 20/08/2007 20/08/2007 20/08/2007 22/06/2007 22/06/2007 20/08/2007 22/06/2007 22/06/2007 22/06/2007 22/06/2007	19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008	10 14 10 3 3 2 3 3 3 3 28 10 14 3 13 14 14 14	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Temperature Tetrachlorvinphos (total) TKN TN TP Trifluralin (total) TSS Zn (total)	22/06/2007 20/08/2007 2/08/2007 2/08/2007 2/08/2007 20/08/2007 22/06/2007 22/06/2007	19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008 19/09/2008	28 3 9 9 9 3 14 14	
61640371	Ground - borehole/well (Mariginiup - WRL linked)	Private Owner	50 386560 6489091	no data supplied	n.d.	n.d.	n/a	operational (5/02/2007 -)
61640314	Ground - borehole/well (Mariginiup - WRL linked)	Private Owner	50 387213 6488263	no data supplied	n.d.	n.d.	n/a	operational (25/01/2007 -)
61640372	Ground - borehole/well	Private Owner	50 387314 6488401	no data supplied	n.d.	n.d.	n/a	operational

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Mariginiup - WRL linked)							(10/08/2006 -)
61640467	Ground - borehole/well (Mariginiup - WRL linked)	Private Owner	50 386293 6488714	no data supplied	n.d.	n.d.	n/a	operational (24/04/2007 -)
61640468	Ground - borehole/well (Mariginiup - WRL linked)	Private Owner	50 386238 6488681	no data supplied	n.d.	n.d.	n/a	operational (1/05/2007 -)
61640469	Ground - borehole/well (Mariginiup - WRL linked)	Private Owner	50 386112 6488668	no data supplied	n.d.	n.d.	n/a	operational (16/05/2007 -)
61640460	Ground - borehole/well (Mariginiup - WRL linked)	Private Owner	50 387312 6487745	no data supplied	n.d.	n.d.	n/a	operational (19/10/2006 -)
61611870	Ground - borehole/well	DoW	50 387538 6479675	Acidity (total) (CaCO3)	15/06/2009	15/06/2009	1	operational

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Lake Goollelal)			Al (soluble) Al (total) Aldrin (total) Alkalinity (CO3-CaCO3) Alkalinity (HCO3-CaCO3) Alkalinity (total) (CaCO3) ANC (BT)-CaCO3% As (total) Atrazine B (soluble) Bromophos-ethyl (total) Ca (soluble) Ca {Ca A} % Ca {Ca KCl} % Ca {Ca P} % Cd (total) Chlordane (total) Chlorfenvinphos (total)	15/06/2009 5/05/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 5/05/2009 5/05/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009	15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 5/05/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009	1 4 1 1 1 1 2 4 1 1 1 1 3 3 3 4 1 1	(6/05/2009 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Chlorpyrifos (total) Chlorpyrifos-methyl (total) Cl (soluble) conductivity Cr (total) D.O.% D.O.mgL-1 DDD (total) DDE (total) DDT (total) Depth to bottom of bore Diazinon (total) Dieldrin (total) Diuron (total) DON Eh {RP, Redox} Endosulf sulfate (total) Endosulf-a (total)	15/06/2009 15/06/2009 15/06/2009 15/06/2009 5/05/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009	15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009	1 1 1 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Endosulf-b (total) Endrin (total) Ethion (total) F (soluble) Fe (soluble) Fe (total) Fenchlorphos (total) Fenitrothion (total) HCH (BHC) a,b,d (total) HCH (BHC) g (total) {Lindane} Heptachlor (total) Heptachlor epoxide (total) Hexachlorobenzene (total) {HCB} Hexazinone (total) Hg (total) K (soluble) Linuron (total)	15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 5/05/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009	15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009	1 1 1 1 1 4 1 1 1 1 1 1 1 1 1 1 1	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Malathion (total) Methoxychlor (total) Metolachlor (total) Mevinphos (total) {Phosdrin} Mg (soluble) Mg {Mg A}% Mg {Mg KCl}% Mg {Mg P}% Mn (total) Moisture content (dry wt)% Molinate (total) Na (soluble) NHx (soluble) Ni (total) NOx (sum sol Ox) {NOx-N, TON} Organic Carbons (total) Organic Phosphorous (total) Oxyfluorofen (total)	15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 5/05/2009 5/05/2009 5/05/2009 5/05/2009 5/05/2009 5/05/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009	15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 5/05/2009 5/05/2009 5/05/2009 15/06/2009 5/05/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009	1 1 1 1 1 3 3 3 4 3 1 1 1 4 1 1 1	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				Parathion (total) {Ethyl par.} Parathion-methyl (total) Pendimethalin (total) pH PO4-P (sol react) {SRP, FRP} S {S CR, Scr}% S {S P}% S {S POS}% S {S[KCl]}% Se (total) Simazine (total) SiO2 (sol react) SO4 (soluble) Static water level TAA (pH6.5) as H+ol/t TDS Temperature Tetrachlorvinphos (total)	15/06/2009 15/06/2009 15/06/2009 5/05/2009 15/06/2009 5/05/2009 5/05/2009 5/05/2009 5/05/2009 5/05/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 4/04/2012 5/05/2009 15/06/2009 15/06/2009 15/06/2009	15/06/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 5/05/2009 5/05/2009 5/05/2009 5/05/2009 5/05/2009 15/06/2009 15/06/2009 15/06/2009 15/06/2009 4/04/2012 5/05/2009 15/06/2009 15/06/2009 15/06/2009	1 1 1 8 1 3 3 3 3 4 1 1 1 1 36 3 1 2 1	

