

TABLE OF CONTENTS

Executive Summary	4
Purpose of the Review	4
1. Purpose of the project	6
2. The latter task was not covered in this report and will be carried out pending Council's decision. Background Information	6
2.1. Council Planning Context	6
2.2. State Government Regulatory Context	7
2.3. City of Karratha Regulatory Context	7
3. Planning of DEAs	8
3.1. Our Relationship With Dogs	8
3.2. Benefits and Challenges of Dog Exercise Areas (DEAs)	9
3.2.1. Demand for Fenced DEAs	10
3.2.2. Dog socialisation requirements	10
4. About the City of Karratha	10
4.1. Dog Ownership	10
4.2. Demographics	11
4.3. The Impact of Location and Climate	12
4.1. Land Supply	13
4.2. Dog Exercise Areas (DEAs)	13
4.2.1. DEAs in the City of Karratha	13
4.2.2. How Karratha Compares with Other LGAs	15
4.3. Project Survey Findings	15
5. Analysis of Findings and Recommendations	16
5.1. Existing DEAs	16
5.2. Potential Additional and/or Fenced DEA	19
5.2.1. Overview	19
5.2.2. Site Assessment	19
5.2.3. Mulataga and Wickham	22
5.3. Other Matters	23
5.3.1. Signage and Written/Digital information	23
5.3.2. Dog Control Regulations	23
5.3.4. Consistency of Site Referencing	24
5.3.5. Provision of Dog Litter Bags and Bins	24
5.3.6. Resourcing of Compliance Monitoring Services	24
5.3.7. Caravan Parking	24
7. The Future – Policy and Planning	25
7.1. Provision Opportunities	25
7.2. The Principles that Will Guide the Planning of DEAs	26
7.3. DEA Planning Framework	27
7.3.1. Design Requirements and Service Level Guidelines for DEAs	27
7.3.2. Estimated Cost of Fenced DEAs	29
8. How the DEA Plan was Prepared	30
9. Implementation and Review of the DEA Plan	30

10. Warranties and Disclaimers	30
11. Attachments	31
Attachment 1 – Summary of Recommendations	31
Attachment 2 - Dog Population Data and Projections	33
Attachment 3 – Expanded Summary of Project Survey Results	34
Attachment 4 – Summary of Existing DEAs	37
Attachment 5 – Fenced DEA Site Assessment Criteria and Summary	40

DEFINITIONS			
Term	Definition	Term	Definition
The City	City of Karratha	MRWA	Main Roads WA
DDA	Australian Disability Discrimination Act 1992	OSMP	Open Space Management Plan/ Levels of Service
DEA	Dog Exercise Area	'Restricted Area' access	Dog off-lead areas with time/access restrictions
Dog Owner	The person in charge of a dog when in a public place	Town of Karratha	The suburb/town as opposed to the City of Karratha
KTMP	Karratha Transport Management Plan	WADA/the Act	Western Australia Dog Act

Executive Summary

Purpose of the Review

The review of Dog Exercise Areas (DEAs) in the City of Karratha was commissioned to establish if there was a need to enhance off-lead opportunities and provide recommendations to address any shortfall.

The objectives of the project were to:

- review existing provision
- establish the rationale that will guide decision-making in relation to the planning and management of DEAs
- establish the need for a dedicated fenced DEA
- establish design requirements for a DEA if this type of facility was deemed necessary
- make recommendations to guide provision.

Methodology

The review involved investigation of council plans and policies to ensure project recommendations aligned with strategic directions in these documents; workshops with council staff; examination of existing DEA provision and design; investigation of potential additional DEA sites; a community survey to identify resident aspirations and perceptions; and incorporation of industry and science-based research.

Baseline Context

Dog numbers

There are 4,184 dogs on the City of Karratha's registration database. According to Animal Medicines Australia (AMA)¹ there could be between 5,033 and 6,030 dogs currently residing in the City, which is up to 40% more dogs than are on the registration database.

Western Australia has a lower level of dog ownership than Australia overall, so the actual number of dogs residing in the City may be on the lower side of AMA projections. However, the unique and changing social/demographic environment in the City of Karratha may account for a lower or higher level of dog ownership than elsewhere in Western Australia.

In 2036 there could potentially be more than 3,000 additional dogs living in the City.

Current Provision

There are eight DEAs in the City. Five of these are in the town of Karratha and three in other towns. Six DEAs are located on sports fields which are owned by the Western Australia Department of Education but managed by the City. Two are located on foreshore areas or riverine environments, and one on a combined oval and foreshore site.

Community Consultation

A community survey was conducted as part of the review, receiving 110 responses. The key findings of the survey were:

- Tambrey and Baynton West Ovals are more frequently used than other DEAs.
- Respondents are more likely to drive to a DEA than walk.
- The preferred location for a new fenced DEA was in Nickol West.
- The most requested inclusions for a fenced DEA were cool surfaces, shade and grass. Only 60% of respondents requested agility equipment inclusion.
- 73% of respondents are 'significantly concerned' about aggressive dogs and owners letting their dog annoy other people in a fenced DEA.
- Over 90% of respondents are 'concerned' or 'significantly concerned' about owners not actively supervising their dogs and/or aggressive/impolite dog owners in a fenced DEA.

The survey findings correlate with broader industry research on fenced DEAs, which highlights shared concerns among dog-owning and non-dog owning communities relating to:

- dog litter
- poor compliance with leashing regulations
- poorly controlled and/or aggressive dogs
- inconsiderate dog owners.

Project survey respondents cited benefits associated with fenced DEAs, however equally respondents cited these same points as a concern:

¹ Based on an average of 1.3 dogs in 40% and 48% of households in 2019/pre Covid and 2021/post Covid respectively across Australia; Pets in Australia: A National Survey of Pets and People; Animal Medicines Australia,

p6. This is based on 2025 REMPLAN provided by council data showing the City to have 9,705 households

- owners can relax more /not worry about their dog (53%/47%)
- owners don't have to worry about their dog annoying other people (55%/40%) or other dogs (35%/65%)
- good for owners who can't control their dogs well (37%/63%).

Analysis of Findings

The key findings of the review are:

- There are very limited opportunities to incorporate additional DEAs and/or a fenced DEA in Karratha, where there will be the greatest increase in dog ownership as the population grows.
- Because of their primary function as a sports field, several existing DEAs:
 - are already primarily fenced or semi-fenced
 - have significant area over which dogs can run; and within which owners could reasonably be expected to 'effectively control' dogs in line with regulations.
- There are opportunities to enhance existing DEAs, particularly in relation to shade, amenity and sensory tree/vegetation plantings

The review concludes there is not a substantiated need for a fenced DEA, however there is clear community desire for one. This desire is primarily based on the want for assistance with controlling dogs and prevention of them running off, and having access to a dedicated site without the access restrictions of current DEAs located on sports fields.

It is important to note the perceived benefits of a fenced DEA, as cited by survey respondents and noted in research, relate to an inability or lack of willingness of owners to control dogs in line with regulations, and to actively supervise dogs. The review offers recommendations to address these behavioural challenges, regardless if a new fenced DEA is established.

Recommendations

Two additional sites have been identified for consideration to address gaps in DEA provision: Richardson Way Park (Karratha) and the Mulataga foreshore. These sites will provide Karratha residents with more options, including a desire for unrestricted access, and meet increased demands associated with the new subdivision in Mulataga.

If a DEA was to be established at Richardson Way Park, then it would be prudent to consider fencing or partial fencing given:

- the proximity to Bayview Road
- the need to separate a DEA from other activities that may need to be accommodated at the Richardson Way Park.

Richardson Way Park is the most suitable and centrally located site for a fenced DEA if the City deems it appropriate, based on the report to proceed with installation. This is because the site has a good profile to a main road, and provides the best scope for incorporating a large enough DEA as well as other infrastructure such as car parking etc.

Other recommendations provided by this report relate to:

- Enhancing landscaping and other physical improvements to existing DEAs
- Increasing dog control monitoring and compliance at certain DEAs.
- Considering closer monitoring of compliance with leashing regulations in the town of Wickham
- Improving signage at DEAs, providing online information about DEAs, and establishing guidelines for signage installation.
- Defining 'dog control' in local laws and introducing rules for fenced DEAs.
- Ensuring consistent and accurate naming of reserves.
- Establishing guidelines for providing dog litter bags and bins.
- Reviewing resources to support effective dog control compliance.

1. Purpose of the project

LMH Consulting/Paws4Play was engaged to undertake a review of the City's off-lead areas with a focus on:

- reviewing the existing provision of dog exercise areas (DEAs) in the City of Karratha (City)
- assessing the need for future dog exercise areas
- evaluating sites for possible inclusion of a fenced DEA
- documenting key design requirements for a fenced DEA
- an action plan to address project findings
- preparing a concept design and an estimate of probable costs for the construction of a fenced DEA.

2. The latter task was not covered in this report and will be carried out pending Council's decision. Background Information

2.1. Council Planning Context

The City has prepared several documents that provide the strategic planning context for this project. Together they articulate objectives and recommendations relating to:

- responsible planning and management of built and natural assets
- ensuring the economic, social and environmental resilience of the City and its communities
- enhancing and protecting natural assets
- optimising access for all ages and abilities
- adapting to a changing demography and strengthening communities.

The following four documents contain themes, objectives and/or recommendations with implications for the project.

Strategic Community Plan 2020-2030

Key themes relevant to the project:

- Maintain and manage infrastructure to optimal standards
- Activate neighbourhoods and public open spaces
- Develop safer community programs and partnerships
- Enforce legislative requirements.

Key implications for the project:

- Service levels for DEAs must be well-defined
- Use of open space to be optimised and unnecessary duplication minimised
- Dog control regulations to be enforced
- Effective communication of dog owner responsibilities and regulations.

Strategic Asset Management Plan, 2019-2024

Key themes relevant to the project:

- Asset planning must consider current and future needs and capacity to provide
- Service levels need to be defined
- Provision needs to be fit-for-purpose
- Assets must be competently, responsibly and sustainably managed.

Key implications for the project:

- Feasibility assessment for DEAs will be based on justifiable/valid 'needs assessment' criteria that addresses community aspirations, science-based evidence and governance considerations
- Planning and design of DEAs will be in line with codes of practice and industry 'good practice'.



Revitalisation Strategy: Pegs Creek, Millars Well & Bulgarra

Key themes relevant to the project:

- A priority on improving liveability and amenity including a focus on urban greening
- Further assessment of Richardson Way Park to determine the need to retain.

Key implications for the project:

- Strategies that optimise amenity/the enhancement of amenity including:
 - the greening of DEAs and areas owners walk dogs

Other documents that have informed the project:

- City of Karratha
- Public Health Plan, 2022-27
- Dogs Local Law, 2019
- Disability Access and Inclusion Plan, 2024-29
- Age Friendly Strategy, 2021-26
- Local Planning Strategy, 2021
- Council Resolution (DEAs) Dec. 2018
- WA State Government
 - Dog Act, 1976
 - Dog Regulations, 2013
 - Litter Act, 1979

2.2. State Government Regulatory Context

This section provides an overview of the state government dog regulations that apply to the management and control of dogs. These regulations are in place to ensure, as best as possible, the safety of the public, dog owners and dogs that frequent public places.

