Dry Parks Strategy

2021

CITY OF Armadale

Inside Cover Image: Pelham Reserve, Armadale
Cover Image: Dawson Reserve, Armadale

Dry Park Strategy Overview

The Dry Parks Strategy will provide guidance to ensure that the needs and open space expectations of the community, are met through the continual and programmed improvement of the City's dry parks.

Overview

The Dry Parks Strategy analyses the City's reserves, with particular focus on the dry reserves, and considers various methods of improvement.

Improvement options range from various water sourcing methods, irrigation improvements, recreation or environmental improvements or no improvements.

This Strategy addresses the improvement of the City's dry parks through the establishment of a Dry Parks Improvement Framework (DPIF) and Hydrozoning Improvement Framework (HIF). Refer Attachment C.

This strategy and associated frameworks will provide guidance for the next five years to ensure that the needs and open space expectations of the community, are met through the continual and programmed improvement of the City's dry parks.

Image: Bungendore Park

Relevant City Documents

The Dry Parks Strategy has impact on the following objectives of the Strategic Community Plan 2020-2030:

2.2 Attractive, inclusive and functional public places

2.2.4 Develop, improve and maintain quality parks, playgrounds and public open spaces throughout the City.

The Dry Parks Strategy aligns with the following Action in the Corporate Business Plan:

1.2.3 Investigate a program for the improvement of the City's dry parks. Develop a dry parks strategy for staged improvement.

This document shall be read and used in conjunction with the following documents:

Document Name	Prepared by	Relevance
City of Armadale Water Position Paper 2021	Sports Turf Technology 2021 on behalf of the City	Provides information regarding irrigation water sources
City of Armadale Citywide Annual Groundwater Monitoring Summary 2019-2020	Sports Turf Technology 2020 on behalf of the City	Provides detail on the City's groundwater licences and annual usage
City of Armadale Parks Facilities Strategy 2018	City of Armadale (Parks)	Provides a comprehensive strategy outlining minimum requirements within a detailed POS classification system
City of Armadale Standard Specification Irrigation System Design and Installation	City of Armadale (Parks)	Specification outlining the City's minimum specifications for an irrigation system
City of Armadale Standard Specification for Bores, Pumps, Headworks and Electrical Cubicles (REV 7 - April 2021)	City of Armadale (Parks)	Specification outlining the City's minimum specifications for irrigation infrastructure
Water Sensitive Cities Benchmarking and Assessment	Prepared by Urbaqua 2020 on behalf of the City	Provides a summary of the City's journey towards becoming a Water Sensitive City
City of Armadale Waterwise Council Action Plan 2020	Water Corporation	Outlines the CoA Waterwise goals and summarises the City groundwater licences
City of Armadale ENG 14 - Landscaping	City of Armadale	Policy relating to the standards of landscaping within the City of Armadale (parks, streetscapes)
Verge Treatment and Management Policy (Under Review)	City of Armadale	Under Review

Image: Corondale Park, Seville Grove

Draft

Date	Revision	Comments
2021	A	Issue for June Council Report
2021	B	Issue for June Council Report - Updated DPIF and HIF
2021	C	Issue for June Council Report - Updated DPIF and HIF (Rev C)
2021	D	Issue for June Council Report - Updated DPIF and HIF (REV D)

Dry Parks Strategy

Contents

Image: Blackburne Reserve, Kelmscott

Acronyms

CoA	City of Armadale
DPIF	Dry Parks Improvement Frameworks
MAR	Managed Aquifer Recharge
PFS	Parks Facilities Strategy (City of Armadale)
POS	Public Open Space
DWER	Department of Water and Environment Regulation
PIP	Parks Improvement Plan
WAPC	Western Australian Planning Commission

Introduction

What is a Dry Park?

In the context of this report 'Dry Parks' are defined as parks with no irrigation source and irrigation system.

Process for this Strategy

The outcome of this strategy is the:

- Dry Park Improvement Framework (DPIF)
- Hydrozoning Improvement Framework (HIF).

The process of determining these frameworks is outlined below:

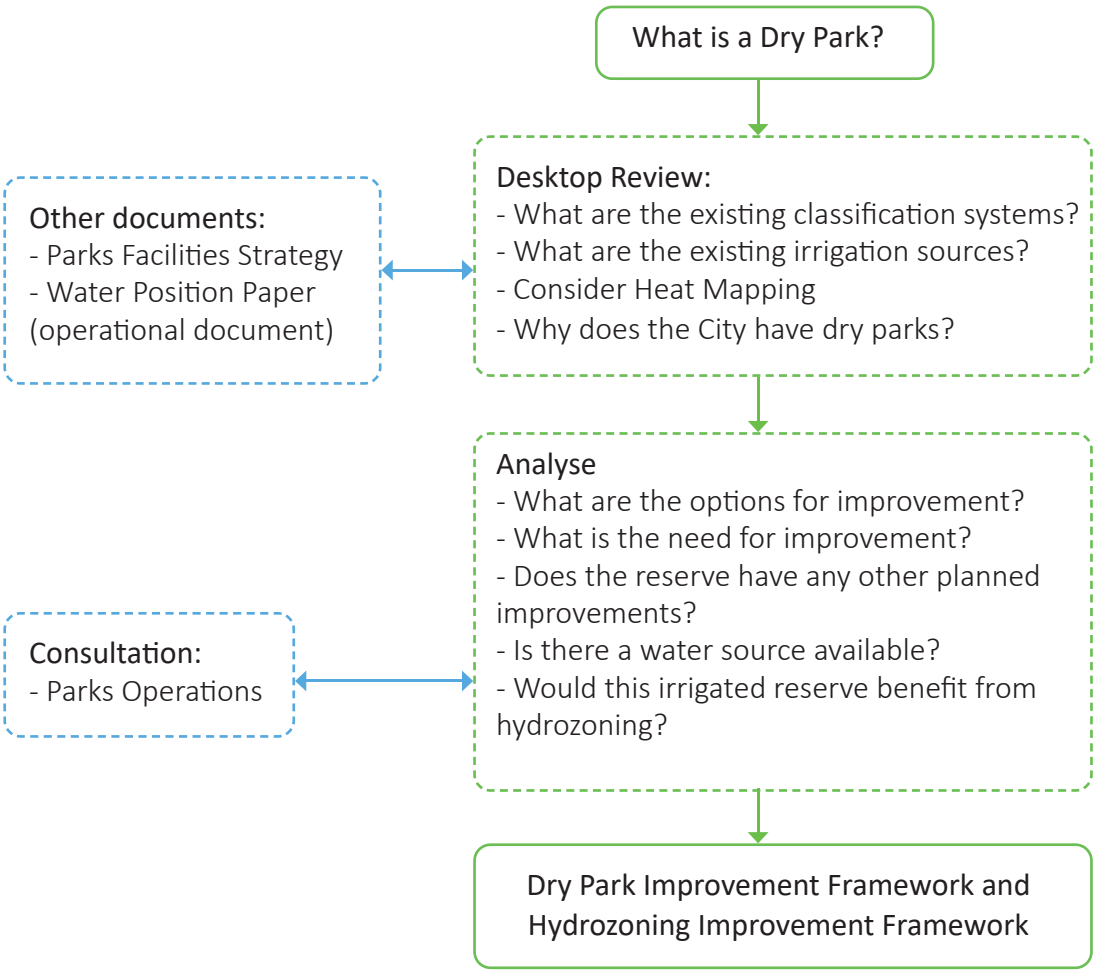

Image 1: Dry Park Strategy Process

Context

The City is located on the urban fringe of the Perth Metropolitan area and is one of a number of outer metropolitan growth councils.

The City is experiencing sustained rapid growth with the population expected to double between 2010 and 2030;

- 2010 the population was estimated at 61,900* residents
- May 2021 the population is estimated at 93,928* residents
- By 2030 the population is expected to be 124,900* residents

**estimates have been extracted from the Id.Consulting webpage May 2021. (https://forecast.id.com.au/armadale)*

This growth is predominantly medium to high density housing where the house occupies the majority of the lot, with little to no 'green' space in the front or back yard.

The desire to maximize the built form on the private lot has increased pressure on the City's open spaces to perform the open space function that a 'typical' backyard used to perform – a space to kick the ball, a space to relax and a space to use with your family and friends.

These functions are often associated with 'green' irrigated spaces.

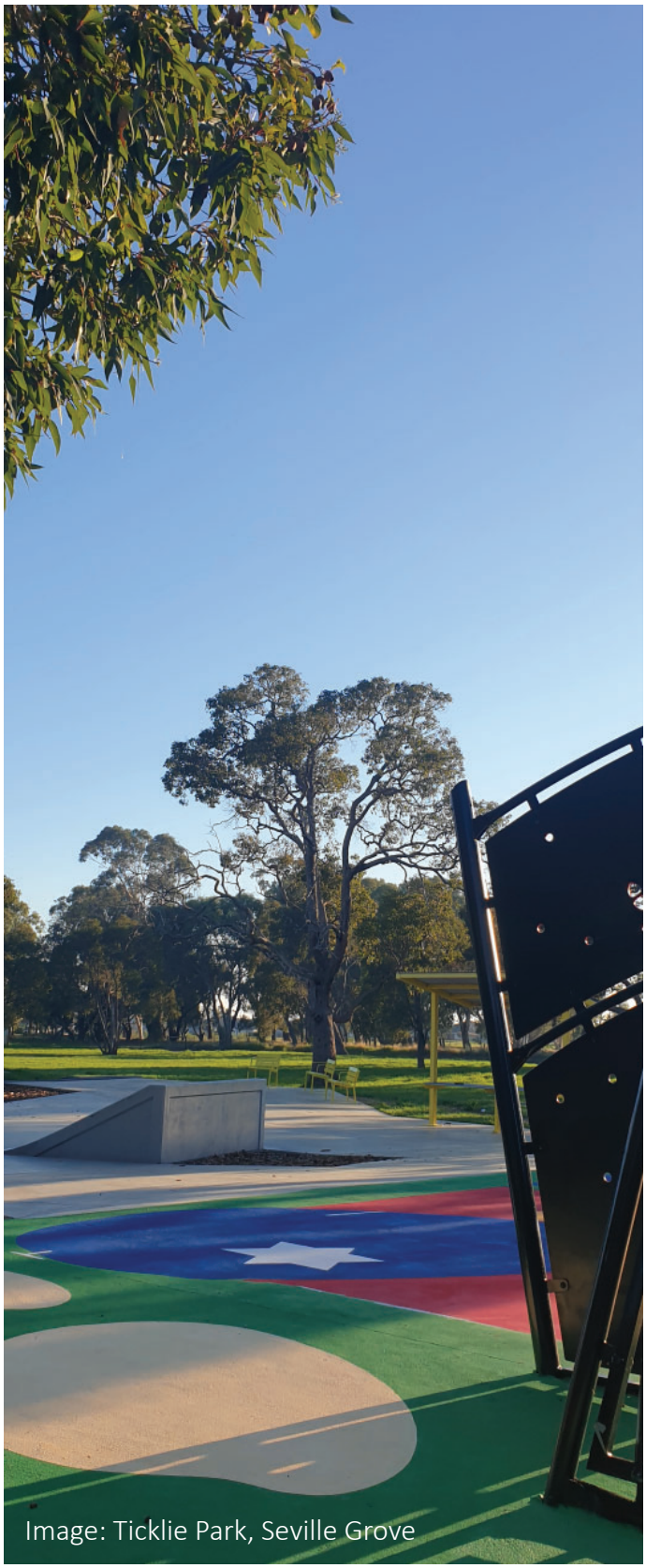

Image: Ticklie Park, Seville Grove

Parks Classification System

The City has a park classification system based on the following:

- Park size; Local, Neighbourhood, District
- Park function (predominate); Nature, Recreation, Sport.

This classification system allows the City, Developers and other consultants to understand typical 'facility types' a park of a certain size and certain function will contain (acknowledging that there are always site specific anomalies).

A 'facility type' will have a maximum score of 1, 5 or 10 as listed in Table 1.

To ascertain if a reserve meets the requirements of its particular classification, the reserve is scored against each facility type and an overall facility score is obtained.

Irrigation is a typical 'facility type' of the following park classifications:

- District Sport
- District Recreation
- Neighbourhood Sport
- Neighbourhood Recreation
- Local Recreation

In these categories, if a reserve is irrigated, it receives a score of 10.

	POS Classification	Facility Type																													
		Pathways	Bridges	Signage	Car Parking	Access Control	Lighting	Play	Bin	Dog Bin	Seating	Shelter	Public Toilet	BBQ	Drink Fountain	Shade Sails	Art	Hard Courts	Fitness	Youth	Community Garden	Men's Shed	Dog Park	Irrigation	Trees	Planting	Scheduled Sports	Passive Turf	WSUD	Max Score	Percentage
DOS	Sport	1	1	1	10	1	10	10	1	1	1	10	10	10	5	1	1	5	1	1	1	1	1	10	5	5	10	5	1	120	100%
DOS	Recreation	1	1	1	10	1	10	10	1	1	1	10	10	10	5	1	1	1	1	1	1	1	1	10	5	5	0	5	1	106	
DOS	Nature	1	1	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	1	18	
NOS	Sport	1	1	1	10	1	10	10	1	1	1	5	1	1	5	1	1	1	1	1	1	1	1	10	5	5	10	5	1	93	
NOS	Recreation	1	1	1	1	1	1	10	1	1	1	10	1	10	5	1	1	1	1	1	0	0	0	10	5	5	0	5	1	76	
NOS	Nature	1	1	1	1	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	1	19	
LOS	Recreation	1	1	1	0	1	0	10	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	10	5	5	0	5	1	45	
LOS	Nature	1	1	1	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	1	17	

Table 1: Parks Facilities Strategy - Facility Type

Parks Classification System v 'Need'

For a Local Recreation reserve where the total possible score is 45, irrigation with a score of 10, is 22% of the total score making it a relatively high and important facility type for Local Recreation reserves.

For the other POS classifications, irrigation makes up the following percentage of the max score for that classification:

- Neighbourhood Recreation 13%
- Neighbourhood Sport 11%
- District Recreation 9%
- District Sport 8%

Irrigation has a relatively high score, particularly in the neighbourhood and local levels on the basis that the provision of irrigation is a basic amenity that enhances a park visually, but importantly provides a level of amenity that allows year round usage, for people of all ages and abilities.

Irrigation cools a park, reduces dust / sand drift and enhances the year round usability of the park.

In determining the Dry Park Improvement Framework we ascertained the 'Need' for improvement and this relates directly to the irrigation 'facility type'.

The City reviewed all of the reserves and noted if they were unirrigated. If a reserve was unirrigated and classified Local Recreation, Neighbourhood Recreation, Neighbourhood Sport, District Recreation and District Sport, their 'Need' score was High (max score of 10).

Not all of the dry parks will need to be considered for improvement as they may already meet the needs of their particular park classification system or other factors may limit improvement.

Image: Barry Poad Reserve, Seville Grove

Parks Maintenance Classification

The following maintenance classifications include **non-irrigated and irrigated** reserves:

- Passive Reserve Level 4 Dry (18)
- Passive Reserve Level 3 Low (130)
- Passive Reserve Level 2 Moderate (54)
- Natural Area Wet (205)
- Natural Area Dry (180)

The following maintenance classifications include irrigated reserves only:

- Passive Reserve Level 1 High (3)
- Active Sport (23)

(Note: the above figures include, where known, 'future' reserves which have been mapped)

City dry parks receive an average of $9,500/hectare annually for maintenance. Irrigated reserves receive an average of $18,500/hectare annually.

Any improvements to a dry park will result in the appropriate increase in the maintenance budget (the costs indicated are 2019 figures).

Image: Newhaven, Piara Waters

New Developments and Western Australian Planning Commission

A very simplistic review of the City Asset data shows irrigation infrastructure is less common within the central band of the City; Armadale, Camillo, Brookdale, Seville Grove, Champion Lakes. *Refer Image 2.* A number of areas within these suburbs were developed before Western Australian Planning Commission (WAPC) conditioned the requirement for developers to provide Public Open Space landscaping and establishment maintenance.

For any new development the following condition(s) generally applies:

"R4 - Arrangements being made for the proposed public open space to be developed by the landowner/ applicant to a minimum standard and maintained for two summers through the implementation of an approved landscape plan providing for the development and maintenance of the proposed public open space in accordance with the requirements of Liveable Neighbourhoods and/or dark sky principles [DELETE AS APPLICABLE] and to the specifications of the local government. (Local Government) Ra2 - With regard to Condition [INSERT VALUE], the development is to include full earthworks, reticulation, grassing of key areas, and pathways that form part of the overall pedestrian and/or cycle network."

The requirement for Developers to provide basic landscaping and reticulation (irrigation) ensures that reserves provide year round amenity and reduces the burden on Local Government Areas to outlay funds for capital works. This WAPC condition is relatively new (post year 2000) and older developments were not required to provide this level of amenity.

The City of Armadale has a number of reserves that were simply ceded free of cost with minimal landscape treatments provided.