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
				TKN TN TP TPA (pH6.5) as H+ol/t Trifluralin (total) TSA (Calc)ol/t TSS Zn (total)	15/06/2009 15/06/2009 15/06/2009 5/05/2009 15/06/2009 5/05/2009 15/06/2009 5/05/2009	15/06/2009 15/06/2009 15/06/2009 5/05/2009 15/06/2009 5/05/2009 15/06/2009 15/06/2009	1 1 1 3 1 3 1 4	
61641807	Ground - borehole/well (Wanneroo - WRL linked)	Private Owner	50 388277 6485579	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61641796	Ground - borehole/well (Hocking - WRL linked)	Private Owner	50 388012 6484457	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61641667	Ground - borehole/well	Private Owner	50 388374 6481189	no data supplied	n.d.	n.d.	n/a	no status recorded

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Wangara - WRL linked)							?
61641612	Ground - borehole/well (Wangara)	Private Owner	50 388341 6481132	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61641611	Ground - borehole/well (Wangara - WRL linked)	Private Owner	50 388341 6481134	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61641607	Ground - borehole/well (Wangara - WRL linked)	Private Owner	50 388157 6480828	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61641606	Ground - borehole/well (Madeley - WRL linked)	Private Owner	50 388287 6480981	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61641605	Ground - borehole/well	Private Owner	50 388231 6480932	no data supplied	n.d.	n.d.	n/a	no status recorded

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
	(Madeley - WRL linked)							?
61641595	Ground - borehole/well (Wangara - WRL linked)	Private Owner	50 388141 6481145	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61641594	Ground - borehole/well (Wangara - WRL linked)	Private Owner	50 388011 6481152	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61641571	Ground - borehole/well (Pearsall - WRL linked)	Private Owner	50 387553 6483019	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61615146	Ground - borehole/well (Mariginiup Monitoring - Groundwater Assessment Network/monitoing)	DoW	50 386291 6489662	Depth to bottom of bore Static water level	17/02/2009 9/05/2007	24/01/2012 20/04/2012	3 13	operational (8/09/2010 -)

AWRC Reference	Site Geology Feature/Purpose	Asset Owner	Position (UTM)	Data Available	Commencement Date	Latest Sample Collection	Sample Frequency	Operation Status
61642067	Ground - borehole/well (Tapping - WRL linked)	Private Owner	50 385569 6489349	no data supplied	n.d.	n.d.	n/a	no status recorded ?
61642091	Ground - borehole/well (Woodvale - WRL linked)	Private Owner	50 387256 6481361	no data supplied	n.d.	n.d.	n/a	operational (14/06/2010 -)
61641658	Ground - borehole/well (Wangara - WRL linked)	Private Owner	50 387985 6481211	no data supplied	n.d.	n.d.	n/a	no status recorded ?

NOTE: The following is a key to the table above:

n.d. = no date

Text in orange = "unknown operational status"

Text in red = "operational status is ceased"