The Western Australia Dog Act (1976) requires the following in relation to the control of dogs:

- A dog:
 - must not be allowed to chase or attack a person or another dog.²
 - must be on-lead and held by a person capable of controlling the dog when in a public place³.
 - can be temporarily tethered by a lead not exceeding two metres⁴.
- A dog is exempt from the above requirements if it is:
 - in a designated DEA

- in an area outside the metropolitan region or outside a townsite, unless the site is designated as a 'rural leashing' area⁵
- in or on a vehicle
- being exhibited for show purposes
- participating in an obedience trial or classes.

The Western Australia Dog Regulations (2013):

- Requires dogs to be restrained by leash no more than two metres in length other than when in a designated DEA
- Prescribes the following as restricted breed dogs for the definition of dangerous dog (restricted breed):
 - dogo Argentino
 - fila Brasileiro
 - Japanese tosa
 - American pit bull terrier
 - Pit bull terrier
 - perro de presa Canario or presa Canario.

Section 49 of the Dog Act allows council to create Local Laws for the purpose of implementing requirements of the Act.

Local Laws may relate matters such as the number of dogs any one person is allowed to take into either a fenced or unfenced DEA; restrictions relating to the age of children allowed in a fenced DEA and the taking of food into the DEA. Local Laws also allow for the City to provide greater clarity around terminology such as 'effective control'.

2.3. City of Karratha Regulatory Context

In line with the Dog Act⁶, dogs must be on-lead within town boundaries unless in a DEA. Dogs can be off-lead outside of town boundaries other than sites the City declares as on-lead or as 'dogs prohibited'.

Dogs must be kept 'under control' when off lead; are not permitted on DEAs located on sports fields when sport or other community related activity is occurring; and are not allowed in children's play areas.

² Western Australia Dog Act 1976, section 33 (D)

³ Western Australia Dog Act 1976, section 31(1)

⁴ Western Australia Dog Regulations

⁵ Western Australia Dog Act 1976, section 31(2B)

⁶ Western Australia Dog Act, 1976, section 31

In December 2018⁷ the City declared the following as 'dog prohibited' areas, other than for assistance dogs:

- foreshore areas:
 - Town Beach (Lot 289 Miller Close), Point Samson
 - Honeymoon Bay, Point Samson
- public environments:
 - public buildings, unless permitted by a sign
 - a theatre or picture garden
 - food premises or food vehicle, except alfresco dining areas
 - public swimming pools.

Dog owners can be penalised under the Litter Act⁸ for not picking up dog litter and/or not disposing of it responsibly.

The Local Law⁹ limits the number of dogs that can be kept on any single premises but there are currently no council restrictions as to the number of dogs that one person can let off-lead in a DEA.

3. Planning of DEAs

3.1. Our Relationship With Dogs

Dogs are a significant part of many households, however community attitudes towards dogs in public places varies, and levels of comfort and tolerance can differ significantly. In very general terms, the following can be used to define, how segments of the community may differ in terms of sentiment and perceptions towards dogs¹⁰:

- The dog owning community
- This segment of the community mostly comprises owners of some 100 breeds of dog that live in almost half of Australian households. It also includes owners of show or event dogs and working dogs. Opinion varies widely in this segment as to expectations and practice relating to dog control.
- Non-dog owners who are not averse to contact with dogs

This segment of the community has varying attitudes perceptions relating to dog control. Overall, they are

comfortable interacting with dogs, but this will vary in terms of the type of contact they are prepared to have and in what environments.

- Non-dog owners who are averse to contact with dogs

This segment of the community does not want any contact with dogs when in a public place. They may have a fear of dogs or dislike them for reasons of cultural or hygiene, dislike of animals more generally.

- Dog trainers/educators

This is the segment of the community involved in providing education, training or behaviour modification, or support services relating to or involving dogs. They may be commercial providers or community-based or not-for-profit providers (e.g. obedience clubs, in-school therapy dog workers). The majority of these providers are also dog owners

Fair and equitable access to public places requires an appreciation of the needs and concerns of each of these community



⁷ Council Amended Resolution No 154239, December 2018

⁸ Western Australia Litter Act, 1979; Part IV - Prevention of Litter

⁹ City of Karratha Dogs Local Law, Adopted by council 29/4/2019; No 54

¹⁰ LMH Consulting/Paws4Play research 2014-2023; various LGAs including Melton, Yarra Ranges, Stonnington, Banyule, Maroondah, Central Coast (NSW), Joondalup (WA)

segments. It should also be noted that attitude, perceptions and expectations can vary significantly *within* each segment.

3.2. Benefits and Challenges of Dog Exercise Areas (DEAs)

The fencing of a DEA should not be considered primarily in response to requests from owners who cannot or will not control dogs in line with dog control regulations. The very nature of these regulations means that owners should have effective recall over their dog and be able to prevent their dogs from running off. If owners cannot be assured of this, then it is expected that dogs will remain on-lead for their own safety and the comfort/safety of other people and dogs.

Effective planning of DEAs needs to consider the following:

- fair, including comfortable, and equitable access to public open space for the community
- dog behaviour and dog owner attitudes and practices
- the level of compliance with dog control regulations the City will be accepting of
- policy relating to optimising the use of public open space or minimising use for a single purpose
- the merits of fencing or not fencing DEA based on reputable information and knowledge
- the type and level of provision that will be made in consideration of the above factors.

Fencing or partially fencing an area for a DEA is of merit when:

- LGAs want to provide for dogs off-lead where otherwise it is not possible or safe to do so. For example, when a DEA may be proximity to a road, playground, commuter cycle pathway
- there is a need to reduce conflict between dogs and other activities in parks or sensitive habitat environments.

However, the benefits of fenced over unfenced DEAs as perceived by some dog owners is often contrary to:

- to the experience of some agencies responsible for enforcing compliance with regulations and managing risk in DEAs
- good open space and dog management practice.

Contrary to popular belief it is necessary that owners more actively monitor their dog in a fenced DEA than when in an unfenced DEA and only take exercised and well-socialised dogs into a DEA. This is because the often small and confined nature of many fenced DEAs, significantly increases the likelihood of intense dog-on-dog activity.

The management challenges associated with the fencing of DEAs are as follows:

- they attract more owners with poorly controlled/educated dogs
- owners are less inclined to actively monitor or engage with their dogs, and intervene proactively in dog-on-dog confrontation and more likely to socialise or be preoccupied on devices



- heightened risk management issues, as compared to unfenced DEAs associated with dogs being left unattended, children and toddlers, dog-on-dog and dog-on-person bites/attacks
- a perception by some owners that dog control regulations do not apply in fenced DEAs
- overcrowding during social meetup times, especially if the DEA is small, and when used by breed specific groups and commercial dog walkers
- high establishment costs and ongoing maintenance requirements
- increases pressure/resourcing of compliance monitoring, complaint resolution and legal engagement
- prevents shared use of the space
- can increase expectations by the community that fenced DEAs will become the norm and not the exception, and will be provided for owners who cannot/will not control dogs in line with regulations.

3.2.1. Demand for Fenced DEAs

Several factors have influenced the proliferation of fenced DEAs in Australia. Most of these factors are not informed by good practice or advice from reputable dog trainers and or behaviourists. Steve Austin a highly regarded Australian dog trainer and advisor to local and state governments and government agencies in Australia and internationally, discourages the fencing of DEAs for the reasons cited in this report.

Some councils cite 'community demand' for installing fenced DEAs and some councils feel a pressure to do so because it is a trend across local government. Caution must be taken if these reasons are the primary basis for installing DEAs because it is without the full picture relating to dog and human behaviour in these environments.

For example, research with an eastern Melbourne LGA¹¹ identified that pressure for the fencing of a DEA came from people who couldn't control their dogs in line with dog control regulations. The proposal to

install a fenced DEA, which did not proceed, would have in effect been reinforcing poor attitudes to dog control and non-compliance with regulations.

Of note, the same research demonstrated that most dog owners would continue to use the unfenced off-lead area and not the proposed adjoining fenced DEA because of safety concerns relating to poor dog control.

3.2.2. Dog socialisation requirements

A commonly held misconception is that dogs require regular off-lead activity with other dogs to be well-socialised. Socialisation is a very important component of puppy development. However, when a dog matures an even more important component of socialisation is familiarisation with the environment in which they reside, especially if it is an urban environment.

This means ongoing exposure to sound and visual stimuli associated with traffic noise and movement; open stairways; close contact with people, prams, bikes; and other dogs encountered behind residential fence lines, along a trail or at a sporting event¹².

The DEA provides an opportunity for dogs to engage with other dogs and other people, however, the DEA does not need to be fenced to achieve dog socialisation outcomes. In terms of exercise, most breeds of dog can be adequately exercised by on-lead walks of a duration suitable to the breed of dog. This type of exercise may well be limited to 5-6 months of the year in Karratha because of the heat and so provision of DEAs whether fenced or unfenced is particularly relevant.

4. About the City of Karratha

4.1. Dog Ownership

There are 4,184 dogs on Council's registration database. According to Animal Medicines Australia (AMA)¹³ there could be between 5,033 and 6,030 dogs currently residing in the City, which is up to 40% more dogs than are on the registration database. This range is accounted for by the Covid

¹¹ LMH Consulting/Paws4Play research; City of Whitehorse, 2020

¹² Steve Austin;
<https://www.news.com.au/lifestyle/home/pets/dogs-should-pass-tests-to-use-offleash-parks-says-expert/news-story/fd2bfcc6fbb78b4eee916cf0ea3e2c60>;
www.austinsdogtrainingeducation.com.au/about-steve-austin

¹³ Based on an average of 1.3 dogs in 40% and 48% of households in 2019/pre Covid and 2021/post Covid respectively across Australia; Pets in Australia: A National Survey of Pets and People; Animal Medicines Australia, p6. This is based on 2025 REPLAN provided by council data showing the City to have 9,705 households

pandemic which saw an almost 9% increase between 2019 and 2022 in the number of households owning a dog.

Western Australia is reported to have a low level of dog ownership (34% of households) compared to other Australia states according to a pet industry survey. This compares to South Australia at 48%, Vic/Tas at 43%, Queensland at 40% and NSW at 35% of households.¹⁴ Therefore, the actual number of dogs residing in the City may be on the lower side of AMA projections.

However, the unique and changing social/demographic environment in Karratha may account for a lower or higher level of dog ownership than elsewhere in Western Australia. The City has a high proportion of transient workers and single person households, which typically have fewer pets than other households. However, there is a growing number of family/longer term and higher income households in the City which are generally associated with higher levels of pet ownership.

In addition, dog ownership is reported to be significantly higher in indigenous communities with 65% of indigenous households claiming to own a dog¹⁵. It is also likely the City has a significant number of 'community dogs' in these communities.