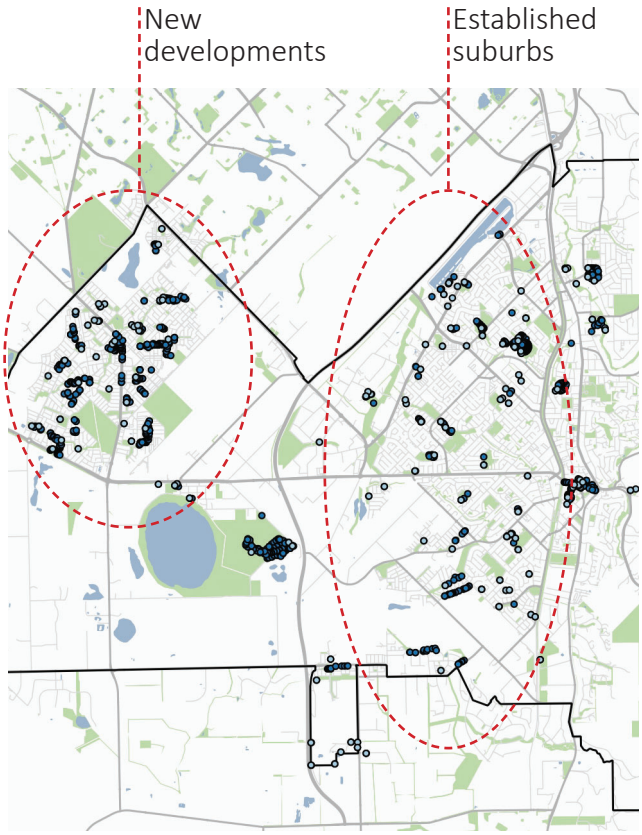

Image 2; City of Armadale – Irrigation Infrastructure. Irrigation infrastructure as shown by blue dot. There is a higher concentration of irrigation infrastructure in the newer suburbs Piara Waters and Harrisdale compared to the established suburbs of Camillo, Seville Grove, Champion Lakes and Kelmscott

Image: Barry Poad, Seville Grove

Internal Benchmarking

How are our Parks irrigated?

The City of Armadale irrigates reserves using the following sources:

A) Groundwater

The majority of the City's reserves are irrigated from groundwater extracted from bores. The groundwater is sourced from the Superficial Aquifer or Leederville Aquifer. Both of these aquifers are currently fully allocated in the 'City of Armadale' sub-area. The 'City of Armadale' sub-area is where a large portion of the City's dry parks are located.

To accommodate any new irrigated parks within the 'City of Armadale' sub-area, the City will need to consider hydrozoning other parks (in the same sub-area) to balance the total water usage, or consider other improvements.

There is allocation available in the 'Wright' sub-area (Superficial aquifer) which covers Piara Waters. The majority of parks are sufficiently irrigated in this area as they have been developed over the past 10 years, and the minimum standard has been achieved through the application of the WAPC condition previously mentioned.

The City is not able to trade between sub-areas.

Refer Attachment A for groundwater aquifer boundaries.

In addition to the allocation issues described above, there are additional issues relating to the use of groundwater that need to be considered and monitored, including but not limited to:

- Salinity
- Iron (Fe)
- Abnormal pH
- Flow
- Long term viability
- DWER allocation (7,500kL/hect/yr to 6,500kL/hect/yr)

B) Irrigation Scheme connections

The City has a limited number of parks irrigated via a scheme water connections. This option was selected if there were no other options available and the irrigated area is extremely limited.

Borello Park (Roleystone), Tredale Field (Mount Richon) and Erica Park (Kelmscott) are irrigated via scheme water. In all instances no other irrigation sources were available and given the lack of irrigated space in the areas, it was deemed a reasonable option.

Irrigating via scheme water has economic and environmental issues, and is a last resort option.

C) Irrigation tanks

There are 13 reserves which require tanks due to insufficient yield to feed the irrigation system.

These tanks are filled from the nearby groundwater bore, and in some instances (for example Cross Park), the City is forced to supplement with scheme water to meet the demands of the particular reserve.

Heat Mapping

The City of Armadale engaged a specialist in 2019/2020 to complete and analyse near-infrared data (year 2020) and capture thermal imagery using satellite images. The analysis identified the extent of the City's existing tree canopy and vegetation cover, and identified hot spots within the City. It is intended to be a benchmark against which the City can measure the success and impact of the City's Urban Forest Strategy.

From a dry park perspective and a very high level review of the heat mapping, it has been identified that there is a 2 to 8 degree difference between dry and irrigated parks. (Refer table 2- Surface Temperature Dry Park v Irrigated Park).

The heat mapping has clearly outlined the local temperature reduction trees provide, and at a closer surface level it also identifies irrigated reserves are lower in temperature. The lower temperature contributes to their overall appeal and usability to the community.

Table 2:
Surface Temperature Dry Park v Irrigated Park

PARK NAME	SUBURB	SURFACE TEMP	IRRIGATED (YES / NO)
TICKLIE RESERVE	SEVILLE GROVE	35.70	NO
PELHAM RESERVE	ARMADALE	34.00	NO
DAMERHAM PARK	KELMSCOTT	33.10	NO
WESTFIELD HERON	CAMILLO	38.50	NO
MINNAWARRA	ARMADALE	27.70	YES
ASPIRI PARK	PIARA WATERS	31.00	YES
WILLIAM LOCKARD RESERVE	HARRISDALE	30.60	YES

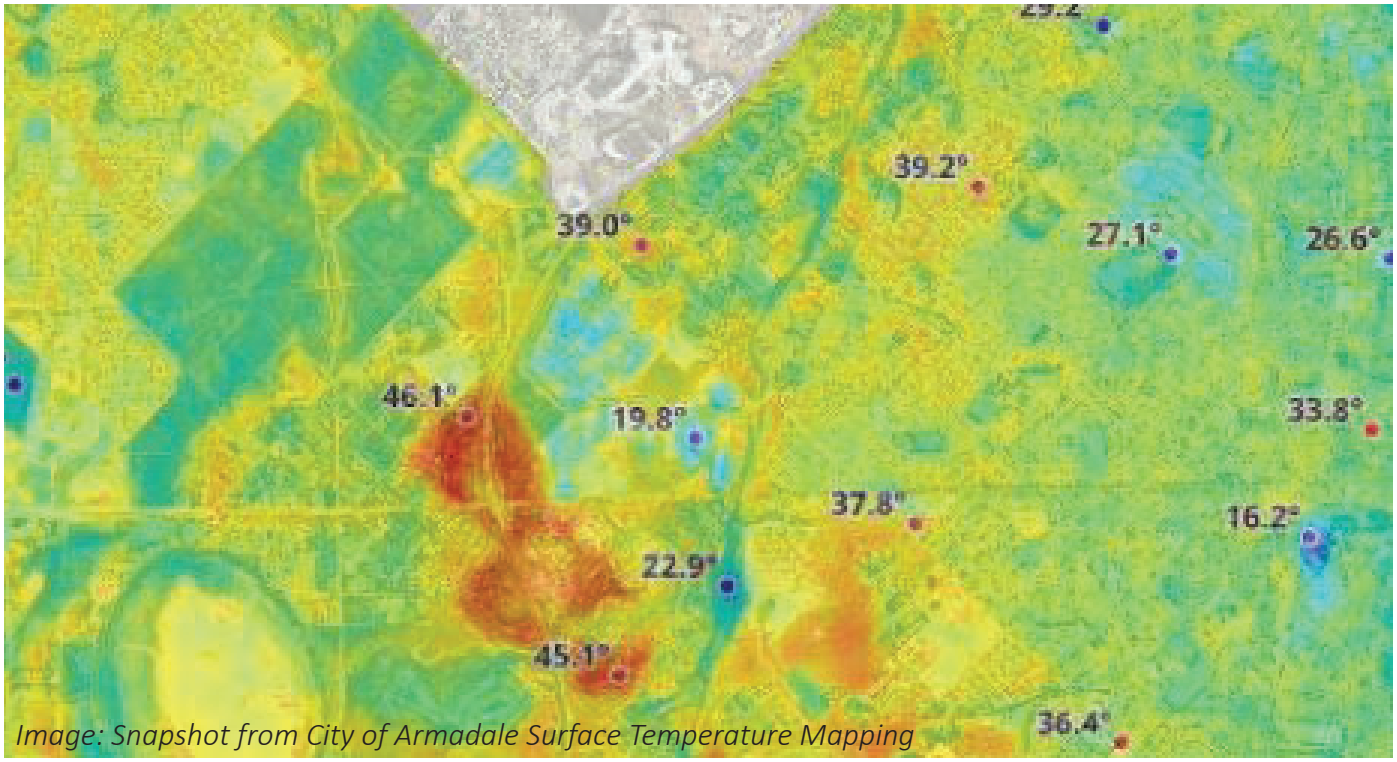

Image: Snapshot from City of Armadale Surface Temperature Mapping

The Benefits of Irrigation

Water is not an infinite resource and its usage needs to be carefully considered and monitored, however it is also important to consider the benefits of an irrigated reserve.

Irrigation supports the health and longevity of trees, shrubs and turf, and is vital to provide optimal green infrastructure. The Western Australian climate is hot, dry and windy. This is a harsh environment in which planting and turf has to thrive, particularly if it is not irrigated.

Irrigation of turf allows for optimal growth and ensures the turf can be used year round for recreational activities. Turf that is not irrigated dies off during the summer months, is hard, spiky and the area is often dusty. This prevents year round usage.

The majority of planting within the City of Armadale is native (Endemic, Western Australian or Australian natives), which require less water than exotic alternatives, however irrigation does support initial growth and maintains a quality that presents well to the community.

Hydrozoning Benefits

Hydrozoning is the optimizing of an irrigation system, to group elements that require similar watering schedules to reduce overall water usage.

Hydrozoning is also the reduction of water usage through the removal of irrigation and associated landscape treatment, and replacing with an alternative landscape surface, such as winter (non-irrigated) planting that requires less water. This shall only occur where the function of the reserve and the extent of irrigation do not align.

For example; Ashworth Park which is predominantly a turfed swale. Turf is not an appropriate surface treatment for a drainage swale and the reserve and broader drainage system would benefit from this reserve being planted with non-irrigated planting.

Hydrozoning irrigated reserves provides opportunity to utilize ‘saved’ water in other reserves which require water for irrigation purposes. This is quite critical in the ‘City of Armadale’ sub-area which is fully allocated (as described in the ‘How are our Parks irrigated? section). Any existing dry parks within the City of Armadale sub-area will more than likely require water allocation from hydrozoning projects.

Image : Pelham Reserve, Armadale

Analysis

City of Armadale Parks Analysis - Dry Parks

To develop the improvement frameworks, a review and analysis of the City's reserves was undertaken in relation to the below criteria and the Detailed Parks Analysis Table is attached (refer Attachment B).

- Reserve Name
- Parks Facilities Classification
- Reserve Maintenance Classification
- Is the reserve currently irrigated? (Yes or No)

If the answer was 'No'; the reserve is not irrigated, and the following factors were assessed (per reserve) to refine the Dry Park Improvement Framework.

Are there any other planned improvements for this reserve?
This was determined by reviewing any recent (last year) or proposed upcoming works in the reserve. It is preferable to align park improvements as this provides greater visual impact for the community, improves the usage for the community and optimizes project funding by combining project upgrades.

- If 'Yes' – Score of 5
- If 'No' – Score of 0

What is the 'Need' for improvement?
This was determined by reviewing the reserves Park Classification and if the reserve was in a classification that requires irrigation.

- Reserve is classified for irrigation – High 'Need' score of 10
- Reserve is classified for irrigation but the existing reserve function reduces the requirement for irrigation – Medium score of 5
- Reserve is not classified for irrigation – Low 'Need' score of 1

Is there a water source available?
This was determined by the following rationale:

- No water source available – Low score of 1
- Water source may be available or further investigation required – Medium score of 5
- Water source and water available – High score of 10

Image: Ashworth Park, Brookdale

City of Armadale Parks Analysis - Dry Parks and Hydrozoning

Will other improvements increase the quality of the reserve?
This was a visual review and assessment of the reserve:

- Environmental improvements such as drainage planting or bushland revegetation – High score of 10
- Recreational improvements such as playgrounds, park furniture and paths- Medium/High score of 7
- Planting improvements such as street tree planting – Medium score of 5

Refer to the 'Options for Improvement' section in this strategy for further information on Hydrozoning.

This review is intended to firstly identify the dry parks and then assess them against the above criteria. The reserves are then ranked in order of priority (highest score to lowest score) to identify the priority reserves for Dry Park improvements.

As part of the detailed parks analysis, hydrozoning existing irrigated reserves was also considered. To consider hydrozoning the following scenarios were considered:

- Are there irrigated reserves with irrigated turf, but the turf is not necessarily performing a suitable recreation function?
- Are there irrigated reserves where the water is 'spread too thin' and not providing a quality surface?
- Are there any dry parks that may benefit from the water saved through hydrozoning?

In the Parks Analysis review, if the answer was 'Yes' to 'Is the reserve currently irrigated?'; the reserve was visually reviewed and assessed if it were appropriate for Hydrozoning.

Image: Paterson Park, Kelmscott

City of Armadale Parks Analysis- Hydrozoning

The following factors were assessed per reserve to refine the Hydrozoning Improvement Framework.

Are there any other planned improvements for this reserve?
This was determined by reviewing any recent (last year) or proposed upcoming works in the reserve. It is preferable to align park improvements as this provides greater impact and aligns

- If 'Yes' – Score of 5
- If 'No' – Score of 0

What is the 'Need' for water saving (ie. is water not being optimally used)?
This was determined by visually reviewing the irrigated area, considering what surface was being irrigated and what the overall function of the reserve was.

- Low need- score of 1
- Medium need- score of 5
- High need- score of 10

Is the reserve is hydrozoned, would there be any water savings?

- The hydrozoning will result in improvements in the POS only (no water saving) – Low score of 1
- The hydrozoning will result in water saving, further investigation required to ascertain where the water can be used – Medium score of 5
- The hydrozoning will result in water saving that can be utilized in reserves currently scheduled for improvement (through the Dry Parks Improvement Framework or other scheduled improvements)- High score of 10

Image: Bernice Hargraves Reserve, Kelmscott

Options for Improvement

The analysis of the City reserves (Attachment B) considered 'Options for Improvement'.

Given the precious nature of water, it is not simply appropriate to irrigate all dry reserves from groundwater or scheme water. Alternative options needed to be considered.

All options for improvement are summarized below:

A. Irrigate the reserve via groundwater bore

Description

Where there is an available allocation, consider installing a new bore or connecting into an existing near-by bore to irrigate the dry reserve.

Application

This option will need to consider the relevant ground water licenses, existing bores and potential new bore locations. The new irrigation system will connect into the new or existing bore and use water abstracted from the relevant aquifer.

Cost

The cost of this option will vary greatly depending on site specific requirements.

- The cost of a new bore and associated headworks etc is between $40k and $80k
- The cost of the irrigation system will vary depending on the irrigated area

B. Hydrozoning (Hydrozoning of reserve to better use water on the same reserve)

Description

Re-prioritise the area of irrigation. *For example – reduce the area of irrigated turf to improve the quality of the turf in a specific area. Focusing more water on the smaller turf area. The other area may be planted with native plants and trees where water usage can be scaled back.*

Application

This option is limited to the irrigated reserve itself (ie. Will not benefit a nearby dry park), but will improve the quality of reserve by better using the water in a reduced area.

Cost

The cost of this option will vary greatly depending on site specific requirements. This option is not a suitable option for dry park improvements, but should be considered for ongoing water usage improvements across the City.

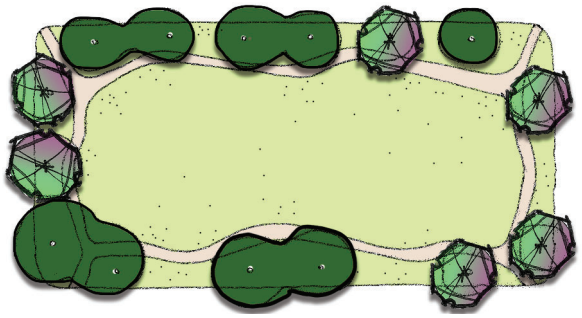

Image 3a – Example Reserve Before

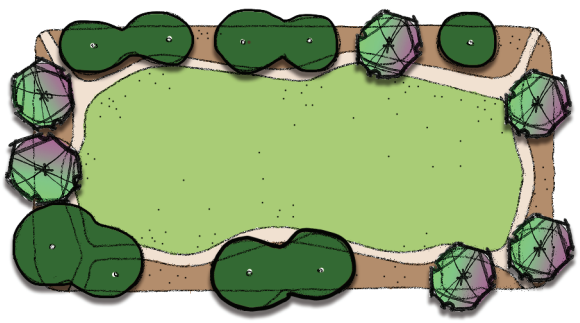

Image 3b - Example Reserve After Hydrozoning

Options for Improvement continued

C. Hydrozoning (Hydrozoning a reserve to save water and use elsewhere)

Description

Reduce the irrigated area on an existing irrigated reserve. The water allocation saved on this reserve can be utilised on a nearby dry park.

Application

This option will require the following:

- Rectification works on the irrigated reserve (eg. irrigation adjustments, tree planting / native shrub planting and mulch to the area of reduced irrigation)
- Installation of irrigation infrastructure between the irrigated reserve and the dry park (eg. mainlines, upgrades to source)
- New works to dry reserve (eg. irrigation system and new surface treatments – turf and planting), along with other improvements if required.

Cost

The cost of this option will vary greatly depending on site specific requirements.

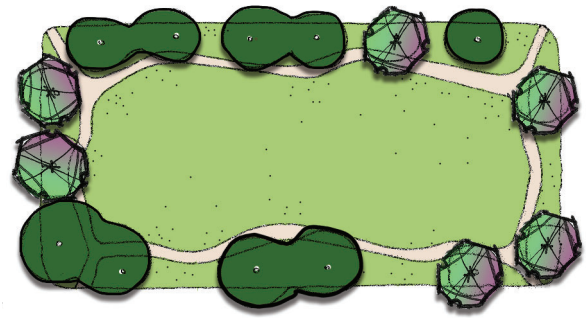

Image 4a – Example Irrigated Reserve Before

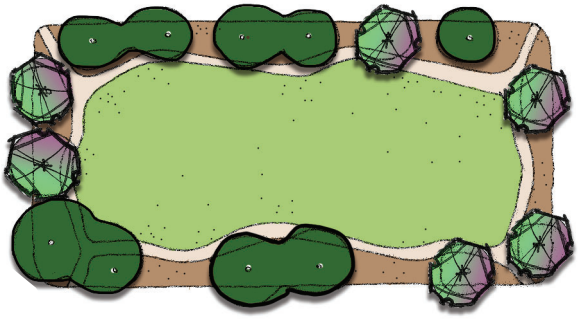

Image 4b – Example Irrigated Reserve After Hydrozone

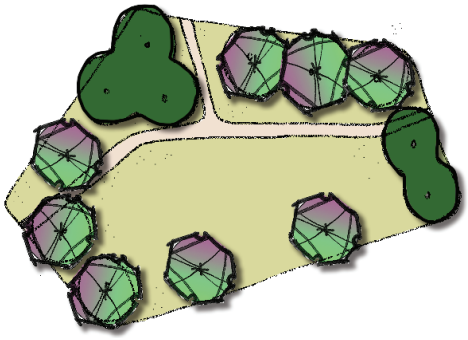

Image 4c – Example Dry Park Before Hydrozone

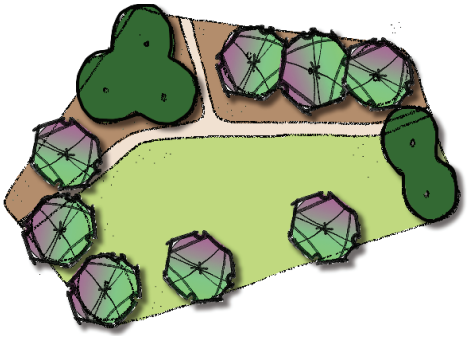

Image 4d – Example Hydrozoned Park After

Options for Improvement continued

D. Irrigation System Improvements

Description

Review and audit existing irrigation systems to determine improvements and appropriate water budgeting that may reduce water usage. The water saved through irrigation system improvements may be used on the reserve itself as per **B – Hydrozoning (Irrigated Park based)** or **C – Hydrozoning (Irrigated Park to Dry Park).**

Improvements to be considered in the audit include centralised control systems, water budgeting, irrigation scheduling, soil moisture monitoring, irrigation design standards and turf maintenance.

Application

This option is wide and varied in its application.

Cost

It is recommended that a separate audit is completed of the City's passive reserve irrigation systems to understand usage, determine improvements and appropriate water budgeting.

E. Scheme Water connection

Description

If all other viable water source options are exhausted, the proposed irrigated area is limited and the need for irrigated space is high, the option to connect to scheme water may be considered.

This option is not preferred and is limited in its application.

Application

This option will require the site to be fitted with a suitable water connection through the Water Corporation. The proposed irrigation system will connect into this water connection and usage will be monitored, recorded and charged by the Water Corporation. The City of Armadale will be required to pay for this cost on an ongoing basis.

Cost

- Scheme water connection costs to the Water Corporation can vary up to $10,000 per application (meter box, application fee, service activation and water contribution)
- Ongoing water usage charges will be charged to the City direct.
- The cost of the irrigation system will vary depending on the irrigated area.

Options for Improvement continued

F. Treated Waste Water*

Description

Utilisation of treated waste water (non-drinking) to irrigate public open space.

Application

This requires the installation of treatment system(s) and 'Third Pipe' system to capture grey water, treat grey water and supply water to public open space irrigation systems.

Cost

This option requires more investigation and is not a suitable option for implementation in the short-term. It may be an option for future improvements following a capital investment into a Treated Waste Water Study.

G. Managed Aquifer Recharge (MAR)*

Description

Managed aquifer recharge is the process by which water is taken from surface sources such as stormwater drains, and is used to either actively or passively recharge the aquifer. This water is then available for future use.

Application

This option will require identification of a surface source. This source will need to be studied prior to any harvesting to ensure that any water taken from the surface and recharged into the aquifer is not contributing to any negative effects on the surface.

Cost

This option requires more investigation and is not a suitable option for implementation in the short-term.

The City has engaged Water West Pty Ltd to complete a feasibility of a waste water / managed aquifer recharge system for the Wungong Masterplan Area. This project is ongoing.

H. Stormwater Harvesting*

Description

Runoff from urban infrastructure or existing stormwater drains can be collected for irrigation, however, storage of the water for use in the drier months can be expensive due to the need for large tanks or underground storage cells.

Application

This option requires the installation of storage cells / tanks to store the run-off water for irrigation purposes. The size of the tanks is generally extremely large, and the cost/benefit is not feasible.

Cost

This option is currently cost prohibitive but shall remain an option should infrastructure costs lower.

I. Subsurface drainage harvesting*

Description

A potential water source for developments on low-lying land is harvesting water from subsurface drainage that has been installed to control rising groundwater levels. Research has shown that subsurface flows are sufficient for direct diversion for POS irrigation without the need for off-season storage at certain sites on the Swan Coastal Plain.

Application

This option requires site specific monitoring and modelling to ensure a reliable source in the drier months when it is most required (Davies et al., 2016).

Cost

This option requires more site specific monitoring and modelling, and is not a suitable option for implementation in the short-term.

Options for Improvement continued

J. Non-irrigated planting enhancements

Description

This option may be used to environmentally improve a dry park, but will not require the ongoing water for irrigation purposes.

Application

This option will need to be undertaken at the appropriate time of the year, and will provide environmental benefits to the reserve. The planting shall be endemic and may be completed with advice from City Environmental Services and City Bushcare Supervisor.

Cost

- Soil improvement, if required, is approximately $4/sq.m
- Tubestock (supply and installed) is approximately $3.50 each
- Ideally any non-irrigated planting will be completed after the first rains (May / June) and will benefit from the cooler winter months after installation. Supplementary truck / hand watering may be required to provide optimal growth in the first and/or second
- There may be costs associated with additional site works, watering and maintenance. These are site specific costs.

K. Other Enhancement Options

Description

This options considers other improvements that may improve the recreational value of the park, without using irrigation.

Application

This option is highly varied and site specific, but may include pathways, fencing, furniture, playground, exercise equipment and/or signage.

Cost

The cost of this option will vary greatly depending on site specific requirements

*Information regarding Treated Waste Water, Managed Aquifer Recharge, Stormwater Harvesting and Sub-surface Drainage Harvesting has been extracted from the City's internal operational document 'Position Paper on Water Management for Parks Irrigation 2021'.

Options for Improvement Summary

The options for immediate improvement of dry parks and for inclusion in the Dry Park Improvement Frameworks includes:

- A- Irrigate the reserve via groundwater bore
- B- Hydrozoning (Hydrozoning of a reserve to better use water on the same reserve)
- C- Hydrozoning (Hydrozoning of irrigated reserve to save water for use elsewhere)
- E- Scheme Water connection
- J- Non-irrigated planting enhancements
- K- Other Enhancement Options

Further study, investigation and capital investment is required prior to the following options being considered:

- D – Irrigation system improvements
- F - Treated Waste Water,
- G- Managed Aquifer Recharge (MAR)
- H- Stormwater Harvesting
- I- Subsurface drainage harvesting

Image: Massell Park, Brookdale

Improvement Frameworks

The frameworks identify the following as priority projects:

- 9 x Dry Park Improvement Projects
- 10 x Hydrozoning Improvement Projects

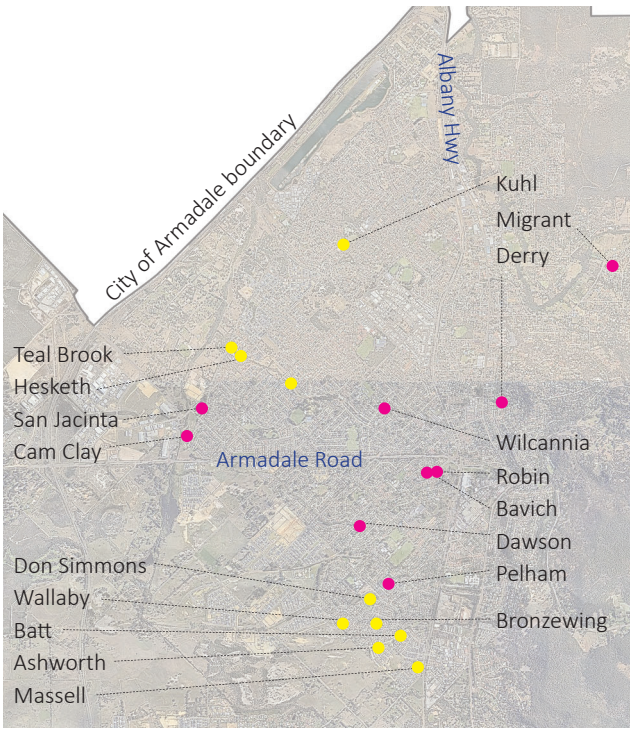

Image 5 – Project mapping for project locations (DPIF - PINK / HIP - YELLOW)

As the high level review indicated, the majority of the dry parks are located in the central band of the City and the priority Dry Park Improvement projects are located in this band. Refer Image 5- Project Mapping.

The ranking system prioritised projects with existing improvements scheduled or projects where works have just been completed. This enables improvements to be focused and concentrated.

The projects have been staged across 5 financial years to balance capital expenditure, allow appropriate time for design, documentation and pricing, and stage any increased maintenance budgets.

The projects and estimated budgets have been summarised on *Table 3 - Dry Park Improvement Framework and Hydrozoning Improvement Framework*

Refer Attachment C – Improvement Frameworks for additional details.

Dry Park Improvement and Hydrozoning Improvement Frameworks

Dry Park Improvement Framework	Proposed Staging and Funding (additional to any proposed LTFP funding) (Subject to further review as detail is obtained regarding water source)							Estimated Increase to the Yearly Maintenance Cost
Reserve Name	**2022/2023**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**	**2027/2028**	**2028/2029**	
Bavich Reserve	Implementation Planning	D+D	$ 50,000					$ 2,130
Robin Park		D+D	$ 50,000					$ 2,485
Wilcannia / Toongabbie Park			D + D	$ 150,000				$ 7,285
Pelham Reserve					D + D	$ 150,000		$ 8,952
Migrant Park					D + D	$ 150,000		$ 34,857
Derry Reserve				D + D	$ 150,000			$ 18,302
San Jacinta Reserve				D + D	$ 100,000			$ 16,172
Dawson Reserve			D + D	$ 150,000				$ 11,173
Cam Clay Reserve						D + D	$ 150,000	$ 16,920

Hydrozoning Improvement Framework	Proposed Staging and Funding (additional to any proposed LTFP funding) (Subject to further review as detail is obtained regarding water source)							
Reserve Name	**2022/2023**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**	**2027/2028**	**2028/2029**	
Ashworth Park	Implementation Planning	D+D	$ 30,000					No change due to hydrozoning
Batt Park		D+D	$ 30,000					
Corondale Park			D + D	$ 200,000				
Don Simmons Reserve				D + D	$ 100,000			
Teal Brook Park					D +D	$ 75,000		
Kuhl Park				D + D	$ 75,000			
Hesketh Park					D +D	$ 75,000		
Massell Park						D + D	$ 75,000	
Bronzewing Reserve			D + D	$ 75,000				
Wallaby Reserve			D + D	$ 75,000				

NOTE: The estimated costs do not include improvements in the other POS where water may be utilised.

$ 160,000	**$ 650,000**	**$ 425,000**	**$ 450,000**	**$ 225,000**	**$ 118,275** estimate per annum
TOTAL Proposed Dry Park Improvement + Hydrozoning Improvement (excl. GST)				**$ 1,910,000**	

Irrigation Audit							
Task	**2022/2023**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**	**2027/2028**	**2028/2029**
Irrigation Audit	$ 40,000						

Notes:
1: Westfield Heron ranked 3 in the Dry Park Improvement Framework, however given the extent of upgrade proposed for 2021 no further works are proposed at this stage

2: D + D = Design and Documentation year
3: All of the parks listed in the Hydrozoning Improvement Framework are located within the City of Armadale sub-area (fully allocated, therefore water sourcing to be reviewed)

Conclusion

Conclusion

This Strategy has analysed the City's reserves, with particular focus on the dry reserves, and considered various methods of improvement.

Improvement options ranged from various water sourcing methods, irrigation improvements, recreation or environmental improvements or no improvements.

It was determined the appropriate methods of improvement as part of this strategy are:

- Recreational or environmental improvements
- Irrigation installation (pending investigation of water source and water availability)
- Hydrozoning

Hydrozoning an existing irrigated reserve allows for water to be saved, and additional water allocation to be utilized in other reserves that are either dry or do not receive sufficient water allocation to optimally irrigate.

Through a scoring and ranking system the Dry Park Improvement Framework and Hydrozoning Improvement Framework have been established. These frameworks are intended to guide the improvement of the top ranked parks over a five year period commencing from 2024/25. The next two years will be used for planning, design and documentation.

In addition to the Improvement Frameworks, a City wide audit of the existing irrigation systems in passive reserves is required and proposed to be completed during the 2022/23 financial year. This audit shall document the existing usage, determine improvements and appropriate water budgeting. This information will inform future reserve improvements.

It is important that the Dry Parks Strategy is reviewed and updated every five years to address potential improvements in technology, standards and practices.

Image: Skeet Memorial, Forrestdale

Image : Newhaven, Piara Waters

Appendix 1

Example A- Need

Example A - How is 'Need' determined in the Dry Park Framework?

In determining the Dry Park Improvement Framework we ascertained the 'Need' for improvement and this relates directly to the irrigation 'facility type'.

The City reviewed all of the reserves and noted if they were unirrigated. If a reserve was unirrigated and classified Local Recreation, Neighbourhood Recreation, Neighbourhood Sport, District Recreation and District Sport, their 'Need' score was High (max score of 10).

For example, Bavich Reserve is a Local Recreation Reserve that is not irrigated. As a Local Recreation Reserve, it is recommended to be irrigated and therefore received a High 'Need' score of 10.

Not all of the dry parks will need to be considered for improvement as they may already meet the needs of their particular park classification system or other factors may limit improvement.

For example, Gemsarna Reserve is a Local Recreation Reserve that is not irrigated. As a Local Recreation it is recommended to be irrigated, however it is highly landlocked reserve, provides no other facilities (eg. playground, seating, paths) and is located in close proximity to Migrant Park (also a dry park) which does have other facilities and where irrigation would be better focused. Gemsarna Reserve therefore received a Low 'Need' score of 1.

Image: Ticklie Park, Seville Grove

Appendix 1

Example B- Dry Park Improvement

<u>Example B – How a Park was assessed as part of the Dry Park Improvement?</u>
An example of a reserve assessed for Dry Park Improvement:

Damerham Park is a Local Recreation reserve that is not irrigated. It has a small playground and is located in Kelmscott in close proximity to the train line. Damerham Park was assessed against the Dry Park categories as outlined below:

1. Is this reserve included in the PIP or Next Priorities?
Yes (score of 5)

2. Is this reserve part of other recent or upcoming projects, upgrades or renewals?
No (score of 0)

3. What is the Need for Improvement?
High, as a local recreation reserve, irrigation is a highly recommended facility (score of 10)

4. Is there an available Water Source?
Further investigation of a water source is required, based on a desktop review there is limited availability (score of 5)

5. Will other improvements increase the quality of this reserve?
Yes Damerham will benefit from environmental improvements and recreation improvements (score of 17)

Based on the analysis, Damerham Park receives a score of 37, and is ranked 3 in the priority of improvement for Dry Parks.

Image: Newhaven, Piara Waters

Appendix 1

Example- Hydrozoning

Example C – How a Park was assessed as part of the Hydrozoning Improvement?
An example of a reserve assessed for Hydrozoning Improvement:

Ashworth Park is a Local Recreation reserve located in Brookdale. Local Recreation are deemed suitable for irrigation, however this reserve is mainly an irrigated, turfed drainage swale. The City has a preference to treat stormwater through vegetated treatment swales. The planting is typically native sedges and rushes with an overstorey of tree planting. Based on this visual assessment, Ashworth Park is deemed suitable for hydozoning and therefore the following categories were assessed:

1. Are there any planned improvements for this reserve?
Yes (score of 5) Ashworth Park is part of the Park Improvement Plan and is scheduled for improvement in 2021/2022 (pending budget approvals)

2. What is the need for water saving? The 'Need' is High (score of 10) on the basis that the reserve has a mainly drainage function and the surface should be landscaped according to this function.

3.Will there be any water saved if hydrozoned?
Yes, water can be utilized at the nearby Harber Park which is scheduled for improvement in 2020 (score of 10).

Based on the analysis, Ashworth Park receives a score of 25, and is ranked 1 in the priority of improvement for Hydrozoning.

Image: Ashworth Park, Brookdale

Image: Rossiter Playing Field playground, Piara Waters

Attachments

Attachments

Attachment A

Groundwater Aquifer Mapping

- City of Armadale sub-area
- Wright sub-area
- Perth confined sub-area
- Karri

Attachment B

City of Armadale Detailed Parks Analysis Table

Attachment C

Improvement Frameworks (detailed)

- Dry Park Improvement Framework
- Hydrozoming Improvement Framework

Attachment A - Groundwater Aquifer Mapping

City of Armadale - Bore Locations
DWER - Groundwater Sub-Areas (Used under permission from DWER, not to be reproduced or copied without prior approval)

The City of Armadale takes no responsibility for inaccuracies within this drawing.