The suburbs with the highest dog registrations are Nickol/Nickol West (1,117 dogs) Baynton/Baynton West/Madigan (917 dogs) and Bulgarra/Mulataga (580 dogs). The suburbs with likely more dogs than are currently registered with the City are the suburbs of:

- Bulgarra/Mulataga with potentially between 400-594 more dogs than are registered
- Baynton/Baynton West/Madigan with potentially between 192-412 more dogs than are registered
- Pegs Creek/Millars Well/Karratha CBD with potentially between 211-407 more dogs than are registered.

According to Animal Medicines Australia there could be between 5,836-6,991 dogs residing in the City by 2036, nearly 3,000 more than currently reside in the LGA. This will add to the pressure on the City's limited green open space likely expected from

other recreation and sport activities in the future.

4.2. Demographics

REMPPLAN information provided by council indicates the population of the City will increase from 27,618 in 2025 to 30,416 by 2026.

According to ABS data, 2021 females represented 45.8% of the population and males 54.2% compared to 50.3% and 49.7% respectively. Compared to Western Australia as a whole, Karratha had:

- a 2.5% or greater proportion of the population in the following age groups:
 - 0-4 (8.4%/6.1%) with a 2.3% difference
 - 5-9 (9.3%/6.5%) with a 2.8% difference
- A greater proportion of the population in the Gen Z/Millennial age groups being:
 - 25-29 (8.1%/6.6%) with a 2.5% difference
 - 30-34 (10.4%/7.4%) with a 3.0% difference
 - 35-39 (10.8%/7.6%) with a 3.2% difference
- A greater proportion of:
 - Individuals identifying as indigenous (11.7%/3.3%)
 - family households (75.1%/71.2%) and families with children (55.9%/44.6%)
 - both parents working full time (34.3%/21.2%)
 - families with two (43.9%/39.1%) or three (25.9%/20.7%) motor vehicles
 - rental households (60.7%/27.3%)
 - households with an income more than \$3,000/wk (53.7%/25.6%)

These demographics are very closely aligned to the demographic cohorts that are most likely to own a pet according to an Animal Medicines Australia report¹⁶ that highlights pet owners more likely to:

- identify as Aboriginal and/or Torres Strait Islander (87%)
- be from households:
- with children under 18 years of age (86%)

¹⁴ Most Insured States in Australia; www.petinsuranceaustralia.com.au/most-insured-states-in-australia/

¹⁵ Understanding Relationships with Dogs in Australian Aboriginal Communities to Inform Effective Dog

¹⁶ Population Management; G. Ma, J. Ford et al; PubMedCentral; [pmc.ncbi.nlm.nih.gov/articles/PMC7278576](https://pubmed.ncbi.nlm.nih.gov/articles/PMC7278576)

¹⁶ Pets in Australia: A national survey of pets and people, 2022

- with incomes of \$100,000 or more (82%)
- in rural or regional locations (74%)
- be Gen Z (18-24 years) or Millennials (25-39 years) (80%)

The alignment of demographic data and pet ownership profile matters relating to pets, and in particular dogs, continue to be a community safety and amenity consideration.

4.3. The Impact of Location and Climate

Temperature in Karratha varies from extreme in the hot season that can last for around 6 months, September through to April. During this time temperature averages 35 degrees+ centigrade.

Karratha experiences extreme seasonal variation in the perceived humidity. The period of greatest humidity is the six months November through to April with January through February experiencing humidity in excess of 90%.

The cool season lasts for approximately three months, June to August, with daily high temperatures averaging below 28 degrees centigrade.

Karratha has very clear skies for approximately eight months of the year April through to January and experiences extreme seasonal variation in the perceived humidity.

Rainfall is greatest during summer and autumn and least during winter and spring. Tropical cyclones cause the most extreme rainfall events and generate 25–34% of the total annual rainfall near the Pilbara coast.

Climate projections for the Pilbara, are that temperatures will continue to rise, and the intensity of heavy rainfall events will increase.

To optimise use of outdoor recreation facilities including DEA a priority needs to focus on creating and enhancing natural environments that help to alleviate the intense nature of the City's environment. This is a challenge in an extreme climate without significant investment in turfing/greening parkland and tree plantings to establish significant shade canopies that will extend and encourage greater use of outdoor amenities. This applies equally to DEAs as it does to other parkland environments whether fenced or unfenced.

If council determines to establish fenced DEAs irrigated grass surfaces, intensive shade

plantings will be a priority as will investment in strong linear plantings of shade trees in existing unfenced DEAs. The latter will enhance existing DEA environments and extend hours of the day when it is comfortable for dog walking activities.

If fencing of DEAs is proposed, then measures must be taken to ensure fencing does not impede storm water drainage channels because of debris build up. As with other parkland infrastructure, fenced DEA infrastructure will need to be protected from overland/drainage water flow especially during the rainy season.



4.1. Land Supply

Remplan data¹⁷ forecasts the number of households to increase by 1,546 between 2025 and 2036 with the most significant increases occurring in the following catchments:

- Bulgarra/Mulataga
- Baynton/Baynton West/Madigan
- Pegs Creek/Millars Well/Karratha CBD
- Nickol/Nickol West

According to the City of Karratha Business Plan, the City is experiencing another resource-driven boom, resulting in a housing shortage and diminishing stock of vacant land. The construction of residential lots in Mulataga is seen as critical to meeting the projected demand for new housing and offers an opportunity to provide a mix of opportunities in terms of allotment size and housing type ¹⁸.

4.2. Dog Exercise Areas (DEAs)

4.2.1. DEAs in the City of Karratha

There are eight DEAs in the City located at:

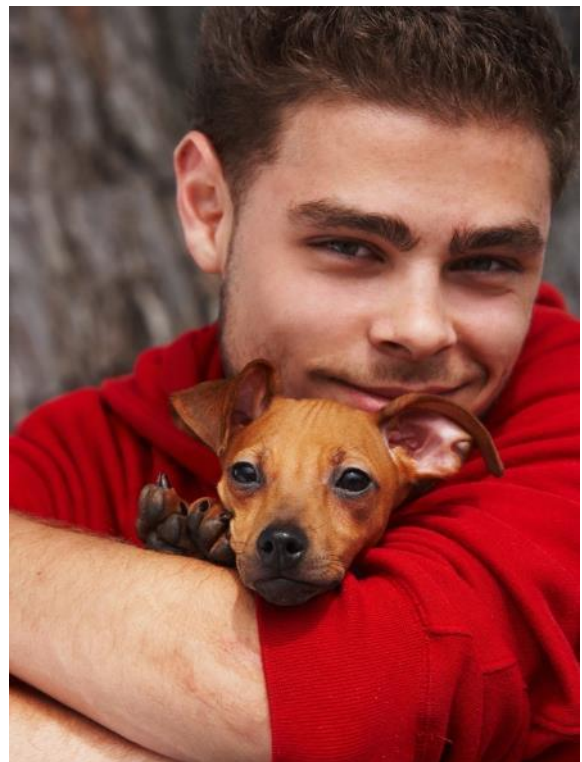
- Baynton West Reserve (sports field)
- Bulgarra Recreation Reserve (Multi-purpose sports field)
- Dampier Recreation Reserve (sports field) and adjacent foreshore
- Tambrey Recreation Reserve (sports field)
- Millar's Well Recreation Reserve (sports field)
- Peg's Creek Reserve (sports field)
- Point Samson Foreshore
- Harding River Environs, Roebourne

Five DEAs are in the town of Karratha and three are in other towns. Six DEAs are located on sports fields which are owned by the Western Australia Department of Education but managed by the City.

Two are located on foreshore areas or riverine environments, and one on a combined oval and foreshore site. The DEAs located on sports fields and extended surrounds, are between approximately 1.0-2.0 hectares in size.

Dogs are not permitted on sports fields when sport training and competition or other community events (e.g. gymkhanas, music festivals, circuses) are taking place.

In line with a joint use/licence agreement with the Department of Education schools have exclusive use of sports fields 7.00am - 3.30pm on school days.



¹⁷ REMPLAN data supplied by the City of Karratha, November 2024

¹⁸ City of Karratha Business Plan, (no date reference)

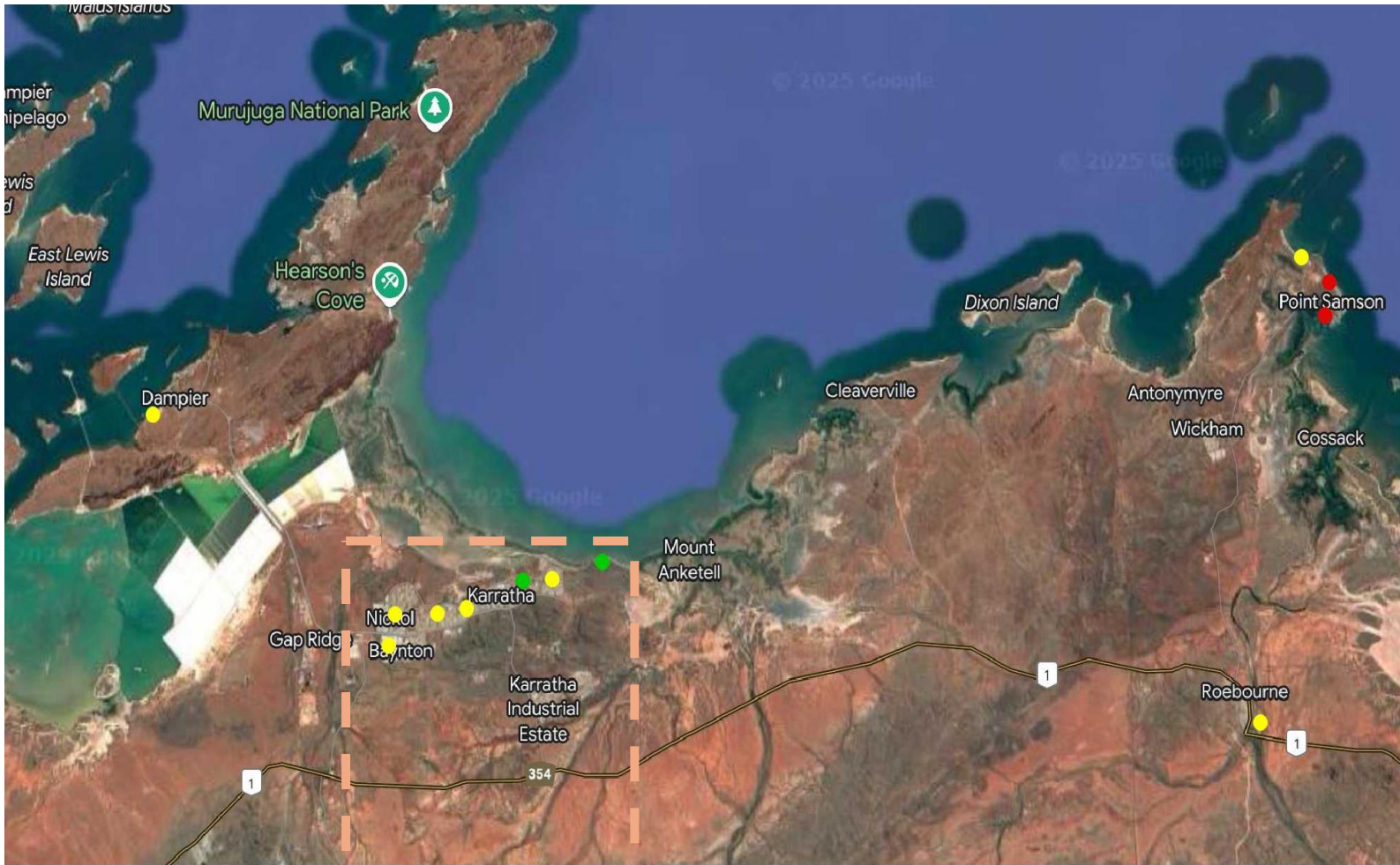
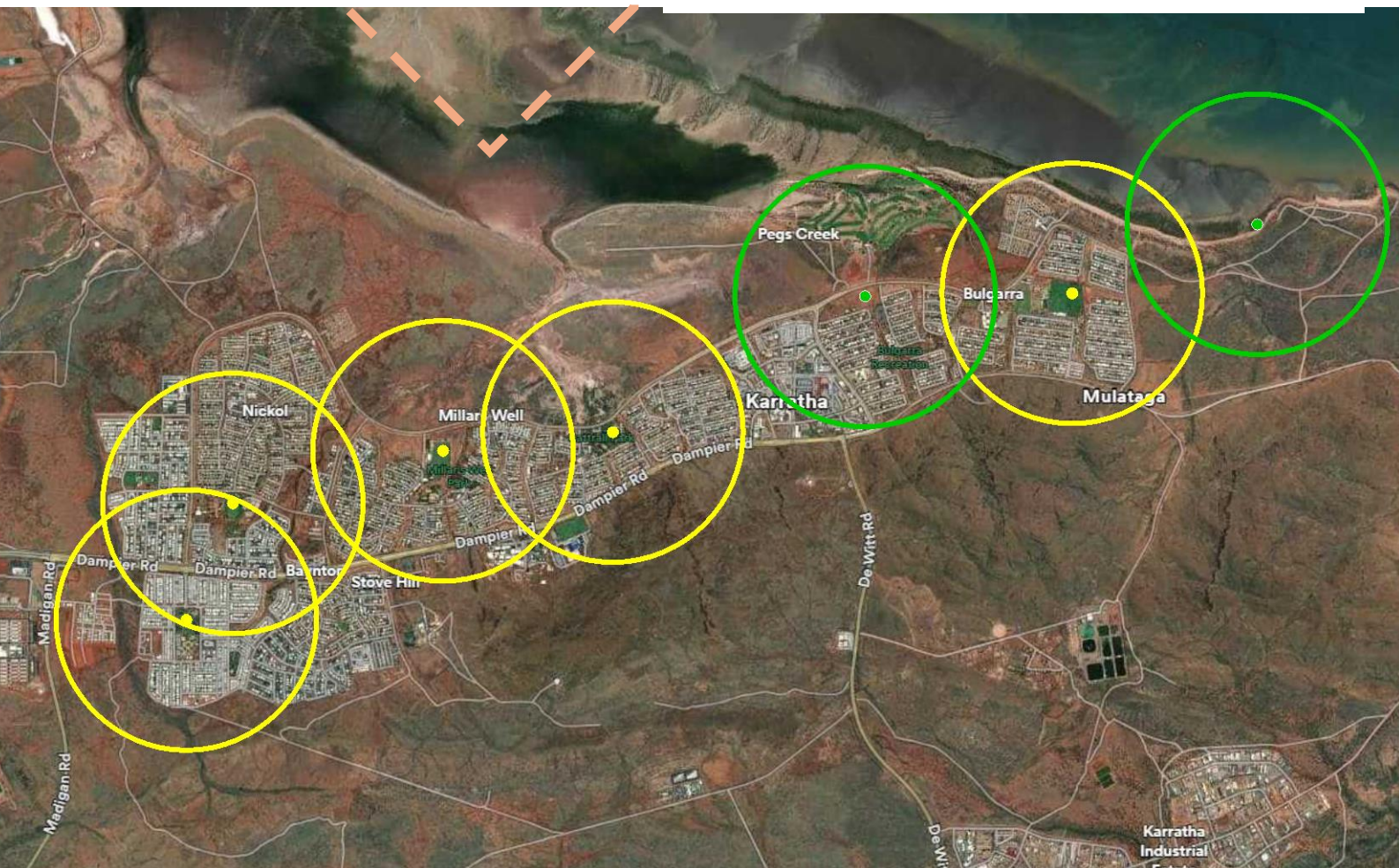


Image above: Location of City of Karratha DEAs (8)

Refer enlargement below
for DEAs in Karratha
township

Image below: Town of Karratha DEAs and proposed DEAs



4.2.2. How Karratha Compares with Other LGAs

A desktop review of nearby LGAs indicates that of the 50 DEAs across the six municipalities only one LGA has a fenced DEA (Port Headland).

In metropolitan areas there are often more fenced DEAs than in rural areas because some councils want to make provision for dogs off-lead but have limited open space in which to incorporate a DEA.

A review of DEA provision by Melton City Council (Vict.) identified that across the six councils surveyed, one in three DEAs were fenced.

However, the ratio of fenced to unfenced varied greatly between LGAs, as did the number of DEAs overall, the size of fenced areas, and the rationale/research that did or didn't inform provision.

Table 1 – Off-lead provision by adjoining LGAs			
LGA	OFF-LEAD AREAS		DOGS PROHIBITED/ RESTRICTIONS
	UNFENCED	FENCED	
Ashburton	9	0	Public buildings, theatre gardens, food premises, swimming pools public toilets, cemeteries
Broome	14 Plus most of foreshore	0	1 site plus, within 10 mts of a playground
Carnarvon	7	0	2 sites plus, cemeteries, school, swimming pools, playgrounds, and public buildings
Derby-West Kimberly	9	0	Not listed
Exmouth	7	0	8 sites plus, shopping malls, swimming pool/water park, recreation precinct. (Dogs must be on-lead on sports fields)
Port Hedland	3	1	Public building, shopping centres/ shops, churches

4.3. Project Survey Findings

This section provides an overview of responses from 110 people who completed an online survey conducted as part of the project. Caution should be applied in interpreting the results of the survey because of the small number of respondents.

Like findings from other projects the key findings from the survey are as follows¹⁹:

- The most frequently used environments used for dog related activity are local footpaths in both the cooler and hotter months of the year. As with other outdoor environments use drops during the hotter months. DEAs are not used as frequently as 'a local park' (non-designated DEA) for off-lead activity and only slightly more than a sports field (other than one designated as a DEA).
 - In summary, 67% of survey respondents let their dogs off the lead in a park that is not a DEA, 31% walk their dogs off-lead 'most of the time' and 40% 'sometimes'.
 - At least 80% of respondents are concerned/very concerned about:
 - aggressive dogs (91%)
 - owners letting dogs annoy other people (91%)
 - dogs not being actively supervised (90%)
 - dog litter (86%)
 - poorly trained dogs (84%)
- In addition, 77% of respondents were concerned about rude/impolite dog owners (77%) and dogs interrupting other parkland activities (74%)
- Respondents are more likely to drive to a DEA than walk.
 - Respondents use the Tambrey Oval and the Baynton West Oval DEAs more frequently than other DEAs in both the hotter and cooler months, however use of Tambrey Oval decreases significantly during the hotter months while use of the Baynton West Oval remains consistent.
 - Respondents consider the following as priority inclusions if a fenced DEA is to be considered:
 - Surfaces that don't get too hot (99% of respondents)
 - Drinking water (98% of respondents)
 - Grassed surfaces (97% of respondents)

¹⁹ Surveys undertaken by LMH Consulting/Paws4Play with various LGAs including Joondalup (WA) Hume, Stonnington, Brimbank, Melton and Whitehorse Councils

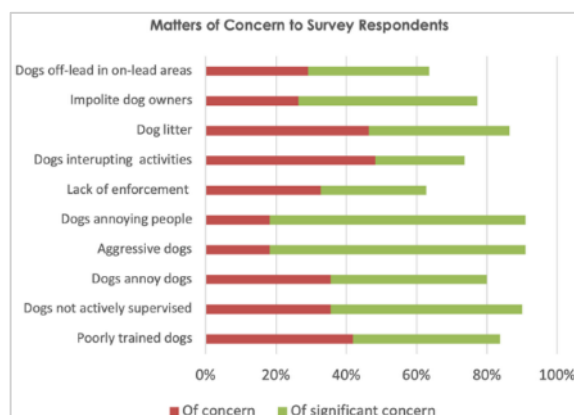
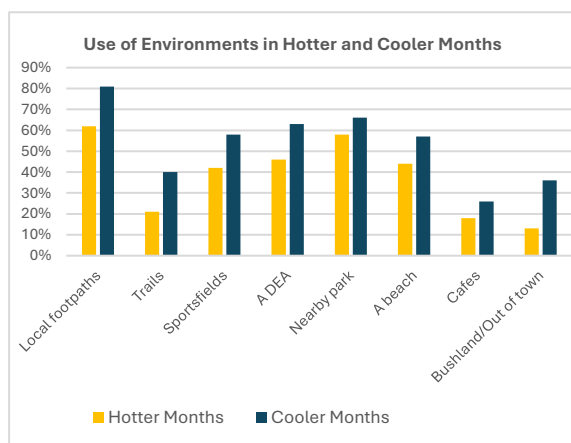
- Natural shade/trees (95% of respondents)
- Double gating (90% of respondents)
- Litter bins and bags (noted in comments).

5. Analysis of Findings and Recommendations

5.1. Existing DEAs

Existing DEAs were assessed for:

- the need for fencing based on size and the adequacy of associated spatial buffers within which owners should reasonably be expected to bring dogs under control in line with regulations
- opportunities to enhance barriers that may provide additional visual distractions for dogs
- opportunities to enhance parkland amenity for dog owners, provide sensory environments for dogs and keep dogs and owners mobile²⁰ by way of:



- additional tree canopy/shade, particularly along linear/circular pathways
- landscape features such as rockscapes
- different textural surfacing.

Most of these features will achieve benefits for all park users, not only dog owners. Significantly, this approach is in line with council's economic, environmental and social planning priorities articulated in strategic plans²¹. These documents have objectives and recommendations relating to:

- increasing urban greening
- improving the amenity of existing parks.

Three existing DEAs are almost fully or semi-fenced. These include DEAs on:

- the Bulgarra Reserve multi-purpose sports field
- Peg's Creek Oval DEA (Peg's Creek)
- Kevin Richards Memorial Oval (Millars Well)
- The following provides an overview of existing sites, adequacy of provision and opportunities to enhance provision.



²⁰ Encouraging dog owners to walk and keep their dogs on the move will help to minimise intensive dog-on-dog activity. This is a risk management consideration.