CITY OF Armadale

Scale 1:75000 @ A4 Landscape
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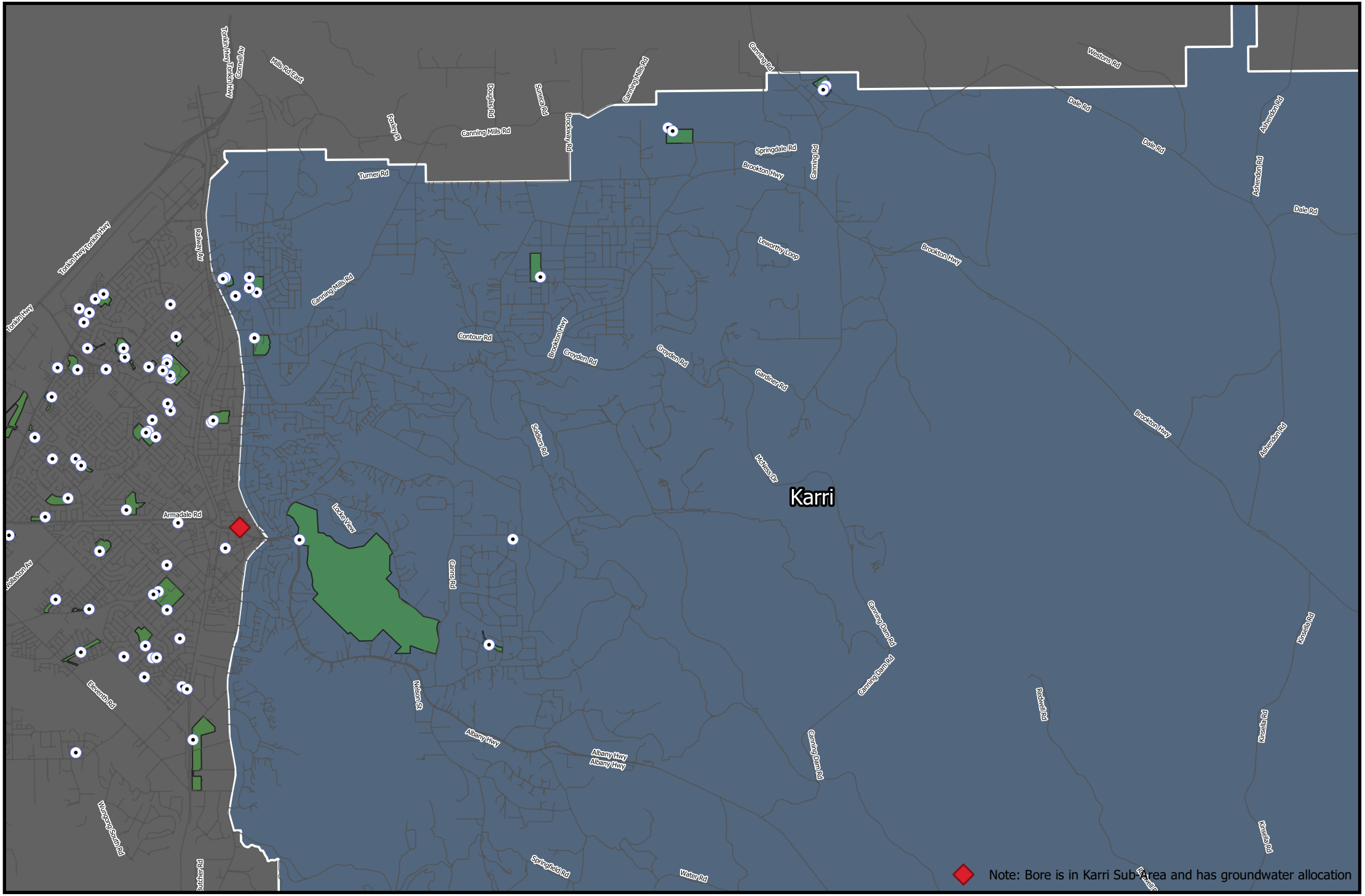

City of Armadale - Bore Locations
DWER - Groundwater Sub-Areas (Used under permission from DWER, not to be reproduced or copied without prior approval)

The City of Armadale takes no responsibility for inaccuracies within this drawing.

CITY OF Armadale

Scale 1:75000 @ A4 Landscape
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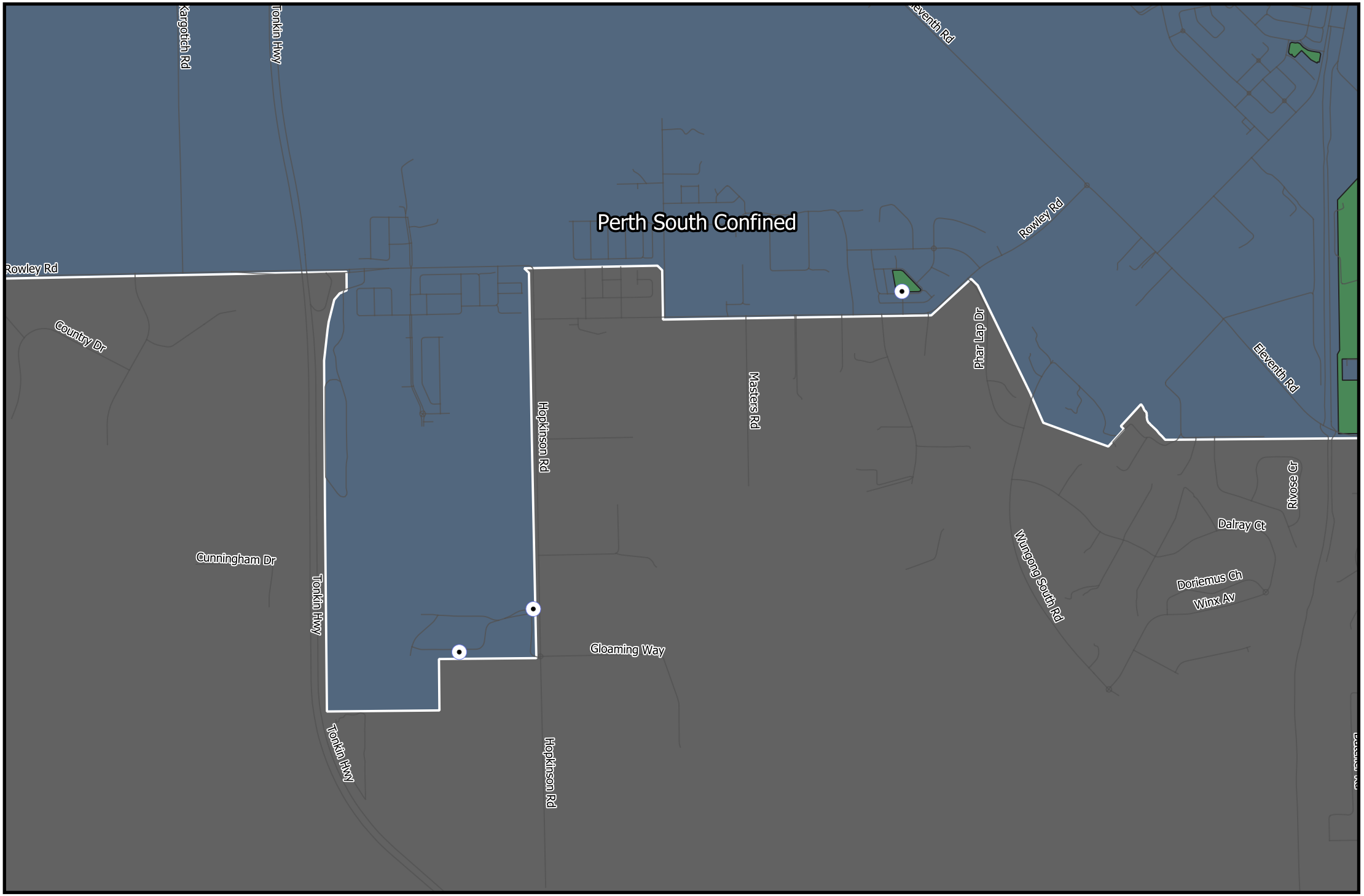

City of Armadale - Leederville Aquifer Bore Locations
DWER - Groundwater Sub-Areas (Used under permission from DWER, not to be reproduced or copied without prior approval)

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CITY OF Armadale

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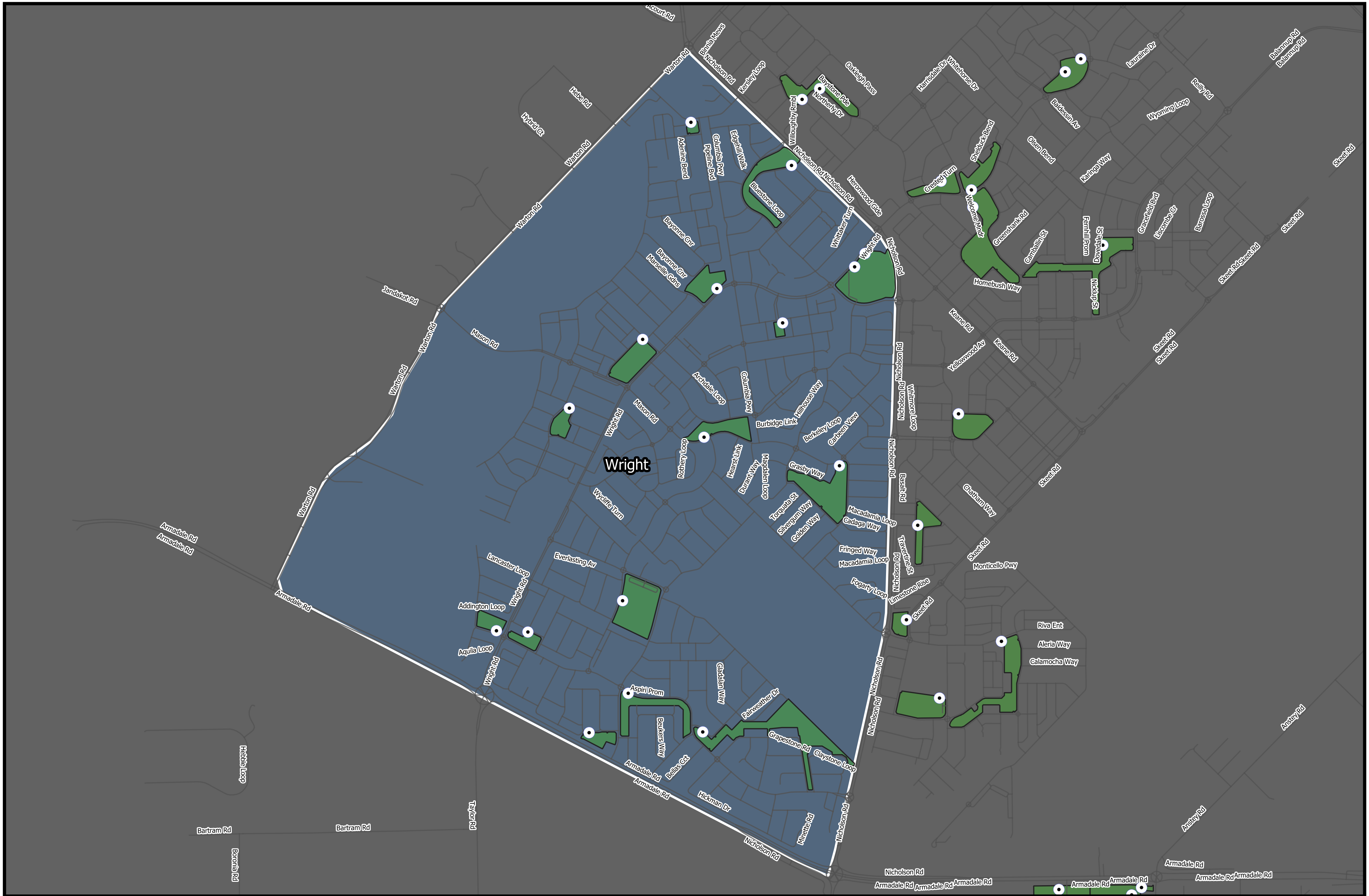

City of Armadale - Bore Locations
DWER - Groundwater Sub-Areas (Used under permission from DWER, not to be reproduced or copied without prior approval)

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CITY OF Armadale

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Page 1 of 4

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Attachment B – City of Armadale Details Parks Analysis Table

KEY

Key	
Natural Area Wet	Natural Area Wet - Irrigated
Natural Area Dry	Natural Area Dry - Irrigated
Passive Level 4 Dry	
Passive Level 3 and Dry	Passive Level 3 and irrigated
Passive Level 2 Moderate and Irrigated	Change Passive Level 2 Moderate to this colour if included in Dry or in PIP
Public Access Ways (hidden)	
Playing field and Community Building	

Scoring Table - DRY PARKS

	Other Upgrades in the reserve		Need for improvement to meet PFS (from dry park	Water Sourcing	Will other improvements, increase the quality of this reserve?	Comments
Description	Is the reserve included in PIP / Next Priorities?	Is the reserve part of other recent or upcoming project upgrades / renewals?	1 - Low 5 - Average 10 - High	1 - No water or water source 5 - Further water investigation required 10 - Water source and water available	10 - Environmental improvements (drainage /bush reveg/mass planting) or (reduce irrig/native planting) 5 - Tree planting 7- Recreational improvements	
Points	5 No	5 No	1 5 10	1 5 10	10 5 7	

Scoring Table - Hydrozoning Improvement Framework

	Other Upgrades in the reserve	Need for water saving (is water being wasted)	Water allocation after water saving methods have been implemented	Comments	Total	Rank
Description	Is the reserve part of other recent or upcoming project upgrades / renewals?	1 - Low 5 - Average 10 - High	10 - The hydrozoning result in additional water allocation for other POS areas scheduled for improvement in DPIF or other scheduled improvements 5- The hydrozoning may result in additional water allocation (not yet determined where) 1 - The hydrozoning will result in improvements in the POS only			
Points	5 No	1 5 10	10 1 5			

ID	Function	Hierarchy	MaintClass	Resrv_Nam	Resrv_Num	Irrigated Yes or No	Should the reserve be irrigated as per PFS	Parks General Comments	Consideration for Irrigation ?	Why to consider or not consider for irrigation?	Consideration for other upgrade as part of this strategy	Included in the PIP / Next Priority?	Note: Not applicable if irrigated	Dry: Included in PIP / Next Priorities?	Dry: Part of other recent or upcoming upgrades?	Need for improvement to meet PFS	Water Sourcing	Will other improvements increase the quality of this reserve?	Comments	TOTAL DRY PARK	RANK	Hydro: Other Upgrades in the reserve	Need for water saving	Water allocation	Comments	Total	Rank
59	Nature	Local	Natural Area Dry	Bedfordale Park	7491	No	No	Bedfordale Hall site	No	Predominantly bush	No	No	Not applicable														
159	Recreation	Local	Passive Reserve Level 3 Low	Yellowwood Park	52615	Yes	Yes		Not Applicable	-	No	No	Not applicable														
160	Recreation	Local	Passive Reserve Level 3 Low	Bayonne Park	53100	Yes	Yes		Not Applicable	-	No	No	Not applicable														
161	Recreation	Local	Passive Reserve Level 3 Low	Foster Reserve	29003	No	Yes	Between Albany Hwy and Streich Ave. Infil will increase pressure in this area	Yes	Infil development	Yes	No		No	No	10	1	17	Other improvement	28	18						
162	Recreation	Local	Passive Reserve Level 3 Low	Westfield Park Reserve	33062	No	Yes	Adjacent Westfield Heron	Yes	Limited usable spaces in the area	Yes	No		No	No	10	1	17	Other improvement	28	18						
163	Recreation	Local	Passive Reserve Level 3 Low	Grovelands Park	35513	Yes	Yes	Consider Hydrozoning	Reduce Irrig	Hydrozoning potential	Yes - Hydrozoning	No	Hydrozone potential						Water savings			No	5	5		10	19
164	Recreation	Local	Passive Reserve Level 3 Low	Allwood Park	46055	Yes	Yes	Tennis Court - older Hilbert	Reduce Irrig	Hydrozoning potential	Yes - Hydrozoning	No	Hydrozone potential						Water savings			No	5	1		6	31
165	Recreation	Local	Passive Reserve Level 3 Low	Allwood Park	46055	Yes	Yes	Older Hilbert	Reduce Irrig	Hydrozoning potential	Yes - Hydrozoning	No	Hydrozone potential						Water savings			No	5	1		6	31
166	Recreation	Local	Passive Reserve Level 3 Low	Pamplona Reserve	46208	Yes	Yes	Seville Grove	Reduce Irrig	Hydrozoning potential	Yes - Hydrozoning	No	Hydrozone potential						Water savings			No	1	5		6	31
167	Recreation	Local	Passive Reserve Level 3 Low	Sotheby Reserve	48976	Yes	Yes	Established Harrisdale	Not Applicable	-	No	No	Not applicable														
168	Recreation	Local	Passive Reserve Level 3 Low	Warbler Park	48977	Yes	Yes	Established Harrisdale	Not Applicable	-	No	No	Not applicable														
169	Recreation	Local	Passive Reserve Level 3 Low	Splendid Reserve	49152	Yes	Yes	Established Harrisdale	Not Applicable	-	No	No	Not applicable														
170	Recreation	Local	Passive Reserve Level 3 Low	Sexty Reserve	28211	No	Yes	Armadale	Yes	Limited usable spaces in the area	Yes	No		No	No	10	1	5	Other improvement	16	54						
171	Recreation	Local	Passive Reserve Level 3 Low	Tollington Park	34957	No	Yes	Large reserve within Kelmscott. Future infil will impact useability	Yes	Infil development	Yes	No		No	No	10	5	17	Water investigation	32	14						
172	Recreation	Local	Passive Reserve Level 3 Low	Bronzewing Reserve	41316	Yes	Yes	Brookdale - Consider hydrozoning	NA	Hydrozoning potential	Yes - Hydrozoning	Yes	Hydrozone potential						Water savings			5	5	5	POS improvement	15	6
173	Recreation	Local	Passive Reserve Level 3 Low	Troon Park	41689	No	Yes	Camillo - limited passive surveillance, limited acces	Yes	Limited usable spaces in the area	Yes	No		No	No	10	1	5	Other improvement	16	54						
174	Recreation	Local	Passive Reserve Level 3 Low	Teal Brook Park	46675	Yes	Yes	Seville Grove	Reduce Irrig	Hydrozoning potential	Yes - Hydrozoning	No	Hydrozone potential						Water savings			No	5	10	Water allocation can be used at Barry Road	15	6
175	Recreation	Local	Passive Reserve Level 3 Low	Letterkenny Park	50767	Yes	Yes	Established Hilbert	Not Applicable	-	No	No	Not applicable														
176	Recreation	Local	Passive Reserve Level 3 Low	Balliol Park	50976	Yes	Yes	Established Piara Waters, heavily turfed. Could be planted	Reduce Irrig	Hydrozoning potential	Yes - Hydrozoning	No	Hydrozone potential						Water savings			No	5	5		10	19
177	Recreation	Local	Passive Reserve Level 3 Low	Balliol Park	50976	Yes	Yes	Established Piara Waters, heavily turfed. Could be planted	Reduce Irrig	Hydrozoning potential	Yes - Hydrozoning	No	Hydrozone potential						Water savings			No	5	5		10	19
178	Recreation	Local	Passive Reserve Level 3 Low	Rosette Park	51815	Yes	Yes	Established Piara Waters	Not Applicable	-	No	No	Not applicable														
179	Recreation	Local	Passive Reserve Level 3 Low	Tredale Field	26011	Yes	Yes	Scheme Water Connection as part of new works	Not Applicable	-	No	No	Not applicable														
180	Recreation	Local	Passive Reserve Level 3 Low	Rotary Park	27568	Yes	Yes	Minor hydrozoning possibilities	Reduce Irrig	Hydrozoning potential	Yes	No	Hydrozone potential						Water savings			5	1	5		11	12
181	Recreation	Local	Passive Reserve Level 3 Low	Valentine Reserve	27811	No	Yes	Kelmscott, partial street frontage, partial residential fences	Yes	Limited irrigated spaces in the area	Yes	No		No	No	10	1	12	Minor Env and Rec	23	32						
182	Recreation	Local	Passive Reserve Level 3 Low	Valentine Reserve	27811	No	Yes	Kelmscott, partial street frontage, partial residential fences	Yes	Limited irrigated spaces in the area	Yes	No		No	No	10	1	12	Minor Env and Rec	23	32						
183	Recreation	Local	Passive Reserve Level 3 Low	Clements Park	36593	No	Yes	Armadale, access via PAW and cul de sac head	Yes	Limited irrigated spaces in the area	Yes	Yes		5	No	5	1	5	Tree planting	16	54						
184	Recreation	Local	Passive Reserve Level 3 Low	Northerly Park	49136	Yes	Yes	Established Harrisdale - possible Hydrozoning	Reduce Irrig	Hydrozoning potential	Yes - Hydrozoning	No	Hydrozone potential	No	5							No	5	5		10	19
185	Recreation	Local	Passive Reserve Level 3 Low	Whittaker Reserve	49170	Yes	Yes	Established Piara waters, small reserve	Not Applicable	Size limits hydrozoning capacity	No	No	Not applicable														
186	Recreation	Local	Passive Reserve Level 3 Low	Lifford Park	50776	Yes	Yes	Established Hilbert	Not Applicable	Size limits hydrozoning capacity	No	No	Not applicable														
187	Recreation	Local	Passive Reserve Level 3 Low	Tipuana Park	51203	Yes	Yes	Established Harrisdale (Harrisdale Green)	Not Applicable	-	No	No	Not applicable														
188	Recreation	Local	Passive Reserve Level 3 Low	Boisdale Park	52240	Yes	Yes	Seville Grove	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
189	Recreation	Local	Passive Reserve Level 3 Low	Ranford Park	27970	No	Yes	Kelmscott - limited water available in this area. Consider other improvement	Yes	Limited irrigated spaces in the area	Yes	No		No	No	10	1	17	Enviro improvement	28	18						
190	Recreation	Local	Passive Reserve Level 3 Low	Heather Locke Reserve	35905	No	Yes	Kelmscott - limited water available in this area. Limited street frontage	Yes	Limited irrigated spaces in the area	Yes	No		No	No	10	1	12	Minor Env and Rec	23	32						
191	Recreation	Local	Passive Reserve Level 3 Low	Moore Park	38523	No	Yes	Linear space NE Forrestdale Lake	No	Consider other improvements	Yes	No		No	No	5	1	10	Enviro/Drainage	16	54						
192	Recreation	Local	Passive Reserve Level 3 Low	Wallaby Reserve	41325	Yes	Yes	Western Brookdale, Consider	Reduce Irrig	Hydrozoning potential	Yes - Hydrozoning	Yes	Hydrozone potential	5	No							5	5	5	POS improvement	15	6
193	Recreation	Local	Passive Reserve Level 3 Low	Bluebeech Park	49402	Yes	Yes	Piara Waters - heavily turfed small POS	Reduce Irrig	Hydrozoning potential	Yes - Hydrozoning	No	Hydrozone potential	No	No							No	5	5		10	19
194	Recreation	Local	Passive Reserve Level 3 Low	Conical Reserve	50620	Yes	Yes	Established Harrisdale - small POS with existing trees, already hydrozoned	Not Applicable	Potential for additional hydrozing if required	No	No	Not applicable														
195	Recreation	Local	Passive Reserve Level 3 Low	Paterson Park	29964	No	Yes	New playground / minor works 2019	Yes	May need to consider other improvements	Enviro Upgrade	No		No	5	5	1	17	Enviro and Rec	28	18						
196	Recreation	Local	Passive Reserve Level 3 Low	Blackburne Reserve	33365	No	Yes	Kelmscott - near school - Minor upgrades 2016	Yes	May need to consider other improvements	Enviro Upgrade	No		No	No	10	1	5	Enviro improvements	16	54						
197	Recreation	Local	Passive Reserve Level 3 Low	Turin Reserve	49433	Yes	Yes	Piara Waters - small POSm heavily turfed, hydrozoning potential	Reduce Irrig	Hydrozoning potential	Yes - Hydrozoning	No	Hydrozone potential									No	5	5		10	19
198	Recreation	Local	Passive Reserve Level 3 Low	Greenshank Reserve	50097	Yes	Yes	Harrisdale - turf area	Reduce Irrig	Size limits hydrozoning capacity	No	No	Not applicable														
199	Recreation	Local	Passive Reserve Level 3 Low	Leroy Park	51476	Yes	Yes	Has existing retained veg, small turf area	Not Applicable	Size limits hydrozoning capacity	No	No	Not applicable														
200	Recreation	Local	Passive Reserve Level 3 Low	Matron Olive Galliers Par	28745	No	Yes	Irrigation would be a great addition. Has small playground	Yes	Limited irrigated spaces in the area	Yes	Yes		5	No	10	5	10	Rec Improvements	30	17						
201	Recreation	Local	Passive Reserve Level 3 Low	Mazzega Park	35763	No	Yes	Playground section of Mazzega. Irrigated turf would be great addition	Yes	Limited irrigated spaces in the area	Yes	No		No	No	10	1	17	Enviro and Rec	28	18						
202	Recreation	Local	Passive Reserve Level 3 Low	Baystone Park	49044	Yes	Yes	Established Harrisdale, irrigated reserve with lake	Reduce Irrig	Hydrozoning potential	Yes - Hydrozoning	No	Hydrozone potential									5	5	1		11	12
203	Recreation	Local	Passive Reserve Level 3 Low	Crested Park	50804	Yes	Yes	Established Harrisdale, irrigated reserve with lake	Reduce Irrig	Hydrozoning potential	Yes - Hydrozoning	No	Hydrozone potential									No	5	5		10	19
204	Recreation	Local	Passive Reserve Level 3 Low	Skeet Memorial Park	38523	No	Yes	Linear space NE Forrestdale Lake	No	Consider other improvements	Yes	No		No	5	5	1	5		16	54						
205	Recreation	Local	Passive Reserve Level 3 Low	Silvershot Reserve	49028	Yes	Yes	Established Harrisdale - small POS. Hydrozoning may not be viable	Not Applicable	Size limits hydrozoning capacity	No	No	Not applicable														
206	Recreation	Local	Passive Reserve Level 3 Low	Massell Park	49372	Yes	Yes	Small drainage based POS in Brookdale, possible hydrozoning	Reduce Irrig	Hydrozoning potential	Yes	Yes	Hydrozone potential	5								No	5	10		15	6
207	Recreation	Local	Passive Reserve Level 3 Low	Erade Park	49693	Yes	Yes	Hydrozoning completed 2018/2019	Not Applicable	Hydrozoning completed	No	No	Not applicable														
208	Recreation	Local	Passive Reserve Level 3 Low	Berkshire Park	51695	Yes	Yes	Small POS. Hydrozoning may not be viable	Not Applicable	Size limits hydrozoning capacity	No	No	Not applicable														
209	Recreation	Local	Passive Reserve Level 3 Low	Caldwell Park	52054	Yes	Yes	(Markwell) - Small POS and hydrozoning not suitable	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
210	Recreation	Local	Passive Reserve Level 3 Low	Ruffle Park	52369	Yes	Yes	Linear POS and hydrozoning not suitable	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
211	Recreation	Local	Passive Reserve Level 3 Low	Damerham Park	25452	No	Yes	Irrigation would be a great addition. Has small playground	Yes	Limited irrigated spaces in the area	Yes	Yes		5	No	10	5	17	Env and rec	37	3						
212	Recreation	Local	Passive Reserve Level 3 Low	Apex Park	29103	No	Yes	Irrigation would be a great addition. Has small playground	Yes	Limited irrigated spaces in the area	Yes	No		No	No	10	1	12	Minor Env and Rec	23	32						
213	Recreation	Local	Passive Reserve Level 3 Low	Erica Park	30834	Yes	Yes	Scheme Water Connection as part of new works	Not Applicable	Size limits hydrozoning capacity	No	No	Not applicable														
214	Recreation	Local	Passive Reserve Level 3 Low	Redtingle Park	35656	No	Yes	Irrigation would be a great addition. Has no facilities, just path	Yes	Limited irrigated spaces in the area	Yes	No		5	No	10	1	17	Env and Rec	33	13						
215	Recreation	Local	Passive Reserve Level 3 Low	Horrie Hill Reserve	39214	Yes	Yes	Small POS with good facilities (close to Harber and Don)	Reduce Irrig	Hydrozoning potential	Yes	No	Hydrozone potential									No	5	5		10	19
216	Recreation	Local	Passive Reserve Level 3 Low	Slab Gully Reserve	44982	No	Yes	MUC with pockets of unirrigated turf	No	Consider other improvements	Yes	No		No	No	5	1	10		16	54						
217	Recreation	Local	Passive Reserve Level 3 Low	Victory Park	51127	Yes	Yes	Small POS. Hydrozoning may not be viable	Not Applicable	Size limits hydrozoning capacity	No	No	Not applicable														
218	Recreation	Local	Passive Reserve Level 3 Low	Lafayette Park	51128	Yes	Yes	Small POS. Hydrozoning may not be viable	Not Applicable	Size limits hydrozoning capacity	No	No	Not applicable														
219	Recreation	Local	Passive Reserve Level 3 Low	Monticello Park	52003	Yes	Yes	Small POS. Hydrozoning may not be viable	Not Applicable	Size limits hydrozoning capacity	No	No	Not applicable														
221	Recreation	Local	Passive Reserve Level 3 Low	Fogarty Park	53168	Yes	Yes	Small POS. Hydrozoning may not be viable	Not Applicable	Size limits hydrozoning capacity	No	No	Not applicable														
222	Recreation	Local	Passive Reserve Level 3 Low	Markwell Park	52054	Yes	Yes	(Markwell) - Small POS and hydrozoning not suitable	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
223	Recreation	Local	Passive Reserve Level 3 Low	Rickett Park	52054	Yes	Yes	Linear POS and hydrozoning not suitable	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
224	Recreation	Local	Passive Reserve Level 3 Low	Flematti Park	49251	Yes	Yes	Irrigation source off site and additional irrigaiton is required for next stage	More water requirec	Requires additional water for stage 2	Yes	Yes															
225	Recreation	Local	Passive Reserve Level 3 Low	Seminole Reserve	42936	Yes	Yes	Hydrozoning potential	Reduce Irrig	Hydrozoning potential	Yes - Hydrozoning	No	Hydrozone potential									No	5	5	Allocate to Cam Clay reserve	10	19
226	Recreation	Local	Passive Reserve Level 3 Low	Joe Saunders Park	49769	Yes	Yes	Small POS. Hydrozoning may not be viable	Not Applicable	Size limits hydrozoning capacity	No	No	Not applicable														
227	Recreation	Local	Passive Reserve Level 3 Low		52054	Yes	Yes	(Markwell) - Small POS and hydrozoning not suitable	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
228	Recreation	Local	Passive Reserve Level 4 Dry	Bavich Reserve	31596	No	Yes	Would benefit from irrigated turf based on new upgrades	Yes	Limited irrigated spaces in the area	Under construction	Yes		5	No	10	10	17		42	1						
229	Recreation	Local	Passive Reserve Level 4 Dry	Robin Park	34901	No	Yes	As above	Yes	Limited irrigated spaces in the area	Under construction	Yes		5	No	10	10	17		42	1						
230	Recreation	Local	Passive Reserve Level 3 Low	Ashworth Park	43920	Yes	Yes	Consider for hydrozoning out irrigation (or reduce) for use at Harber	Reduce Irrig	Hydrozoning potential	Yes	Yes	Hydrozone potential									5	10	10	Native planting and allocate to Harber	25	1
231	Recreation	Local	Passive Reserve Level 4 Dry	Gemsarna Reserve	26826	No	Yes	Land is very landlocked, provides limited ped access, irrigation would not provide substantial benefit	No	Landlocked and limited community benefit	Enviro upgrade	Yes		5	No	1	1	10		17	52						
232	Recreation	Local	Passive Reserve Level 4 Dry	Mogo Reserve	34170	No	Yes	Heavily land locked, serves local residents only	No	Landlocked and limited community benefit	No	(no proposed upgrade)		5	No	1	1	5	LandLocked	12	64						
233	Recreation	Local	Passive Reserve Level 4 Dry	George Foster Reserve	33373	No	Yes	Armadale area - irrigation would be a great addition.	Yes and other works?	Limited irrigated spaces in the area	Yes	Yes		5	No	10	1	12		28	18						
234	Nature	Local	Natural Area Wet	Mossgreen Reserve	48975	Yes	No	Local reserve with retained vegetation and small area of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
235	Nature	Local	Natural Area Wet	Tolarno Park	48977	Yes	No	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
236	Nature	Local	Natural Area Wet	Whitehorse Park	48977	Yes	No	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
237	Nature	Local	Natural Area Wet	Rothery Park	51692	Yes	No	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
238	Nature	Local	Natural Area Wet		52045	No	No	Western Power Easement	Not Applicable	Power Easement restrictions	No	No	Not applicable														
239	Nature	Local	Natural Area Wet	Torridge Park	51309	Yes	No	Linear MUC with retained vegetation and small area of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
240	Nature	Local	Natural Area Wet	McPhail Park	52165	Yes	No	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
241	Nature	Local	Natural Area Wet	Wyee Park	34873	No	No	Forms part of connected PAWs, predomonantly landlocked parcels	No	Landlocked and limited community benefit	No	No	Not applicable														
242	Nature	Local	Natural Area Wet	Wyee Park	34873	No	No	Forms part of connected PAWs, predomonantly landlocked parcels	No	Landlocked and limited community benefit	No	No	Not applicable														
243	Nature	Local	Natural Area Wet		36385	No	No	Drainage reserve	No	Drainage basin	No	No	Not applicable														
244	Nature	Local	Natural Area Wet	Aspiri Park	51430	Yes	No	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
245	Nature	Local	Natural Area Wet	Medawar Park	51976	No	No	Drainage reserve	No	Drainage basin	No	No	Not applicable														
246	Nature	Local	Natural Area Wet	Burrowa Park	32505	No	No	Forms part of connected PAWs, predomonantly landlocked parcels	No	Landlocked and limited community benefit	No	No	Not applicable														
247	Nature	Local	Natural Area Wet		52169	No	No	Predominantly drainage reserve	No	Drainage reserve	No	No	Not applicable														
248	Nature	Local	Natural Area Wet		30047	No	No	Linear drainage reserve (behind houses), unplanted with mature trees	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	10		12	64						
249	Nature	Local	Natural Area Wet	Brookside Park	33976	No	No	(part of) Linear drainage reserve (behind houses), unplanted with mature trees	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	10		12	64						
250	Nature	Local	Natural Area Wet	Shepherd Reserve	34077	No	No	Bushland reserve - irrigation not required	No	Predominantly bush	No	No	Not applicable														
251	Nature	Local	Natural Area Wet	Kellogg Park	51539	Yes	No	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
252	Nature	Local	Natural Area Wet	Clout Park	51613	Yes	N	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
253	Nature	Local	Natural Area Wet	Oakleigh Park	49044	Yes	N	Neighbourhood reserve with large expanses of turf	Not Applicable	Predominantly bush	Yes	No	Not applicable														
254	Nature	Local	Natural Area Wet	Riva Park	51420	Yes	N	Predominantly drainage reserve	Not Applicable	Hydrozoning potential	Yes	No	Hydrozone potential									No	1	10	Allocate to Skeet Road median	11	12
255	Nature	Local	Natural Area Wet	Benalla Reserve	50619	No	N	Predominantly bush reserve with very small irrigation component	Not Applicable	Predominantly bush	No	No	Not applicable														
256	Nature	Local	Natural Area Wet	Genomics Park	50713	Yes	N	Local reserve with retained vegetation and small area of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
257	Nature	Local	Natural Area Wet	Torino Park	51267	Yes	N	Linear MUC with retained vegetation and small area of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
258	Nature	Local	Natural Area Wet		52444	No	N	Drainage reserve	No	Drainage reserve	No	No	Not applicable														
259	Nature	Local	Natural Area Wet	Allwood Park	46054	Yes	N	Neighbourhood reserve with pond, large area of turf	Yes - hydrozone	Provides good amenity, consider hydrozoning out	Yes	No	Hydrozone potential									No	5	1		6	31
260	Nature	Local	Natural Area Wet	Bill Clare Park	49769	Yes	N	Small POS with drainage. Hydrozoning may not be viable	Not Applicable	Size limits hydrozoning capacity	No	No	Not applicable														
261	Nature	Local	Natural Area Wet	Bedbrook Park	50406	Yes	N	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