²¹ Karratha Revitalisation Strategy: Pegs Creek, Millars Well & Bulgarra; Karratha Environmental Sustainability Strategy

Table 2 – Existing unfenced DEAs in Karratha

	RESERVE/PARK	SITE REFERENCE	FENCING/AREA	BUFFERS/OPPORTUNITY
1	Baynton West Reserve	Sports field (unfenced)	Large area (1.43 Ha) Restricted access Unfenced	<ul style="list-style-type: none"> Adequate buffers * Increase pathway/linear tree plantings
2	Bulgarra Recreation Reserve	Multi-purpose sports field (primarily)	Large area (1.8 Ha) Restricted access Primarily/semi-fenced	<ul style="list-style-type: none"> Install visual barriers across pedestrian entry points Consider self-closing gates where pedestrian entry onto a main road etc. Replace rope fencing with fixed/cyclone fencing
3	Dampier Recreation Reserve & Foreshore	Site 1 - Hampton Oval/	Large area (1.17 Ha) Restricted access Unfenced	<ul style="list-style-type: none"> Adequate buffers * Shade tree/amenity plantings around oval perimeter Signage upgrade, particularly re playground
		Site 2 – Dampier Foreshore	Large area (2.4 Ha) Unrestricted access	<ul style="list-style-type: none"> Not relevant
4	Tambrey Recreation Reserve, Nickol	Tambrey sports field	Large area (1.57 Ha) Adequate buffers Restricted access Unfenced	<ul style="list-style-type: none"> Adequate buffers * Dense shade/amenity plantings to the east of the existing DEA and along linear pathway to Flannelbush Way
5	Millar's Well Recreation Reserve	Kevin Richards Memorial Oval	Large area (2.3 Ha) Restricted access Primarily/semi-fenced	<ul style="list-style-type: none"> Adequate buffers * Install visual barriers across pedestrian entry points Consider self-closing gates where pedestrian entry onto a main road etc.
6	Peg's Creek Reserve	Peg's Creek Oval	Large area (1.66 Ha) Restricted access Primarily/semi-fenced	<ul style="list-style-type: none"> Adequate buffers * Install visual barriers across pedestrian entry points Dense shade/amenity plantings around perimeter of oval
7	Foreshore	Foreshore Nth of 19 Meares Rd.	Large 'visually contained' area (2.4 Ha) Unrestricted access	<ul style="list-style-type: none"> Adequate buffers *
8	Harding River Environs	Roebourne	Large area (6.0 Ha) Unrestricted access	<ul style="list-style-type: none"> Adequate buffers * Easy for owners to lose visual contact with dogs given the undulating environment and vegetation which can be problematic in close proximity to the river
<p>* Adequate buffers which owners should reasonably be expected to bring dogs under control in line with regulations Restricted Access - Access restricted to when sport/recreation activities not in progress</p>				

In summary, all sites are large and of a size and within which owners should reasonably be expected to bring dogs under control in line with regulations and without the need for full fencing.

Recommendations to Address Findings

Baynton West Park DEA

- Consider stronger plantings of shade trees along the perimeter pathway around the sports field to increase/infill shade canopy around the park.
This will encourage/allow owners to comfortably walk dogs, particularly in hotter weather, address survey respondents for more shade in existing DEAs and council's urban greening priorities.

Bulgarra Recreation Reserve DEA

- Consider intensive cluster shade tree plantings or linear plantings around the perimeter of the multi-purpose area to increase shade canopy.
This will encourage/allow owners to comfortably walk dogs, particularly in hotter weather; address survey respondents for more shade in existing DEAs and council's urban greening priorities.
- As an alternative or in addition to creating a single purpose fenced DEA in the City, consider the merits of replacing

the rope fencing with cyclone wire fencing and installing chicane barriers at entry points to create a primarily enclosed DEA on the existing DEA site.

Hampton Oval and Hampton Foreshore (Dampier)

4. Consider cluster plantings of shade trees around the perimeter of the sports field to increase shade canopy.
This will encourage/allow owners to comfortably walk dogs, particularly in hotter weather; address survey respondents for more shade in existing DEAs and address council's urban greening priorities.
5. Update signage relating to dog on-off lead regulations, particularly in relation to the playground.
6. Consider barrier fencing between the DEA and the playground to prevent/minimise dogs from entering the area/discourage owners from letting dogs enter the space.
7. Consider additional signage on the foreshore that delineates dog on-off lead areas and dog control requirements.

Kevin Richards Memorial Oval

8. As an alternative or in addition to creating a single purpose fenced DEA in the City, consider the merits of chicane barriers at pedestrian entry points to create a sightline barrier (dogs) and a primarily enclosed DEA at this existing DEA site.
9. Consider barrier fencing between the DEA and the playground to prevent/minimise dogs from entering the space.

Tambrey Sports field

10. Consider extending the DEA into the shaded/irrigated area to the east of the existing DEA.
11. Consider infill plantings of shade trees in the irrigated area to the east of the DEA and along the path leading to Flannelbush Turn and properties to the south.
This will encourage/allow owners to comfortably walk dogs, particularly in hotter weather; address survey respondents for more shade in existing

DEAs and address council's urban greening priorities.

12. Update signage relating to dog on-off lead regulations and designation of the site as a DEA.

Peg's Creek Oval

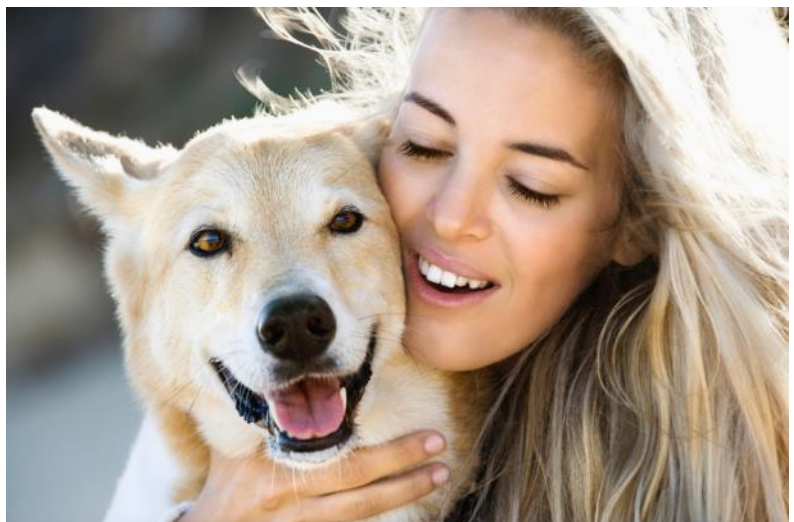
13. Consider stronger plantings of shade trees around the perimeter of the sports field, especially at the northern end and in wider sections of the site along the eastern side of the sports field.
14. As an alternative or in addition to creating a single purpose fenced DEA in the City, consider the merits of additional fencing and/or landscape barriers and chicane barriers at entry points to create a primarily enclosed DEA at this existing DEA site.

Point Samson Foreshore

15. Consider the occasional monitoring of the dune system to identify any adverse impacts associated with off-lead access.

Roebourne Harding River Environs

16. Consider strategies to address non-compliance with dog control regulations.
17. Consider options for an alternative DEA site in Roebourne.



5.2. Potential Additional and/or Fenced DEA

5.2.1. Overview

Nearly all residents living in the town of Karratha have access to a fenced DEA within a 1.0 km radius apart from residents living in the vicinity of the Karratha CBD and residents who will live in the new subdivision of Mulataga by 2036.

All DEAs are on sports fields that are owned by the Department of Education. This restricts off-lead activity to before and after school and at times when sport and recreation activities are not occurring.

Two additional sites proposed for consideration will address a gap in provision (Karratha CBD) and offer an alternative unrestricted environment (Mulataga foreshore) for Karratha residents.

The findings of this project indicate an unsubstantiated *need* for a fenced DEA as opposed to a *desire* for a fenced DEA and this is primarily based on the need to better control dog and prevent dogs from interrupting other parkland activities. The advantages cited by survey respondents from the project survey and surveys from other projects relate to an inability or lack of willingness of owners to control dogs in line with regulations, and to actively supervise dogs.

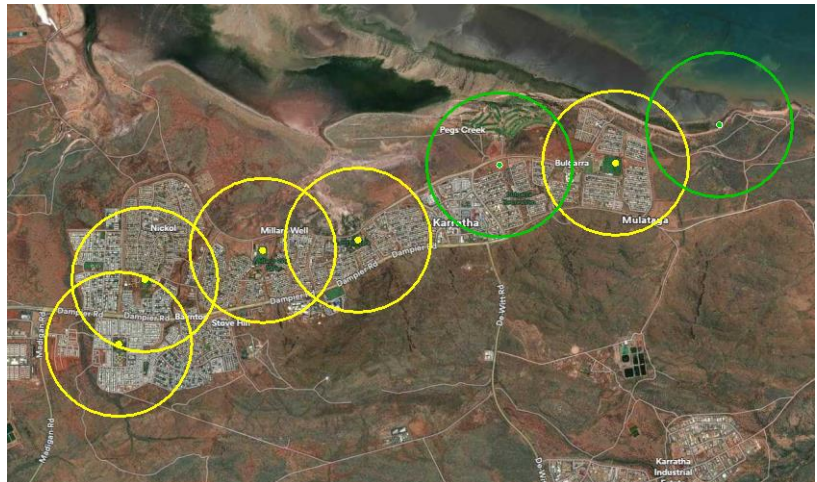
Equally survey respondents expressed concern about the lack of control of dogs by owners, dogs being off-lead in on-lead areas, and aggressive dogs among other concerns. In addition, and consistent with Rangers from other LGAs, the City's Rangers express concern about dog behaviour and dogs not being controlled appropriately.

These factors, together with the extensive even though restricted access to off-lead areas, for a fenced DEA unless council desired to fill a gap in provision by establishing a DEA at Richardson Way Park. In this case, it would be prudent to consider fencing or partial fencing given:

- the proximity to Bayview Road
- the need to separate a DEA from other activities that may need to be

accommodated at the Richardson Way Park.

5.2.2. Site Assessment



Above: Residential catchment within a 1.0 km radius of a DEA in Karratha

Sixteen sites were shortlisted and inspected for assessment as to their suitability for inclusion of a fenced DEA. The following sites were removed from further consideration based on size; location in local streets and traffic related issues; impact on resident access to parkland for other activities; incompatibility with other site activities; and/or parkland design consideration.

These nine sites are:

- Ausburn Park, Nickol
- Church Way Park, Baynton
- Hazel Court Park, Nickol
- Goshawk Court Park, Nickol
- Peace Park, Nickol
- Baynton West Park, Baynton West
- Balyarra Park, Baynton West
- Rothschild Park, Baynton West
- Michael Lewandowski Park, Baynton West

A detailed review was then undertaken for the seven sites listed in Table 3 together with a summary of the key benefits and challenges associated with a potential fenced DEA at each site.

Table 3 – Site Assessment Summary			
OVERVIEW	KEY BENEFITS	POTENTIAL CHALLENGES	SCORE (/70)
1. BULGARRA Richardson Way Park (Eastern sector) <ul style="list-style-type: none"> Potential area available - 1.6-2.0 Ha Location – Near east sector of Karratha 	<ul style="list-style-type: none"> More centrally located than many other sites A size that allows for location/ design flexibility Site not designated for any other purpose Capacity to accommodate associated DEA infrastructure e.g. off-road car/caravan parking Good profile to Bayview Rd. (Promo, compliance monitoring, passive surveillance) Further activates a community hub 	<ul style="list-style-type: none"> Site poor in terms of existing natural features/shade Flood management issues need to be investigated Good practice DEA design/ landscape costs Cost of infrastructure associated with DEA e.g. such as car parking, toilets pathways, irrigation 	55
2. BULGARRA Area NW of Bulgarra Oval <ul style="list-style-type: none"> Potential area available - 0.74 Ha Location – Far east sector of Karratha An on-lead area 	<ul style="list-style-type: none"> A size that allows for location /design flexibility Key infrastructure in place/nearby e.g. car parking, toilets, irrigation Capacity to accommodate additional DEA infrastructure e.g. off-road car/caravan parking Active site (safety)/consolidates a community hub Good profile to Bayview Rd. (Promo, compliance monitoring, passive surveillance) Compliments adjoining unfenced DEA provision 	<ul style="list-style-type: none"> Site under consideration for temporary overflow caravan parking and potential other uses as identified in the Draft Community Infrastructure Plan. Not irrigated Site poor in terms of existing natural features/shade Good practice DEA design/ landscape costs Location in the far east sector of Karratha may be considered a negative 	46
3. MILLAR'S WELL Tilbrook Close (opposite Kevin Richards Memorial Oval) <ul style="list-style-type: none"> Potential area available - 1.4/3.4 Ha An on-lead area Location – Mid west sector of Karratha 	<ul style="list-style-type: none"> A size that allows for location/ design flexibility Capacity to accommodate associated DEA infrastructure e.g. off-road car/caravan parking Good profile to Bayview Rd. (Promo, compliance monitoring, passive surveillance) Further activates/consolidates a community hub 	<ul style="list-style-type: none"> All/part of this site has been designated for overflow caravan accommodation and potential other uses as identified in the Draft Community Infrastructure Plan. Site poor in terms of existing natural features/shade Flood management issues need to be investigated Good practice DEA design/ landscape costs 	45
4. NICKOL WEST NE corner of Nickol West Park <ul style="list-style-type: none"> Potential area available - 0.5 Ha An on-lead area Location – Far west sector of Karratha 	<ul style="list-style-type: none"> A size that allows for design flexibility A site with good amenity – irrigated, linear shade tree plantings along site boundary Good profile to local streets (passive surveillance, compliance monitoring, safety) Key infrastructure in place/nearby e.g. car parking, toilets Further activates/consolidates a community hub 	<ul style="list-style-type: none"> Part of the site may be needed to incorporate the proposed upgrade to the playground and family area The DEA may be considered inconsistent with the formal design of the park Access to site is through local streets Limited car/no caravan parking capacity No capacity for immediate car access to the site (DDA) 	41
5. NICKOL Area btw Tambrey Oval and parkland <ul style="list-style-type: none"> Potential area available - 0.62 Ha An on-lead area Location – Mid west sector of Karratha 	<ul style="list-style-type: none"> A size that allows for design flexibility Key infrastructure nearby e.g. car parking, toilets, irrigation Further activates (safety)/ consolidates a hub Compliments adjoining unfenced DEA provision 	<ul style="list-style-type: none"> Access to site is through local streets Cost associated with potential infill and flood management Limited car/no caravan parking capacity No capacity for immediate car access to the site (DDA) Site poor in terms of existing natural features/shade Good practice DEA design/ landscape costs 	38

Table 3 – Site Assessment Summary			
OVERVIEW	KEY BENEFITS	POTENTIAL CHALLENGES	SCORE (/70)
6. NICKOL Cnr Bayview & Bathgate Rds (Jennifer Creek) <ul style="list-style-type: none"> Potential area available - 2.1 Ha An on-lead area Location – Mid west sector of Karratha (north)	<ul style="list-style-type: none"> Reasonable size (depending on flood management) Site not designated for another purpose unless flood management and housing (refer 'Lazy Lands' review) are priority for the site Good profile to Bayview Rd. (Promo, compliance monitoring, safety) 	<ul style="list-style-type: none"> Limited capacity to accommodate off-street car parking/caravan parking. Potential traffic management conflict given proximity to corner. Site poor in terms of existing natural features/shade No irrigation connection nearby Creates a 'standalone' site Flood management issues need to be investigated & may restrict area available Good practice DEA design/landscape costs 	34
7. NICKOL Near cnr of Tambrey & Delambre Drs (Jennifer Creek) <ul style="list-style-type: none"> Potential area available - 0.5 Ha An on-lead area Location – Mid west sector of Karratha 	<ul style="list-style-type: none"> Reasonable size (depending on flood management) Not designated for another purpose unless flood management and housing (refer 'Lazy Lands' review) are priority for the site Good profile to Tambrey Dr. (Promo, compliance monitoring, passive surveillance) 	<ul style="list-style-type: none"> No/limited capacity to accommodate off-street car parking/caravan parking Site poor in terms of existing natural features/shade No irrigation connection nearby Creates a 'standalone' site Flood management issues need to be investigated & may restrict area available Good practice DEA design/landscape costs 	32

Recommendation to address findings:

18. Prepare a master plan for the entirety of Richardson Way Park²² to ensure:

- an integrated approach to the planning and design of the park overall
- the space at the park is optimally used
- all elements, including a DEA are well integrated
- a minimum of 0.5-1.0 Ha is allocated to the DEA separate to car parking etc.
- flood/storm water management and traffic management requirements are addressed



Above: Location of sites assessed for the feasibility of incorporating a fenced DEA (red) and existing DEA sites (blue)

²² The Karratha Revitalisation Strategy: Pegs Creek, Millars Well & Bulgarras recommends that Richardson Way be considered for disposal. The City is also considering

the potential installation of a bike track in the western sector of the park.

- consultation is undertaken in line with council's community consultation and communication policies.

5.2.3. Mulataga and Wickham

There are very limited opportunities to provide for additional DEAs given the limited open space. However, considering future subdivision and likely off-lead practice by dog owners there is merit in considering the following.

Mulataga

There is an opportunity to consider designating a section of the Mulataga foreshore as a DEA.

This would provide Karratha residents with access to a foreshore DEA within the township. The closest alternative foreshore DEA is in Dampier some 20 kms to the north-west.

Landmarks defining any DEA in this location must be easily identifiable by dog owners and for ease of compliance monitoring by rangers.

This is particularly relevant given the Mulataga Structure Plan and the associated addition of 1,094 households and 2,737 residents forecast between 2026 and 2036.

Wickham

In 2019 council resolved to retract the designation of a DEA in Wickham following community request to do so. Research and project survey results suggest that owners will be letting dogs off-lead in open space and or foreshore areas in Wickham regardless of leashing regulations. The City may consider proactive monitoring of compliance with regulations to ensure other park users are not adversely impacted by dogs off-lead.

Recommendations to address findings

19. Consider designating a section of the Mulataga back beach as a DEA, ensuring that the DEA can be clearly defined by landmarks.
20. Consider closer monitoring of compliance with leashing regulations in the town of Wickham.

Figure 1: Mulataga Structure Plan Area (Oct 2020)



Figure 2: Mulataga Structure Plan (Oct 2020)



5.3. Other Matters

The project identified several other matters that council should consider reviewing as part of a strategy to encourage compliance with regulations and general courtesy relating to the use of shared spaces by dog owners and other members of the community. These matters relate to:

5.3.1. Signage and Written/Digital information

A review of signage at reserves should be undertaken to ensure signage is adequate for the purpose of communicating DEAs and dog leashing regulations at key entry points. Signage should be reviewed periodically to ensure it is consistent with any change in council designation of DEAs and accurately articulates designated off-lead areas.

Signage may include maps and or text depending on site specific requirements. Signage should also be accompanied by accurate online information that can be easily downloaded by residents and visitors.

Onsite information should also reinforce dog control regulations and courtesy for other open space users and online information should provide expanded information relating to the same.

Recommendations to address findings

21. Review the adequacy of onsite signage in terms of location and accuracy of information.
22. Prepare management/service level guidelines that defines where signage will be installed.
23. Review the need for more comprehensive information on council's website in relation to dog off and on-lead areas.

5.3.2. Dog Control Regulations

The Dog Act requires that dogs be held by a person capable of controlling it²³ and stipulates dogs must be prevented from chasing or attacking people or other animals. The Act ²⁴ does not define the term 'control' but it does allow LGAs to make Local Laws in respect of this matter.

Individual interpretation can vary significantly if the term remains undefined, rendering it difficult for Rangers to take

action if, for example, dogs are annoying or harassing other park users.

To clarify requirements some LGAs clearly define dog control obligations in terms of the following:

- a dog's response to owner recall
- the owner maintaining their dog within eyesight and within a defined distance
- the owner preventing their dog from annoying other dogs and/or people.

Many LGAs have been reluctant to limit the number of dogs any one person can walk on-lead at any one time or let off-lead in a public place. This is primarily due to pressure from commercial dog walkers and owners of multiple dogs. However, this is an increasing public safety issue given the reported high level of poorly trained and less responsive dogs, aggressive dog and dog owners, and dog attacks²⁵.

The public risk is further exacerbated in fenced DEAs where issues are even more concentrated. To minimise risk associated with fenced DEAs council should consider at least the following requirements:

- Prohibition of babies and toddlers
- Requiring a person to be of an age and competency to manage a dog in a potentially hazardous environment
- Prohibition of timid, anxious, reactive, uneducated and/or unexercised dogs
- Prohibition of un-desexed dogs and dogs under 12 months
- Prohibition of food/picnicking
- Prohibition of bikes and scooters
- Prohibition of the use of chocker chains and other punitive control equipment.

Recommendations to address findings

24. Consider introducing a clear definition of 'dog control' into its local laws
25. Consider introducing specific requirements relating to the use of fenced DEAs if they are introduced.

²³ Western Australia Dog Act 1976, section 33 (D)

²⁴ WA Dog Act section 32, part 2

²⁵ Projects undertaken by LMH Consulting/Paws4Play with various LGAs including Joondalup (WA), Hume, Stonnington, Brimbank, Melton and Whitehorse Councils

5.3.4. Consistency of Site Referencing

The project has identified that multiple references are used to define a reserve or site. In some cases, the name of the oval is the primary reference given as opposed to the name of the wider reserve where the oval is located. The latter should be the primary identifier of the site, which in turn needs to be clear on promotional information.

Referencing needs to be consistent in all council documents and public information. This is particularly important given the number of tourists visiting Karratha and the increasing number travelling with dogs.

Recommendations to address findings

26. Update databases to ensure reserves are defined by title as opposed to a component of the reserve such as the name of the oval or the playground; and ensure accurate location descriptors/references.