262	Nature	Local	Natural Area Wet	Asplin Reserve	50580	No	N	Small POS, consider environmental improvements	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	10	Enviro only	12	64						
263	Nature	Local	Natural Area Wet		52044	No	N	Western Power Easement	Not Applicable	Power Easement restrictions	No	No	Not applicable														
264	Nature	Local	Natural Area Wet	Whiteley Park	52510	Yes	N	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
265	Nature	Local	Natural Area Wet		53167	No	N	Western Power Easement	Not Applicable	Power Easement restrictions	No	No	Not applicable														
269	Nature	Local	Natural Area Wet	Reilly Park		No	N	Linear drainage swale	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	10	Enviro only	12	64						
270	Nature	Local	Natural Area Wet	Bate Park	53118	Yes	N	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable														
271	Nature	Local	Natural Area Wet		53112	No	N	Western Power Easement	Not Applicable	Power Easement restrictions	No	No	Not applicable														
272	Nature	Local	Natural Area Wet	Wright Brook Park	30047	No	N	Linear drainage reserve (behind houses), unplanted with mature trees	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	10	Enviro only	12	64						
273	Nature	Local	Passive Reserve Level 4 Dry	Bamlett Reserve	28746	No	No	Consider Environmental upgrade	No	Larger residential lots with backyards.	No	No	Not applicable														
274	Nature	Local	Natural Area Dry		29076	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
275	Nature	Local	Natural Area Dry	Garland Reserve	30058	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
276	Nature	Local	Natural Area Dry	Windsor Reserve	30100	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
277	Nature	Local	Natural Area Dry	Angelo Reserve	30166	No	No	Located between Gwynne Park and Dawson Reserve, mature trees	No	Proximity to other irrigated spaces	Yes - path connections	No		No	No	1	1	7	Path connections	9	87						
278	Nature	Local	Natural Area Dry	Acacia Park	31948	No	No	Linear reserve adjacent Neerigen Brook	No	Drainage function	Yes - Enviro upgrade	No		No	No	1	1	10	Enviro only	12	64						
279	Nature	Local	Natural Area Dry	Russelia Reserve	32120	No	No	One lot bushland, other bare lot with mature trees	No	Predominantly bush, plus bare lot	Yes - Enviro upgrade	No		No	No	1	1	10	Enviro and bollards	12	64						
280	Nature	Local	Natural Area Dry		32219	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
281	Nature	Local	Natural Area Dry	Carradine Reserve	32219	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
282	Nature	Local	Natural Area Dry	Emerald Reserve	33125	No	No	Bushland / bare lot - no irrigation required	No	Predominantly bush	Yes - Enviro upgrade	No		No	No	1	1	10	Enviro only	12	64						
283	Nature	Local	Natural Area Dry	Leake Reserve	33940	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
284	Nature	Local	Natural Area Dry	Gilcoe Reserve	34507	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
285	Nature	Local	Natural Area Dry	Gillam Park Park	37213	No	No	Mature trees and poor ground surface	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	17	Enviro and Rec (paths)	19	38						
286	Nature	Local	Natural Area Dry	Notting Hill Reserve	37637	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
287	Nature	Local	Natural Area Dry	Eskdale Reserve	39812	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
288	Nature	Local	Natural Area Dry		45366	No	No	Drainage reserve,	No	Predominantly bush	No	No	Not applicable														
289	Nature	Local	Natural Area Dry		47977	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
290	Nature	Local	Natural Area Dry		47977	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
291	Nature	Local	Natural Area Dry	Thomas Price Reserve	48763	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
292	Nature	Local	Natural Area Dry	Moseri Reserve	50453	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
293	Nature	Local	Natural Area Dry		50582	No	No	Linear drainage reserve (behind houses), unplanted with mature trees	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	10	Enviro (landlocked)	12	64						
294	Nature	Local	Natural Area Dry	Brian O'Neill Memorial Re	5247	Yes	No	No change proposed	Not Applicable	NA	NA	No	Not applicable														
295	Nature	Local	Natural Area Dry	Conifer Reserve	23658	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
296	Nature	Local	Passive Reserve Level 4 Dry	Callow Park	29594	No	No	Located at the end of a cul-de-sac; An upgrade would not benefit many people	No	ited community benefit, consider enviro improveme	Yes - Enviro upgrade	No		No	No	1	1	12	Limited catchment	14	61						
297	Nature	Local	Natural Area Dry	Hicks / Savage Park	30048	No	No	Mature trees and poor ground surface	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	17	Enviro	19	38						
298	Nature	Local	Natural Area Dry	Kurrajong Reserve	31140	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
299	Nature	Local	Natural Area Dry	Gillam Park Park	32234	No	No	Mature trees and poor ground surface	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	17	Enviro and Rec (paths)	19	38						
300	Nature	Local	Natural Area Dry	Opal Park	33067	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
301	Nature	Local	Natural Area Dry	Hilltop Reserve	44372	No	No	Mature trees and poor ground surface (part drainage swale)	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	17	Enviro and Rec	19	38						
302	Nature	Local	Natural Area Dry	Albens Vale Park	45283	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
303	Nature	Local	Natural Area Dry	Rubida Park	45284	No	No	Mature trees and poor ground surface	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	5		7	88						
304	Nature	Local	Natural Area Dry	Hesketh Park	46675	Yes	No	Small POS, however could be fully planted, Turf not beneficial	Reduce irrig	Consider other improvements	Yes - Enviro upgrade	No										No	5	10	Focused irrigation within the POS, swale improvements	15	6
305	Nature	Local	Natural Area Dry		46948	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
306	Nature	Local	Natural Area Dry	Goolamrup Reserve	2110	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
307	Nature	Local	Natural Area Dry	Scott Park	7072	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
308	Nature	Local	Natural Area Dry	Wandoo Reserve	27337	No	No	Mature trees and poor ground surface	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	5		7	88						
309	Nature	Local	Natural Area Dry	Bettenay Park	28434	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
310	Nature	Local	Natural Area Dry	Sefton Park	28434	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
311	Nature	Local	Natural Area Dry	Sefton Park	28434	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
312	Nature	Local	Natural Area Dry	Alice Reserve	28728	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
313	Nature	Local	Natural Area Dry	Hamersley Reserve	29052	No	No	Mature trees and poor ground surface	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	5		7	88						
314	Nature	Local	Passive Reserve Level 4 Dry	Paterson Park	29964	No	No	Stream component of Paterson Park and the Brookton Hwy square, consider other improvement options (non-irrigated planting)	No	Consider other improvements	Yes - Enviro Upgrade	No		No	5	1	5	17		28	18						
315	Nature	Local	Natural Area Dry	Attunga Reserve	30115	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
316	Nature	Local	Natural Area Dry	Amethyst Reserve	33126	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
317	Nature	Local	Natural Area Dry	Dale Reserve	34171	No	No	Mature trees and poor ground surface	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	10		12	64						
318	Nature	Local	Natural Area Dry	Kootingal Park	34703	No	No	Mature trees and poor ground surface / part drainage swale	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	17		19	38						
319	Nature	Local	Natural Area Dry		35182	No	No	Entry into Seville Grove - Irrigation or other improvements	Yes	Mature trees - consider as entrance	Yes	No		No	No	1	1	17		19	38						
320	Nature	Local	Natural Area Dry	Arbour Park	35733	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
321	Nature	Local	Natural Area Dry	Treecrest Gardens	43933	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
322	Nature	Local	Natural Area Dry	Corondale Park	44185	Yes	No	Limited irrigation, drainage swale and current project	Yes / Reduce?	Consider environmental improvements and hydrozoning	Yes	Yes	Hydrozone potential									5	10	5	Focused irrigation within the POS, swale improvements	20	3
323	Nature	Local	Passive Reserve Level 4 Dry		48637	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
324	Nature	Local	Natural Area Dry	Ranford Park	27970	No	No	Mature trees and poor ground surface	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	10		12	64						
325	Nature	Local	Natural Area Dry	Carrigg Park	28428	No	No	Mature trees and poor ground surface	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	10		12	64						
326	Nature	Local	Passive Reserve Level 4 Dry	Adair Park	28428	No	No	Mature trees and poor ground surface	No	Conside other improvements	Yes - Enviro Upgrade	No		No	No	1	1	10		12	64						
327	Nature	Local	Passive Reserve Level 4 Dry	Ellis Park	28625	No	No	Mature trees and poor ground surface	No	Conside other improvements	Yes - Enviro Upgrade	No		No	No	1	1	10		12	64						
328	Nature	Local	Natural Area Dry	Hookway Reserve	30151	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
329	Nature	Local	Natural Area Dry	Stonegate Reserve	32113	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
330	Nature	Local	Natural Area Dry	Gillam Park Park	32235	No	No	Mature trees and poor ground surface	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	17		19	38						
331	Nature	Local	Natural Area Dry	Michael Park	37636	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
332	Nature	Local	Natural Area Dry	Hall Park	37636	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
333	Nature	Local	Natural Area Dry	Lockyer Park	37636	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
334	Nature	Local	Natural Area Dry		42753	No	No	Armadale Road - mature trees and poor ground surface	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	10		12	64						
335	Nature	Local	Natural Area Dry	Morolo Park	42863	No	No	Mature trees and poor ground surface	No	Consider other improvements	Yes	Yes		5	No	1	1	17		24	27						
336	Nature	Local	Natural Area Dry		43139	No	No	Drainage	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	10		12	64						
337	Nature	Local	Natural Area Dry	Batt Park	43920	Yes	No	Ashworth Park - Turfed drainage swale	Reduce irrig	Hydrozoning potential	Hydrozone options	Yes	Hydrozone potential	5	No							5	10	10	Native planting and allocate to Harber	25	1
338	Nature	Local	Natural Area Dry	Richon Park	44324	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
339	Nature	Local	Natural Area Dry	Lomond Park	52071	No	No	Drainage reserve	No	Drainage sump	Yes - Enviro Upgrade	No		No	No	1	1	10	Drainage reserve	12	64						
340	Nature	Local	Natural Area Dry	Carrawatha Park	28248	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
341	Nature	Local	Natural Area Dry	Werndley Reserve	28488	No	No	Drainage, mature trees, close to Dawson	No	Consider other improvements	Yes	No		No	No	1	1	17		19	38						
342	Nature	Local	Natural Area Dry	Whittington Park	29532	No	No	Mature trees and poor ground surface	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	10		12	64						
343	Nature	Local	Natural Area Dry	Errol Green Park	29597	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
344	Nature	Local	Natural Area Dry		30739	No	No	Drainage, mature trees, close to Dawson	No	Consider other improvements	Yes	No		No	No	1	1	10		12	64						
345	Nature	Local	Passive Reserve Level 4 Dry	Peaceful Pond	30840	No	No	Very well vegetated, upgrades should be environmental based rather than irrigation	No	Consider other improvements	Enviro Upgrade			No	No	1	1	17		19	38						
346	Nature	Local	Natural Area Dry	Holden Park	32286	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
347	Nature	Local	Natural Area Dry	Wallangara Bridle Trail	34027	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
348	Nature	Local	Natural Area Dry		33975	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
349	Nature	Local	Natural Area Dry		33975	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
350	Nature	Local	Natural Area Dry	Wallangara Bridle Trail	34027	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
351	Nature	Local	Natural Area Dry	Wallangara Bridle Trail	34027	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
352	Nature	Local	Natural Area Dry	Wallangara Bridle Trail	34027	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
354	Nature	Local	Natural Area Dry	Croyden Park	42185	No	No	Bushland - no irrigation required	No	Rural reserve	No	No	Not applicable														
355	Nature	Local	Natural Area Dry	Chateau Park	43932	No	No	Mature trees and poor ground surface	No	Consider other improvements	Yes - Enviro upgrade	No	Not applicable														
356	Nature	Local	Natural Area Dry	Cammillo Reserve	44606	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
357	Nature	Local	Natural Area Dry		45162	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
358	Nature	Local	Natural Area Dry			No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
359	Nature	Local	Natural Area Dry	Maclean Park	50583	No	No	Drainage reserve and bushland	No	Consider other improvements	Yes - Enviro upgrade	No	Not applicable														
360	Nature	Local	Natural Area Dry	Ringwood Reserve	28745	No	No	Drainage reserve and bushland	No	Consider other improvements	Yes - Enviro upgrade	No	Not applicable														
361	Nature	Local	Natural Area Dry	Travers Park	29054	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
362	Nature	Local	Natural Area Dry	Peet Reserve	30231	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
363	Nature	Local	Natural Area Dry	Cordelia Park	33748	No	No	Linear reserve adjacent Neerigen Brook	No	Drainage function	Yes - Enviro upgrade	No	Not applicable														
364	Nature	Local	Natural Area Dry	Sheriff Reserve	34172	No	No	Mature trees and poor ground surface	No	Consider other improvements	Yes - Enviro upgrade	No	Not applicable														
365	Nature	Local	Natural Area Dry	Acacia Park	34793	No	No	Linear reserve adjacent Neerigen Brook	No	Drainage function	Yes - Enviro upgrade	No	Not applicable														
366	Nature	Local	Natural Area Dry	Acacia Park	34793	No	No	Linear reserve adjacent Neerigen Brook	No	Drainage function	Yes - Enviro upgrade	No	Not applicable														
367	Nature	Local	Natural Area Dry	Higgins Park	35371	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
368	Nature	Local	Passive Reserve Level 4 Dry	Peaceful Pond	33653	No	No	Very well vegetated, upgrades should be environmental based rather than irrigation	No	Consider other improvements	Yes - Enviro Upgrade			No	No	1	1	17		19	38						
369	Nature	Local	Passive Reserve Level 4 Dry	Mazzega Park	35763	No	No	Bushland - no irrigation required	No	Consider other improvements	Yes - Enviro Upgrade			No	No	1	1	17		19	38						
370	Nature	Local	Natural Area Dry	Calliandra Reserve	35959	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
371	Nature	Local	Natural Area Dry	Hobbs Park	39773	No	No	Drainage reserve	No	Drainage function	Yes - Enviro upgrade	No	Not applicable														
372	Nature	Local	Natural Area Dry	Leys Reserve	44602	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
373	Nature	Local	Passive Reserve Level 4 Dry	Woodcroft Reserve	44918	No	No	Drainage reserve, upgrades to be limited to pathways and environmental	No		Enviro Upgrade			5	No	1	1	17		24	27						
374	Nature	Local	Natural Area Dry		45382	No	No	Adjacent Canning River	No	Predominantly bush	No	No	Not applicable														
375	Nature	Local	Natural Area Dry		46382	No	No	Brookton Highway Verge	No	Mains Road Verge - no irrigation	No		Not applicable														
376	Nature	Local	Natural Area Dry		46864	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
377	Nature	Local	Natural Area Dry		8171	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
378	Nature	Local	Natural Area Dry	Hassett Winstanley Reser	29381	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
379	Nature	Local	Natural Area Dry	Glebe Reserve	31641	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
380	Nature	Local	Natural Area Dry	Quenda Reserve	32018	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
381	Nature	Local	Natural Area Dry	Morrison Park	32224	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
382	Nature	Local	Natural Area Dry	Allawah Reserve	34073	No	No	Landlocked reserve	No	Landlocked and limited community benefit	Yes	Yes		5	No	1	1	12		19	38						
383	Nature	Local	Natural Area Dry	Kootingal Park	34463	No	No	Mature trees and poor ground surface / part drainage swale	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	17		19	38						
386	Nature	Local	Natural Area Dry		34471	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
387	Nature	Local	Natural Area Dry	Regina Reserve	35518	No	No	Landlocked reserve	No	Landlocked and limited community benefit	No	No	Not applicable														
388	Nature	Local	Natural Area Dry	Neerigen Brook Reserve	35613	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
389	Nature	Local	Passive Reserve Level 4 Dry	Rails Crescent Bridle Trail	37199	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
390	Nature	Local	Natural Area Dry	Rails Crescent Bridle Trail	37199	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
391	Nature	Local	Natural Area Dry	Rails Crescent Bridle Trail	37199	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
392	Nature	Local	Natural Area Dry	Rails Crescent Bridle Trail	37199	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
393	Nature	Local	Natural Area Dry	Rails Crescent Bridle Trail	37199	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
394	Nature	Local	Natural Area Dry	Rails Crescent Bridle Trail	37199	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
395	Nature	Local	Natural Area Dry	Rushton Reserve	39837	No	No	Mature trees and poor ground surface / part drainage swale	No	Consider other improvements (paths)	Yes - Enviro upgrade	No		No	No	1	1	17		19	38						
396	Nature	Local	Natural Area Dry	Benbecula Park	51797	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
397	Nature	Local	Natural Area Dry	Benbecula Park	51797	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
398	Nature	Local	Natural Area Dry	Benbecula Park	51797	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
399	Nature	Local	Natural Area Dry	Ward Reserve	26562	No	No	Close to Kelmscott Train Station - 'Entry' into Kelmscott	Yes	Consider other improvements (paths)	Yes	No		No	No	5	5	12	Entry POS	22	37						
400	Nature	Local	Natural Area Dry	Kembla Park	28630	No	No	Mature trees and poor ground surface / part drainage swale	No	Consider other improvements (paths)	Yes - Enviro upgrade	No		No	No	1	1	10	Drainage function	12	64						
401	Nature	Local	Natural Area Dry	Hellenic Reserve	28794	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
402	Nature	Local	Natural Area Dry		35543	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
403	Nature	Local	Natural Area Dry	William Turner Reserve	31847	No	No	Mature trees, poor ground surface, close to Creyk	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	12		14	61						
404	Nature	Local	Natural Area Dry	Scott Park	32226	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
405	Nature	Local	Natural Area Dry	Admiral Road Reserve	32979	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
406	Nature	Local	Natural Area Dry	Nattai Park	33748	No	No	Landlocked reserve - near Neerigen Brook PS	No	Consider other improvements	Yes - Enviro upgrade	No		No	No	1	1	12		14	61						
407	Nature	Local	Natural Area Dry	Kendal Reserve	39579	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
408	Nature	Local	Natural Area Dry	Westview Reserve	33795	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														
409	Nature	Local	Passive Reserve Level 4 Dry	Henrietta Reserve	43146	No	No	Located near Derry Reserve. Has existing trees and path connections	No	Consider other improvements	Yes - Enviro upgrade	YEs		No	No	1	1	10		12	64						
410	Nature	Local	Natural Area Dry	Tickle Park	44182	No	No	Part of Tickle (NW) - Irrigation part of current upgrade for other side?	Yes	Part of larger improvements	No	Yes	Not applicable														
411	Nature	Local	Natural Area Dry		46287	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable														

KEY

Natural Area Wet	Natural Area Wet - Irrigated
Natural Area Dry	Natural Area Dry - Irrigated
Passive Level 4 Dry	
Passive Level 3 and Dry	Passive Level 3 and irrigated
Passive Level 2 Moderate and Irrigated	Change Passive Level 2 Moderate to this colour if included in Dry or in PIP
Public Access Ways (hidden)	
Playing field and Community Building	

													Description
412	Nature	Local	Natural Area Dry	Indica Park	47423	No	No	Mature trees, hard ground, poor understorey	No	Site conditions would limit irrigation	No	No	Not applicable
413	Nature	Local	Natural Area Dry		45929	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
414	Nature	Local	Natural Area Dry	Aviemore Park	46887	Yes	No	Irrigation source elsewhere (part Benbecula)	Not Applicable	Provides good amenity. No change	No		Not applicable
415	Nature	Local	Natural Area Dry		46515	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
416	Nature	Local	Natural Area Dry	Rails Crescent Bridle Trail	37199	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
419	Nature	Local	Natural Area Dry	Warwick Savage Park		No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
421	Nature	Local	Natural Area Dry	Corondale Park	50335	Yes	No	Limited irrigation, drainage swale and current project	Yes / Reduce?	Part of larger imrprovement	No	Yes	Not applicable
423	Sport	Neighbourh	Active Sport	Frye Park	30183	Yes	Yes	Active playing Field	Not Applicable	Consider hydrozoning the banks	Yes	No	Hydrozone potential
424	Sport	Neighbourh	Active Sport	Rossiter Playing Field	52045	Yes	Yes	Active playing Field	Not Applicable	Provides good amenity - no scope for hydrozoning	No	No	Not applicable
425	Sport	Neighbourh	Active Sport	Karragullen Oval	27763	Yes	Yes	Active playing Field	Not Applicable	Water source is an issue. No change	No	No	Not applicable
426	Sport	Neighbourh	Active Sport	Piara Waters Oval	51837	Yes	Yes	Active playing Field	Not Applicable	Provides good amenity - no scope for hydrozoning	No	No	Not applicable
427	Sport	Neighbourh	Active Sport	Creyk Park		Yes	Yes	Active playing Field	Not Applicable	Provides good amenity - no scope for hydrozoning	No	NO	Not applicable
428	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Sheaf Park	52615	Yes	Yes	Irrigated reserve	Not Applicable	Provides good amenity. No change	No	No	Not applicable
429	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Wilcannia / Toongabbie P	31566	No	Yes	Quite landlocked, has playground and would benefit from improvement	Yes	Limited amenity in the area	Yes	Yes	
430	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Bernice Hargrave Reserve	32346	Yes	Yes	Irrigated sparsely, may benefit from hydrozoning	- reduce or hydroz	Hydrozoning potential	Yes	No	Not applicable
431	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Tickle Park	46207	Yes	Yes	Existing upgrade has commenced - includes irrigation	Yes	Hydrozoning potential	Yes	Yes	Not applicable
432	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	William Lockard Park	48977	Yes	Yes	Linear MUC with small pockets of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
433	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Jim and Alma Baker Park	48977	Yes	Yes	Irrigated reserve	Not Applicable	Provides good amenity. No change	No	No	Not applicable
434	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Sandstone Park	51395	Yes	Yes	Irrigated reserve	Not Applicable	Provides good amenity. No change	No	No	Not applicable
435	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Borrello Park	31139	Yes	Yes	Irrigated reserve	Not Applicable	Provides good amenity. No change	No	No	Not applicable
436	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Borrello Park	31139	Yes	Yes	Irrigated reserve	Not Applicable	Provides good amenity. No change	No	No	Not applicable
437	Recreation	Neighbourh	Passive Reserve Level 4 Dry	Pelham Reserve	36873	No	Yes	Between Gwynne and Don - Mature trees	Yes	Good size for non sport recreation	Yes	Yes	
438	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Migrant Park	2121	No	Yes	District benefit	Yes	District amenity	Yes	Yes	
440	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Alderson Park	34694	No	Yes	Local park would benefit from irrigation or other improvements	Yes	Located near aged care facility	Yes	Yes	
441	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Aspiri Park	51430	Yes	Yes	Linear MUC with small pockets of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
442	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Derry Reserve	25699	No	Yes	Neighbourhood park, with linear swale.	Yes	Consider irrigation or other improvements	Yes	Yes	
443	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Kuhl Park	35636	Yes	Yes	Large area of irrigated turf, would benefit from hydrozoning	- reduce or hydroz	Hydrozoning potential	Yes	No	Hydrozone potential
445	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Wilcannia / Toongabbie P	34049	No	Yes	Quite landlocked, has playground and would benefit from improvement	Yes	Limited amenity in the area	Yes	Yes	
446	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	San Jacinta Reserve	41640	no	Yes	Limited irrigated spaces in the area, would benefit from improvement	Yes	Limited amenity in the area	Yes	Yes	
447	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Harber Park	46129	Yes	Yes	Requires additional water	Yes - hydrozone	Hydrozoning potential (for additional)	NA	Yes	Not applicable
448	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Burtonia Park	49667	Yes	Yes	Neighbourhood Park	Not Applicable	Provides good amenity. No change	No	No	Not applicable
449	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Freesia Park	52369	Yes	Yes	Linear MUC with irrigated turf kickabout space	Not Applicable	Provides good amenity. No change	No	No	Not applicable
450	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Dawson Reserve	30165	No	Yes	Limited irrigated spaces in the area, would benefit from improvement	Yes	Consider irrigation or other improvements	Yes	Yes	
451	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Lina Hart Memorial Park	33367	No	Yes	Limited irrigated spaces in the area, would benefit from improvement	Yes	Consider irrigation or other improvements	Yes	No	
452	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Westfield Heron Reserve	35737	No	Yes	Current upgrade scheduled through stimulus projects	Yes	Consider irrigation or other improvements	Yes	No	
453	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Benbecula Park	48887	Yes	Yes	Retained vegetation and small irrigated area	Not Applicable	Provides good amenity. No change	No	No	Not applicable
454	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Minnawarra Park and Sanctuary Lake		Yes	Yes	Well utilised reserves with good facilities	Not Applicable	Provides good amenity. No change	No	No	Not applicable
455	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Minnawarra Park and Sanctuary Lake		Yes	Yes	Well utilised reserves with good facilities	Not Applicable	Provides good amenity. No change	No	No	Not applicable
458	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Eva and Bill Moore Reserv	34326	Yes	Yes	Combination recreation and retained bushland	Not Applicable	Predominantly bush	No	No	Not applicable
459	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Fancote Park		Yes	Yes	Current upgrade scheduled through Councillor request	Not Applicable	Separate upgrade scheduled	No	No	Not applicable
460	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Villatella Park	51267	Yes	Yes	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
461	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Reg Williams Reserve	32505	Yes	Yes	Environmental improvements to be considered	Not Applicable	Hydrozoning commenced?	Yes	No	Hydrozone potential
462	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Bryan Gell Reserve	35233	Yes	Yes	Recreation spaces and irrigated turf	Reduce irrig	Hydrozoning potential	Yes - Enviro upgrade	No	Hydrozone potential
463	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Matthew Stott Reserve	38843	Yes	Yes	Large area of irrigated turf, would benefit from hydrozoning	Reduce irrig	Hydrozoning potential	Yes - Reduce irrig	No	Hydrozone potential
464	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Don Simmons Reserve	41611	Yes	Yes	Neighbourhood Reserve - hydrozoning potential	Reduce irrig	Hydrozoning potential	Yes	No	Hydrozone potential
465	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Don Simmons Reserve	41611	Yes	Yes	Neighbourhood Reserve - hydrozoning potential	Reduce irrig	Hydrozoning potential	Yes	No	Hydrozone potential
466	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Lions Park	32219	No	Yes	Local reserve with retained vegetation and Neerigen Brook	No	Bush / Drainage reserve	No	No	
467	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Willowdale Park	52755	Yes	Yes	Recreation spaces and irrigated turf	Not Applicable	Provides good amenity. No change	No	No	Not applicable
470	Nature	Neighbourh	Natural Area Wet	Heronwood Reserve	50802	No	No	Small portion of existing bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
471	Nature	Neighbourh	Natural Area Wet	Verdant Reserve	49322	Yes	No	Combination recreation and retained bushland	Not Applicable	Predominantly bush	No	No	Not applicable
472	Nature	Neighbourh	Natural Area Wet	Jim and Alma Baker Park	50599	Yes	No	Combination recreation and retained bushland	Not Applicable	Predominantly bush	No	No	Not applicable
473	Nature	Neighbourh	Natural Area Wet	Eva and Bill Moore Reserv	34326	Yes	No	Combination recreation and retained bushland	Not Applicable	Predominantly bush	No	No	Not applicable
474	Sport	District	Active Sport	Alfred Skeet Oval		Yes	Yes	Active playing Field	Not Applicable	Consider hydrozoning the outer perimeter, will require consultation	No	Yes	Hydrozone potential
475	Sport	District	Active Sport	Harrisdale Playing Field	52635	Yes	Yes	Active playing Field	Not Applicable	Consider hydrozoning the outer perimeter, will require consultation	Yes	No	Hydrozone potential
476	Sport	District	Active Sport	John Dunn Memorial Park	24748	Yes	Yes	Active playing Field	Not Applicable	Consider hydrozoning the outer perimeter, will require consultation	Yes	No	Hydrozone potential
477	Sport	District	Active Sport	Gwynne Park	21152	Yes	Yes	Active playing Field	Not Applicable	Consider hydrozoning the outer perimeter, will require consultation	Yes	Yes	Hydrozone potential
478	Sport	District	Active Sport	Morgan Park	32347	Yes	Yes	Active playing Field	Not Applicable	Consider hydrozoning the outer perimeter, will require consultation	Yes	Yes	Hydrozone potential
479	Sport	District	Active Sport	Cross Park		Yes	Yes	Active playing Field	Not Applicable	Provides good amenity - no scope for hydrozoning	No	No	Not applicable
480	Sport	District	Active Sport	Palomino Park	36180	Yes	Yes	Horse training	Not Applicable	No change - irrigated area appears constrained	No	No	Not applicable
481	Sport	District	Active Sport	Rushton Park		Yes	Yes	Active playing Field	Not Applicable	Consider hydrozoning the outer perimeter, will require consultation	Yes	Yes	Hydrozone potential
482	Sport	District	Active Sport	Bob Blackburn Reserve	39798	Yes	Yes	Active playing Field	Not Applicable	Consider hydrozoning the outer perimeter, will require consultation	Yes	Yes	Hydrozone potential
483	Sport	District	Active Sport	Springdale Park	44389	Yes	Yes	Active playing Field	Not Applicable	Provides good amenity - no scope for hydrozoning	No	No	Not applicable
484	Recreation	District	Passive Reserve Level 1 High	Memorial Park		Yes	Yes	City Central Parkland - good amenity no change	Not Applicable	Prominent location	No	No	Not applicable
485	Nature	District	Natural Area Dry	Creyk Park Flora Reserve	39208	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
486	Nature	Neighbourh	Natural Area Dry	John Dunn Memorial Park	36729	No	No	This part not irrigated - long length along NE boundary	No	Irrigation not required in this zone	No	No	Not applicable
487	Nature	District	Natural Area Dry	Lloyd Hughes Park	6468	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
488	Nature	District	Natural Area Dry	Fletcher Park	14217	Yes	No	Already hydrozoned	Not Applicable	Provides good amenity. No change	No	No	Not applicable
490	Nature	District	Natural Area Dry	Springdale Park	44389	Yes	No	Already hydrozoned - Playing Field Site	Not Applicable	Provides good amenity. No change	No	No	Not applicable
492	Nature	Regional	Natural Area Wet		38820	No	No	Wungong River and associated foreshore	No	River foreshore	No	No	Not applicable
493	Nature	Regional	Natural Area Wet		28638	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
494	Nature	Regional	Natural Area Wet		29398	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
495	Nature	Regional	Natural Area Wet		29398	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
496	Nature	Regional	Natural Area Wet		29398	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
497	Nature	Regional	Natural Area Wet	Palomino Park	36339	No	No	Wungong River and associate foreshore	No	River foreshore	No	No	Not applicable
498	Nature	Regional	Natural Area Wet	Kalajzich Park	232	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
499	Nature	Regional	Natural Area Wet	Kalajzich Park	232	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
500	Nature	Regional	Natural Area Wet		232	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
501	Nature	Regional	Natural Area Wet		232	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
502	Nature	Regional	Natural Area Wet		232	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
503	Nature	Regional	Natural Area Wet		37779	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
504	Nature	Regional	Natural Area Wet		27073	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
505	Nature	Regional	Natural Area Wet		28584	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
506	Nature	Regional	Natural Area Wet		36741	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
507	Nature	Regional	Natural Area Wet		24883	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
508	Nature	Regional	Natural Area Wet		25721	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
509	Nature	Regional	Natural Area Wet		33647	No	No	Canning River and associated foreshore	No	River foreshore	No	No	Not applicable
510	Nature	Regional	Natural Area Wet	Palomino Park	36180	Yes	No	Palomino Park, Wungong River and associated foreshore	Not Applicable	Provides good amenity. No change	No	No	Not applicable
511	Nature	Regional	Natural Area Dry		27572	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
512	Nature	Regional	Natural Area Dry		30245	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
513	Nature	Regional	Natural Area Dry	Araluen Walk Trail	28293	No	No	Walk trail - consider other improvements	No	Predominantly bush	No	No	Not applicable
514	Nature	Regional	Natural Area Dry	Canning Mills Reserve	34155	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
515	Nature	Regional	Natural Area Dry		4127	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
516	Nature	Regional	Natural Area Dry		50380	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
517	Nature	Regional	Natural Area Dry		50380	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
521	Nature	Regional	Natural Area Dry	Canning Mills Reserve	34155	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
522	Nature	Regional	Natural Area Dry		23592	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
523	Nature	Regional	Natural Area Dry	Canning Mills Reserve	34155	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
524	Nature	Regional	Natural Area Dry	Canning Mills Reserve	34155	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
525	Nature	Regional	Natural Area Dry	Gibbs Reserve	32635	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
526	Nature	Regional	Natural Area Dry	Canning Mills Reserve	34155	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
527	Nature	Regional	Natural Area Dry	Bungendore Park	4561	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
528	Nature	Regional	Natural Area Dry	Armadale Settlers Comm	4127	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
529	Nature	Regional	Natural Area Dry	Araluen Walk Trail	28293	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
530	Nature	Regional	Natural Area Dry	Armadale Settlers Comm	4127	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
531	Nature	Regional	Natural Area Dry	Forrestdale Lake Nature R	27165	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
532	Nature	Regional	Natural Area Dry	Armadale Settlers Comm	4127	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
533	Nature	Regional	Natural Area Dry	Armadale Settlers Comm	4127	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
534	Nature	Regional	Natural Area Dry		27165	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
536	Nature	Regional	Natural Area Dry	Bob Blackburn Reserve		Yes	No	Playing Fields and Bush Reserve with playground	Not Applicable	Provides good amenity. No change	No	No	Not applicable
537	Nature	Regional	Natural Area Dry	Armadale Settlers Comm	4127	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
538	Nature	Regional	Natural Area Dry	Armadale Golf Course	27165	Yes	No	Golf Course	Not Applicable	Provides good amenity. No change	No	No	Not applicable
539	Nature	Regional	Natural Area Dry	Roley Pool	28353	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
601	Recreation	Local	Passive Reserve Level 3 Low	Dovedale Park	52077	Yes	Yes	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
602	Recreation	Local	Passive Reserve Level 3 Low	Lauraine Reserve	52972	Yes	Yes	Adjacent Balannup Drain	Not Applicable	Provides good amenity. No change	No	No	Not applicable
603	Recreation	Local	Passive Reserve Level 3 Low	Jarvis Park	52710	Yes	Yes	Park Avenue - linear swale with small areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
604	Recreation	Local	Passive Reserve Level 3 Low	Fernhill Park	51310	Yes	Yes	Existing Harrisdale, existing trees with small area of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
605	Recreation	Local	Passive Reserve Level 3 Low	Friston Park	52588	Yes	Yes	Community Park, with Heritage value, small area of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
606	Recreation	Local	Passive Reserve Level 3 Low	Moraba Park	53427	Yes	Yes	Retained vegetation, with small area of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
611	Recreation	Local	Passive Reserve Level 3 Low	Lexington Park	52448	Yes	Yes	Community Park, with small area of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
617	Recreation	Local	Passive Reserve Level 3 Low	MacIntyre Park	53739	Yes	Yes	Community Park, with small area of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
631	Recreation	Local	Passive Reserve Level 3 Low	Wattledale Park	53371	Yes	Yes	Park Avenue - linear swale with small areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
635	Recreation	Local	Passive Reserve Level 3 Low	Moraba Park	51958	Yes	Yes	Park Avenue - linear swale with small areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
636	Recreation	Local	Passive Reserve Level 3 Low	Livorno Park	53681	Yes	Yes	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
638	Recreation	Local	Passive Reserve Level 3 Low	Baltic Park	52968	Yes	Yes	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
642	Recreation	Local	Passive Reserve Level 3 Low	Terracina Park	53023	Yes	Yes	Local park with good amenity	Not Applicable	Provides good amenity. No change	No	No	Not applicable
644	Recreation	Local	Passive Reserve Level 3 Low	Moraba Park		Yes	Yes	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
645	Recreation	Local	Passive Reserve Level 3 Low	Paramor Park	53367	No	Yes	Small local park with no irrigation	No	Provides reasonable amenity, Consider other improvements	Yes	No	
647	Recreation	Local	Passive Reserve Level 3 Low	Wattledale Park	53371	Yes	Yes	Park Avenue - linear swale with small areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
648	Nature	Local	Natural Area Wet	Jim and Alma Baker Park	52780	Yes	No	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
649	Nature	Local	Natural Area Wet		51816	Yes	No	Park Avenue - linear swale with small areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
650	Nature	Local	Natural Area Wet		51816	Yes	No	Park Avenue - linear swale with small areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
652	Nature	Local	Natural Area Wet	Flatbush Park	52449	Yes	No	Park Avenue - linear swale with small areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
653	Nature	Local	Natural Area Wet	Wycliffe Park	51693	No	No	Drainage basin - irrigation not required	Not Applicable	Drainage basin	No	No	Not applicable
654	Nature	Local	Natural Area Wet	Liscombe Park	52442	Yes	No	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
688	Nature	Local	Natural Area Wet	Manhattan Park	52163	Yes	No	Park Avenue - linear swale with small areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
714	Nature	Local	Natural Area Wet	Glenlossie Park		Yes	No	Park Avenue - linear swale with small areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
732	Nature	Local	Natural Area Wet		52740	Yes	No	Park Avenue - linear swale with small areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
734	Nature	Local	Natural Area Wet	Sapium Park	52768	Yes	No	Small local park with existing vegetation. Area of irrigation would be v. small	Not Applicable	Provides good amenity. No change	No	No	Not applicable
738	Nature	Local	Natural Area Dry		52971	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
739	Nature	Local	Natural Area Wet	Villatella Park	51267	Yes	No	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
740	Nature	Local	Natural Area Wet	Powell Reserve	52509	No	No	Turf linear MUCwith existing trees	Yes - hydrozone	Large swathe of turf, consider Enviro improvements	Yes	No	
741	Recreation	Local	Natural Area Wet	Barossa Park	53146	Yes	Yes	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
742	Nature	Local	Natural Area Wet	Worcester Park	53118	Yes	Yes	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
743	Nature	Local	Natural Area Wet	Fairweather Park	51504	No	No	Drainage basin - irrigation not required	Not Applicable	Drainage basin	No	No	Not applicable
748	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Greenlink Park	50868	Yes	Yes	Neighbourhood park - with turf kickabout	Not Applicable	Provides good amenity. No change	No	No	Not applicable
757	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Macadamia Park	53527	Yes	Yes	Dog Park - provides good amenity	Not Applicable	Provides good amenity. No change	No	No	Not applicable
760	Nature	Neighbourh	Natural Area Wet	Lambert Reserve	42044	No	No	Bushland - no irrigation required	Not Applicable	Predominantly bush	No	No	Not applicable
765	Recreation	District	Passive Reserve Level 1 High	Shipwreck Park	53321		Yes						Not applicable
776	Nature	Regional	Natural Area Wet	Gerald Russell Park	52784	No	No	Retained vegetation - no irrigation required	Not Applicable	Predominantly bush	No	No	Not applicable
777	Recreation	Local	Passive Reserve Level 3 Low	Norite Park		Yes	Yes	Small local park with existing vegetation. Area of irrigation would be v. small	Not Applicable	Provides good amenity. No change	No	No	Not applicable
778	Recreation	Local	Passive Reserve Level 3 Low	Moraba Park		Yes	Yes	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
779	Recreation	Local	Passive Reserve Level 3 Low	Moraba Park	51958	Yes	Yes	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
780	Nature	Local	Natural Area Wet	Fairweather Park	51504	No	No	Drainage basin - irrigation not required	Not Applicable	Drainage basin	No	No	Not applicable
781	Recreation	District	Passive Reserve Level 1 High	Robot Park	52816		Yes						Not applicable
782	Recreation	Local	Passive Reserve Level 3 Low	Guerin Park	51694	Yes	Yes	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
783	Recreation	Local	Passive Reserve Level 3 Low	Marseille Park	50401	Yes	Yes	Large area of irrigation turf, hydrozoning potential	Yes - hydrozone	Large area of turf for consolidation	Yes	No	Hydrozoning potential
784	Recreation	Local	Passive Reserve Level 3 Low	Broadway Park	48941	Yes	YEs	Linear MUC with pockets of irrigated turf	Not Applicable	Provides good amenity. No change	No	No	Not applicable
785	Nature	Local	Natural Area Wet	Dovedale Park	52077	Yes	No	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
786	Nature	Neighbourh	Natural Area Wet	Heronwood Reserve	49892	Yes	No	Majority bushland reserve with small pocket of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
787	Nature	Local	Natural Area Wet	Lauraine Reserve		Yes	No	Linear MUC with areas of irrigation	Not Applicable	Provides good amenity. No change	No	No	Not applicable
799	Recreation	Local	Passive Reserve Level 3 Low	Gerald Russell Park	45968	Yes	Yes	Neighbourhood reserve with pond, large area of turf	Yes - hydrozone	Provides good amenity, consider hydrozoning out	Yes	No	Not applicable
802	Nature	Regional	Natural Area Wet	Cam Clay Reserve	51071	No	No	Irrigation would benefit, there is large unused space	Yes	Limited usable spaces in the area	Yes	No	
804	Nature	Regional	Natural Area Wet	Palomino Park	36180	Yes	No	Palomino Park, Wungong River and associated foreshore	Not Applicable	Provides good amenity. No change	No	No	Not applicable
805	Recreation	Local	Passive Reserve Level 3 Low	Barry Poad Reserve	41523	Pending	Yes	Upgrade commenced through A14 CIL	Additional irrigation	Additional improvements would benefit	Yes	Yes	
808	Recreation	Local	Passive Reserve Level 3 Low	Abingdon Reserve	33208	Yes	Yes	Poor irrigation, hydrozoning required	Yes - hydrozone	Hydrozoning potential	Yes	No	Not applicable
809	Nature	Local	Natural Area Wet		44836	No	No	Bushland, mature trees, limited understorey	No	Not Applicable	No	No	Not applicable
810	Nature	Local	Natural Area Dry	Meyer Reserve	33364	No	No	Landlocked reserve, with footpaths and lighting	No	Landlocked and limited community benefit	No	No	Not applicable
811	Nature	Regional	Natural Area Wet	Fancote Park	29398	No	No	Canning River upper banks adjacent Fancote	No	Consider other improvements	No	No	Not applicable
812	Nature	Regional	Natural Area Wet		27073	No	No	Canning River upper banks adjacent Fancote	No	Consider other improvements	No	No	Not applicable
813	Nature	Local	Natural Area Dry		31604	Yes	No	Community Garden	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not applicable
814	Nature	Regional	Natural Area Wet		26755	No	No	Canning River upper banks - limited access	No	Not Applicable	No	No	Not applicable
815	Nature	Regional	Natural Area Wet		26755	No	No	Canning River upper banks - limited access	No	Not Applicable	No	No	Not applicable
816	Nature	Local	Natural Area Dry	Possum Park	27708	No	No	Bushland - no irrigation required	No	Predominantly bush	No	No	Not applicable
817	Nature	Local	Natural Area Dry	Coolaberra Reserve	44920	No	No	Busland and Drainage swale - no irrigation required	No	Consider other improvements (paths)	Yes - Enviro upgrade	Yes	
818	Nature	Local	Natural Area Dry	extension of Benbecula	51797	No	No	Busland and Drainage swale - no irrigation required	No	Planted swale	No	No	Not applicable
820	Recreation	Neighbourh	Passive Reserve Level 2 Moderate	Wattledale Park	53708	Yes	Yes	Irrigated reserve	Not Applicable	Provides good amenity. No change	No	No	Not applicable
824	Recreation	Local	Passive Reserve Level 3 Low	Langer Park	53618	Yes	Yes	Small POS, limited options to reduce irrigation.	Not Applicable	Provides good amenity. No change	Not Applicable	No	Not applicable
836	Nature	Regional	Natural Area Wet		36339	No	No	Southern portion of Wungong Walk Trail, part river, part paddock	No	Part of Wungong Project	Yes	No	
837	Nature	Regional	Natural Area Wet		37778	No	No	Central portion of Wungong Walk Trail, part river, part paddock	No	Part of Wungong Project	Yes	No	
840	Nature	Regional	Natural Area Wet		53354	No	No	Northern portion of Wungong Walk Trail, part river, part paddock	No	Part of Wungong Project	Yes	No	
841	Nature	Local	Natural Area Wet	Palomino Park	36180	Yes	No	Horse training	Not Applicable	Provides good amenity. No change	Not Applicable	No	Not applicable