5.3.5. Provision of Dog Litter Bags and Bins

It is worth reviewing council's policy rationale in relation to the installation and placement of litter bag dispensers and bins. For example, at some reserves bins are placed in on-lead areas but not in off-lead areas.

Some LGAs in Victoria determine they will only provide litter bags and bins in off-lead areas, while others determine they will not provide these amenities on the basis that owners are required by law to carry a litter bag²⁶ and dispose of litter appropriately.

Research and the prevalence of dog litter in most metropolitan environments indicates that the presence of litter bags and bins has little impact on dog owner's predisposition to pick up litter and dispose of litter appropriately. In addition, the irresponsible depletion of litter bags results in high levels of complaint to LGAs relating to empty litter bag dispensers.

Recommendations to address findings

27. Prepare management/service level guidelines that define when and where litter bag dispensers and bins will be installed

5.3.6. Resourcing of Compliance Monitoring Services

The project has found that City Rangers spend most of their time dealing with dogs wandering at large and with little or no time allocated to monitoring compliance with leashing and dog control regulations. As a result, City staff undertake no/little proactive monitoring of DEAs and other public spaces for compliance with leashing regulations.

If council determines to install a fenced DEA/s, the experience of other LGAs strongly suggests that the resourcing of compliance monitoring, litigation associated with dog-on-dog and dog-on-human incidents and addressing of complaints will need to be significantly increase.

Recommendations to address findings

28. Review resourcing for compliance monitoring services to ensure service level requirements are accurately addressed.

5.3.7. Caravan Parking

As the project progressed it emerged that both permanent and temporary overflow caravan parking was being considered through other planning processes for several sites. Some of these sites included those being considered as potential DEAs as part of this project. These include sites:

- at Richardson Way Park
- on the corner of Tilbrook Close and Bayview Road, to the west of the Kevin Richards Memorial Oval
- at Bulgarra Recreation Reserve to the north-east of the multi-purpose sports field

Recommendations to address findings

29. That priorities relating to these sites be investigated and resolved to minimise future potential planning conflicts.

²⁶ Victorian Domestic Animals Act, 1994

7. The Future – Policy and Planning

7.1. Provision Opportunities

Opportunities for designating areas for dog off-lead activity in the City is restricted because of the scarcity of unencumbered open space that can be used for recreation purposes. If open space is available, it is either/or:

- a sports field
- been very formally landscaped
- is small and/or does not have the buffer needed between a proposed DEA and other parkland infrastructure
- located in residential streets that would not easily accommodate additional vehicle traffic
- or has been allocated for other purposes such as for overflow caravan parking.

As a result, the opportunity to provide a more equitable access to DEAs is extremely limited within the urban area.

Most DEAs in the Karratha are on sports fields that generally provide more than 1.0 Ha over which dogs can run. These sites also provide a good buffer between the DEA and adjoining roads or other parkland activity.

Where there may be unirrigated/undeveloped open space, the viability of irrigating undeveloped/unirrigated land solely for use as a DEA would need to

be well assessed against other service priorities given the likely level of use.

Ideally, a DEA would be within a one-to-two-kilometre catchment to optimise walkability and based on the function of the DEA in the overall network of DEAs. In Karratha this means that most households currently have access to a DEA, apart from those in the far north and south sectors of the town of Karratha.

However, in the hotter 8 months of the year walking on footpaths can be extremely harsh on dog paws and uncomfortable for owners because of the radiant heat. While the use of footpaths drops during the hotter months, the project survey indicates that footpaths, as local parks, are still well used by dog owners even in the hotter months.

On site observations and survey results suggest that dog owners primarily access existing unfenced DEAs by car even if they live within a short distance.



7.2. The Principles that Will Guide the Planning of DEAs

The following statements or principles will guide the planning of fenced and unfenced DEAs. Provision and service levels relating to the planning of DEAs will be reviewed regularly to ensure they stay consistent with council policy and planning objectives particularly as they relate to key strategic documents such as the City's Strategic Community Plan, Strategic Asset Management Plan, Environmental Sustainability Strategy and the Disability Inclusion Plan.

Of relevance in the above strategies are principles, objectives and/or recommendations relating to:

- Optimising the number and type of activities that can be accommodated/shared in public places, including in parkland (e.g. sport, dog off-lead activities, cycling)
- Protecting and enhancing biodiversity values
- Ensuring a consistent standard and quality of provision for similar type environments
- Optimising safety and promoting safe practices in public environments (e.g. safe sporting practices, effective and compliant control of dogs, safe cycling practices)
- Accessibility
- Responsible budget (Including infrastructure) management

In addition, the following principles will also apply to the planning and management of DEAs:

1. Sharing of parkland

- A range of sport and recreation activities compete for access to limited public open available in Karratha. This means that sport and or recreation activities will generally have to share space with DEA spaces.

2. Planning and Policy

- Provision for owners and their dogs will be based on:
 - evidence-based research relating to human and dog behaviour in DEAs

- the availability of appropriate open space
- the need to balance provision for both dog owners and other users of parkland/sports fields
- economic, environmental, and social factors.

3. Accessibility and Service Levels

- Universal/Good Design Guidelines²⁷ will direct the planning and development of DEAs
- Not all DEAs, whether fenced or unfenced will have the same features and amenities
- A provision framework will guide the type and level of natural and built features that will be considered at any given DEA site.

4. Provision and Enhancement of DEAs

- The City will:
 - seek to prioritise opportunities to enhance existing DEAs particularly in terms of reserve perimeter/partial perimeter fencing and consolidation of linear plantings of shade trees around the perimeter of sports fields
 - seek to optimise the acquisition of unencumbered public open space for use as DEAs.

5. Fencing of DEAs

- Generally, and in line with good practice:
 - DEA areas will be unfenced
 - Fencing will not be provided to contain dogs that owners cannot or will not control in line with dog control Orders
 - Fencing will only be considered to address risk management considerations, as when there is:
 - an inadequate spatial buffer between a DEA and other incompatible parkland activities
 - an inadequate spatial buffer between a DEAs and roads
 - a need to protect sensitive environments
 - where fencing is to be considered, partial fencing and visual/physical landscape

²⁷ WA State Planning Policy 7.0 – Design for Everyone
Guide: A Guide to Sport and Recreation Settings, 2024

buffers will be the preference over full fencing of DEAs

- Council may consider the fencing/partial fencing of the reserve/parkland as opposed to the fencing of a DEA site

6. Public Amenity and Safety

- It is assumed that dog owners will:
 - make themselves aware of state and council dog control regulations and manage their dogs in line with these regulations. This includes managing the behaviour of their dog and picking up dog litter
 - keep their dog on a lead if they cannot be controlled in line with regulations
 - respect the rights of other people and dogs to have peaceful use of public spaces
 - Council will consider community education initiatives where there is non-compliance with dog control regulations.

7.3. DEA Planning Framework

7.3.1. Design Requirements and Service Level Guidelines for DEAs

Normally service levels would define spatial requirements for open space assets. However, the planning for dogs off-lead has not been subject to the same open space planning requirements as have other assets such as playgrounds, sports fields and courts. Where LGAs are now attempting to provide off-lead spaces for dog owners, there is inadequate public open space that can be dedicated for the purpose and to minimise conflict with other park activities.

As a result, it is difficult to apply strict spatial and use requirements as would be desired. Therefore, service levels are defined in terms of 'small' and 'medium/large'; depending on where there may be opportunity to incorporate a DEA. Ideally a fenced DEA should be a minimum of 0.5 Ha to allow for the incorporation of sensory elements and to disperse dog related activity.

Table 4 defines the type of infrastructure that council may consider for each type of DEA whether fenced or un-fenced.