Scoring Table - DRY PARKS

	Other Upgrades in the reserve: Is the reserve included in PIP / Next Priorities?	Is the reserve part of other recent or upcoming project upgrades / renewals?	Need for improvement to meet PFS (from dry park: 1 - Low; 5 - Average; 10 - High	Water Sourcing: 1 - No water or water source; 5 - Further water investigation required; 10 - Water source and water available	Will other improvements, increase the quality of this reserve? 10 - Environmental improvements (drainage /bush reveg/mass planting) or (reduce irrig/native planting); 5 - Tree planting; 7- Recreational improvements	Comments	TOTAL DRY PARK	RANK
Points	5 / No	5 / No	1 / 5 / 10	1 / 5 / 10	10 / 5 / 7			
421							0	91
429	5	No	10	5	17		37	3
431	5							
437	5	No	10	5	17		37	3
438	5	No	10	5	17		37	3
440	5	No	10	5	12		32	14
442	5	No	10	5	17		37	3
445	5	No	10	5	17		37	3
446	5	No	10	5	17		37	3
450	5	No	10	5	17		37	3
451	No	No	10	1	17		28	18
452	No	5	10	5	17		37	3
466	No	No	5	1	17		23	32
645	No	No	5	1	5		11	86
740	No	5	5	1	17		28	18
802	No	5	10	5	17		37	3
805	No	5	10	10	7		32	14
817	5	No	1	1	10		17	52
836	No	5	1	1	17		24	27
837	No	5	1	1	17		24	27
840	No	5	1	1	17		24	27

Scoring Table - Hydrozoning Improvement Framework

	Other Upgrades in the reserve: Is the reserve part of other recent or upcoming project upgrades / renewals?	Need for water saving (is water being wasted): 1 - Low; 5 - Average; 10 - High	Water allocation after water saving methods have been implemented: 10 - The hydrozoning result in additional water allocation for other POS areas scheduled for improvement in DPIF or other scheduled improvements; 5- The hydrozoning may result in additional water allocation (not yet determined where); 1 - The hydrozoning will result in improvements in the POS only	Comments	Total	Rank
Points	5 / No	1 / 5 / 10	10 / 1 / 5			
423	5	5	1	Community Consultation Required	11	12
443	No	10	5		15	6
461	No	5	5		10	19
462	No	5	5		10	19
463	No	5	1		6	31
464	5	5	10		20	3
465	5	5	10		20	3
474	No	1	5	Community Consultation Required	6	31
475	No	1	5	Community Consultation Required	6	31
476	5	1	5	Community Consultation Required	11	12
477	5	1	5	Community Consultation Required	11	12
478	5	1	5	Community Consultation Required	11	12
481	No	1	5	Community Consultation Required	6	31
482	No	1	5	Community Consultation Required	6	31
783	No	5	5		10	19

Attachment C – Dry Park Improvement Framework and Hydrozoning Improvement Framework

Dry Park Improvement Framework

Reserve Name	Reserve Number	Rank	PFS Classification		Maintenance Classification	Recent or upcoming other works	Current Proposed LTFP funding	Irrigation water source available or investigation required	Proposed Improvements	Proposed Staging and Funding (additional to any proposed LTFP funding) (Subject to further review as detail is obtained regarding water source) 2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	Estimated Increase to the Yearly Maintenance Cost
Bavich Reserve	31596	1	Local	Recreation	Passive Reserve Level 4 Dry	Yes in progress - 2021	Existing budget	Available	Irrigation and turf to enhance upcoming works	Implementation Planning	D+D	$ 50,000					$ 2,130
Robin Park	34901	1	Local	Recreation	Passive Reserve Level 4 Dry	Yes in progress - 2021	Existing budget	Available			D+D	$ 50,000					$ 2,485
Wilcannia / Toongabbie Park	31566	3	Neighbourhood	Recreation	Passive Reserve Level 2 Moderate	Proposed - 2022/2023	$50,000	Investigation required	Investigated irrigation source and consider environmental and recreational improvements			D + D	$ 150,000				$ 7,285
Pelham Reserve	36873	3	Neighbourhood	Recreation	Passive Reserve Level 4 Dry	No works scheduled	$0	Investigation required						D + D	$ 150,000		$ 8,952
Migrant Park	2121	3	Neighbourhood	Recreation	Passive Reserve Level 2 Moderate	Yes completed - 2019	$0	Investigation required						D + D	$ 150,000		$ 34,857
Derry Reserve	25699	3	Neighbourhood	Recreation	Passive Reserve Level 2 Moderate	Proposed - 2023/2024	$100,000	Investigation required					D + D	$ 150,000			$ 18,302
San Jacinta Reserve	41640	3	Neighbourhood	Recreation	Passive Reserve Level 2 Moderate	Proposed - 2023/2024	$350,000	Investigation required					D + D	$ 100,000			$ 16,172
Dawson Reserve	30165	3	Neighbourhood	Recreation	Passive Reserve Level 2 Moderate	Proposed - 2022/2023	$100,000	Investigation required				D + D	$ 150,000				$ 11,173
Cam Clay Reserve	51071	3	Regional	Nature	Natural Area Wet	Wungong Walk Trail (part)	$0	Investigation required							D + D	$ 150,000	$ 16,920

Hydrozoning Improvement Framework

Reserve Name	Reserve Number	Rank	PFS Classification		Maintenance Classification	Recent or upcoming other works	Current Proposed LTFP funding	Where can water saved by utilised?	Proposed Hydrozoning	Proposed Staging and Funding (additional to any proposed LTFP funding) (Subject to further review as detail is obtained regarding water source) 2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	
Ashworth Park	43920	1	Local	Recreation	Passive Reserve Level 3 Low	Proposed 2021/2022	$100,000	Harber Park (requries additional allocation)	Reduce turf and increase swale planting	Implementation Planning	D+D	$ 30,000					No change due to hydrozoning
Batt Park	43920	1	Local	Nature	Natural Area Dry	Proposed 2021/2022	$50,000				D+D	$ 30,000					
Corondale Park	44185	3	Local	Nature	Natural Area Dry	Proposed 2021	Existing budget	Ticklie Park (currently a dry reserve with proposed irrigation - requires additional allocation)	Reduce turf and increase swale planting			D + D	$ 200,000				
Don Simmons Reserve	41611	3	Neighbourhood	Recreation	Passive Reserve Level 2 Moderate	Yes - 2021	Existing budget	Dawson Park / Pelham Reserve (Dry reserves)	Reduce turf and increase tree planting/mulch areas				D + D	$ 100,000			
Teal Brook Park	46675	6	Local	Recreation	Passive Reserve Level 3 Low	No works scheduled	$0	Barry Poad (currently a dry reserve with proposed improvements)	Reduce turf and increase swale planting					D +D	$ 75,000		
Kuhl Park	35636	6	Neighbourhood	Recreation	Passive Reserve Level 2 Moderate	No works scheduled	$0	Water to be better utilised in Kuhl	Potentially improvements in POS only				D + D	$ 75,000			
Hesketh Park	46675	6	Local	Nature	Natural Area Dry	No works scheduled	$0	Barry Poad (currently a dry reserve with proposed improvements)	Reduce turf and increase planting					D +D	$ 75,000		
Massell Park	49372	6	Local	Recreation	Passive Reserve Level 3 Low	No works scheduled	$0	Harber / Horrie Hill / Flematti	Reduce turf and increase basin planting						D + D	$ 75,000	
Bronzewing Reserve	41316	6	Local	Recreation	Passive Reserve Level 3 Low	Proposed 2022/2023	$75,000	Harber / Horrie Hill / Flematti	Prioritise turf improvements			D + D	$ 75,000				
Wallaby Reserve	41325	6	Local	Recreation	Passive Reserve Level 3 Low	Proposed 2022/2023	$75,000	Harber / Horrie Hill / Flematti	Prioritise turf improvements			D + D	$ 75,000				

NOTE: The estimated costs do not include improvements in the other POS where water may be utilised.

						estimated increase to yearly maintenance cost
$ 160,000	$ 650,000	$ 425,000	$ 450,000	$ 225,000	$ 118,275	
TOTAL Proposed Dry Park Improvement + Hydrozoning Improvement (excl. GST)				$ 1,910,000		

Irrigation Audit

Task	Reserve Number	Rank	PFS Classification	Maintenance Classification	Recent or upcoming other works	Current Proposed LTFP funding	Where can water saved by utilised?	Proposed Hydrozoning	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	
Irrigation Audit									$ 40,000							

Notes:
1: Westfield Heron ranked 3 in the Dry Park Improvement Framework, however given the extent of upgrade proposed for 2021 no further works are proposed at this stage

2: D + D = Design and Documentation year
3: All of the parks listed in the Hydrozoning Improvement Framework are located within the City of Armadale sub-area (fully allocated, therefore water sourcing to be reviewed)

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