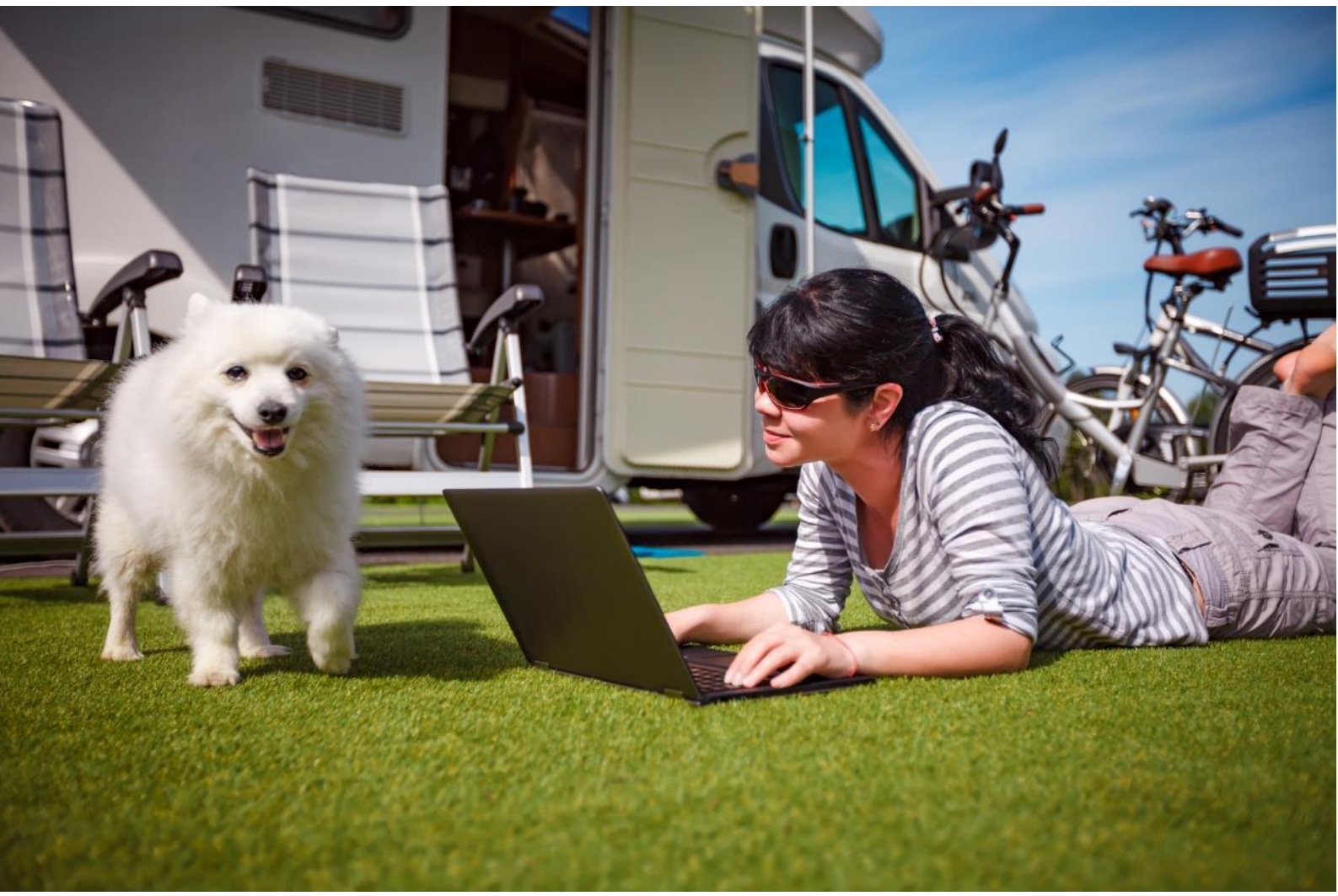


Table 4 – Design requirements and service level guidelines for DEAs

Legend: NR=Not relevant

		Types of Designated DEAs				
		Large Unfenced (Sports fields)	Small/Med. unfenced	Large fenced	Small/Med. fenced	Foreshore Areas
1.0	FENCED & UNFENCED ENVIRONMENTS					
	Large/medium runabout area	✓ (time restrictions apply)	NR	✓	NR	✓ seasonal restrictions may apply
	Small runabout area (separate)	NR	✓	✓	✓	NR
	Quiet area (separate)	NR	✓	✓	✓	NR
2.0	CORE INFRASTRUCTURE					
	Barriers					
	▪ Fencing – Full	In line with City policy	In line with City policy	In line with City policy	In line with City policy	NR
	▪ Fencing - Partial	Site specific	Site specific	Site specific	Site specific	Site specific
	▪ Reserve fencing	In line with fencing policy	✗	✓	✓	NR
	▪ Protective fencing (vegetation)	NR	✓	✓	✓	NR
	▪ Barrier/buffer planting	NR	✓	✓	✓	NR
	Signage					
	▪ Rules/regs/emergency contact etc.	✓	✓	✓	✓	✓
	▪ Map designating on-lead/off-lead areas	✓	✓	NR	NR	✓
	▪ Education/agility equipment instructional info	✗	NR	Maybe	NR	✗
	▪ Conservation educational signage (dog control)	NR	Site specific	NR	NR	Site specific
	▪ Message board	✓	✓	✓	✓	✓
3.0	ACTIVITY AREAS/DESIGN ELEMENTS					
	Open runabout area	✓	✓	✓	✓	✓
	Hillocks/mounds	NR	✓	✓	✓	NR
	Close/cluster tree plantings	Perimeter	Cluster	✓	Cluster	NR
	Sniff trails – Refer also item 'Sensory vegetation plantings'	✓ Site specific	✓	✓	NR	NR
	Rock scramble areas/rockscapes	NR	✓	✓	✓	NR
	Dry creekbed or rockbed	NR	✓	✓	✓	NR
	Sensory vegetation plantings	NR	✓	✓	✓	NR
	Digging pit (sand)	NR	✓	✓	✓	NR
	Natural elements (installed)	NR	✓	✓	✓	NR
	'Space breakers' (to slow down/break fast paced chasing and running)	NR	✓	✓	✓	NR
	Water play element	NR	✗	Maybe	✗	NR
	Educational/agility equipment	✗	✗	Maybe	✗	✗
4.0	LANDSCAPING/LANDSCAPE FEATURES					
	Natural shade/tree plantings	NR	✓	✓	✓	NR
	Vegetation along approach fencing	NR	NR	✓	✓	NR
	Vegetation to separate spaces/visual barriers'	NR	✓	✓	✓	NR

Table 4 – Design requirements and service level guidelines for DEAs

Legend: NR=Not relevant

		Types of Designated DEAs				
		Large Unfenced (Sports fields)	Small/Med. unfenced	Large fenced	Small/Med. fenced	Foreshore Areas
	Tree Grove/ Bamboo Grove	NR	✓	✓	✓	NR
	Internal walking trails	NR	✗	✓	✓	NR
	Irrigation	Site specific	Site specific	Site specific	Site specific	Site specific
	Drainage	Site specific	Site specific	Site specific	Site specific	Site specific
5.0	AMENITIES/SUPPORTING INFRASTRUCTURE					
	Tie-up points	No tie up points				
	Seating					
	▪ Seating with backs and armrests	NR	✓	✓	✓	NR
	▪ Bench seating	✗	✓	✓	✓	✗
	▪ Perch rocks/logs	✗	✓	✓	✓	✗
	▪ Picnic tables and chairs	✓ As available in nearby parkland		✗ Not to be installed – Risk management		✓ As available nearby
	Drinking water – people & dogs			✓	✓ As available nearby	
	Toilets	As may be available in nearby parkland				
	Shade structures with seats and high 'table bench' and 'hanging hooks'	✗	✗	✓	Maybe	✗
	Parking					
	▪ Off street parking	✓	✗	Maybe	Maybe	Maybe
	▪ Disability Parking	✓	Maybe	✓	Maybe	In line with City policy
	▪ Caravans/ motorhomes (short term only)	Maybe	✗	✓	✗	✗
	▪ Coffee vans	Maybe	✗	Maybe	✗	✗

7.3.2. Estimated Cost of Fenced DEAs

Unfenced DEAs generally allow dogs to run over an extensive area and dissipate energy. They also provide owners with various opportunities to move their dog away from other dog and human activity. In contrast, the fenced DEA reduces these options and intensifies dog activity to a confined space. Fencing and gating can be a benefit in some contexts. However, they become an obstacle when the need to quickly vacate a fenced DEA arises.

Therefore, landscape design elements that provide a sensory, including visual distraction for dogs become critical design elements in a fenced DEA. These elements also:

- allow owners to retreat behind appropriate visual barriers if issues occur
- help minimise intrusive behaviour of other dogs. These landscaping elements are required to counter the

intensity of likely dog-on-dog activity because of the confined area.

DEA design projects the consultancy team has undertaken in Victoria indicate the cost of installing a DEA in that state for a fenced area of approximately 0.5 Ha can reasonably be expected to cost upwards of \$700,000-\$800,000.

Because of climatic conditions in Victoria a significant proportion of this cost is associated with the need for a robust, primarily granitic sand surface. A similar proportion of cost would likely be associated with irrigation and drainage works in the City of Karratha. It also assumes the inclusion of significant vegetation plantings; sensory elements for dogs such as dry creek beds, digging pits and clamber mounds; and social amenities such as shelters, seating and water.

There will also be additional costs associated with:

- subsurface works and ground preparation
- planning requirements relating to car parking, access pathways, signage, connection to water, irrigation/greening of the site
- amenities such as built shelters unless significant natural shade is available.

Given the geographic isolation of the City of Karratha there are likely to be significant cost escalations associated with construction in the City.

Further costs will be associated with compliance monitoring; and community education initiatives required to address dog control issues, and conflict related customer requests.

8. How the DEA Plan was Prepared

Information and research for this project has been drawn from several sources including:

- An online community survey (110 respondents) to test community aspirations and sentiment

Opportunities to complete a survey were promoted on the City's website and social media pages

- Workshops and various meetings with council staff
- Park/reserve visitations to assess the suitability of sites to accommodate fenced DEAs
- Review of the findings of various council reports and strategic plans to ensure consistency with council planning and policy objectives
- Comments from council's annual survey
- Findings from industry-based research.

Feedback on the draft report will also be incorporated into the findings.

9. Implementation and Review of the DEA Plan

The key directions of the review are not likely to change significantly over the life of the document. However, it will be reviewed in 5-years to ensure:

- to ensure that directions and priorities remain consistent local and industry research findings, industry good practice and council priorities
- to refine recommendations in line with any changes in research findings
- to incorporate new opportunities that may have emerged

10. Warranties and Disclaimers

The information contained in this report is provided in good faith. LMH

Consulting/Paws4Play has applied its experience, knowledge and professional enquiry to this project but has also relied on information supplied by council, other organisations, and/or people.

The recommendations are based on good practice as it is currently understood. This does not alleviate the likelihood of events that may arise because of the way associated environments and installations are used, managed or maintained; and the knowledge and experience of users.

Accordingly, Paws4Play/LMH Consulting and any employees or subcontractors do not undertake any responsibility to any persons in respect of this report, other than council, or for any errors or omissions contained, arising through negligence, or as otherwise caused.



11. Attachments

Attachment 1 – Summary of Recommendations

Table 5 – Recommendations to address findings of the project
EXISTING DEAs
Baynton West Park DEA 1. Consider stronger plantings of shade trees along the perimeter pathway around the sports field to increase shade canopy and infill areas around the park.
Bulgarra Recreation Reserve DEA 2. Consider intensive cluster shade tree plantings or linear plantings around the perimeter of the multi-purpose area to increase shade canopy. 3. As an alternative or in addition to creating a single purpose fenced DEA consider the merits of replacing the loop rope fencing and installing chicane barriers at entry points to create a primarily enclosed DEA on the existing site.
Hampton Oval and Hampton Foreshore DEA 4. Consider cluster plantings of shade trees around the perimeter of the sports field to increase shade canopy. 5. Update signage relating to dog on-off lead regulations, particularly in relation to the playground. 6. Consider barrier fencing between the DEA and the playground to prevent/minimise dogs from entering the area/discourage owners from letting dogs enter the space. 7. Consider additional signage on the foreshore that delineates dog on-off lead areas and dog control requirements.
Kevin Richards Memorial Oval DEA 8. As an alternative or in addition to creating a single purpose fenced DEA in the City, consider the merits of chicane barriers at pedestrian entry points to create a sightline barrier (dogs) and a primarily enclosed DEA at this existing DEA site. 9. Consider barrier fencing between the DEA and the playground to prevent/minimise dogs from entering space.
Tambrey Sports field DEA 10. Consider extending the DEA into the shaded/irrigated area to the east of the existing DEA 11. Consider infill plantings of shade trees in the irrigated area in the irrigated area to the east of the DEA and along the path leading to Flannelbush Turn and properties to the south. 12. Update signage relating to dog on-off lead regulations and designation of the site as a DEA.
Peg's Oval DEA 13. Consider stronger plantings of shade trees around the perimeter of the sports field, especially at the northern end and in wider sections of the site along the eastern side of the sports field. 14. As an alternative or in addition to creating a single purpose fenced DEA in the City, consider the merits of additional fencing and/or landscape barriers and chicane barriers at entry points to create a primarily enclosed DEA at this existing DEA site.
Point Samson Foreshore 15. Consider the occasional monitoring of the dune system to identify any adverse impacts associated with off-lead access.
Roebourne Harding River Environs 16. Consider strategies to address non-compliance with dog control regulations. 17. Consider options for an alternative DEA site in Roebourne.
POTENTIAL NEW FENCED DEA
18. Prepare a master plan for the entirety of Richardson Way Park to ensure to ensure: <ul style="list-style-type: none">▪ an integrated approach to the planning and design of the park overall▪ the space at the park is optimally used▪ all elements, including a DEA are well integrated▪ a minimum of 0.5-1.0 Ha is allocated to the DEA separate to car parking etc.

Table 5 – Recommendations to address findings of the project
<ul style="list-style-type: none"> ▪ flood/storm water management and traffic management requirements are addressed ▪ consultation is undertaken in line with council's community consultation and communication policies.
ADDITIONAL DEAS
<p>Mulataga</p> <p>19. Consider designating a section of the Mulataga back beach as a DEA, ensuring that the DEA can be clearly defined by landmarks.</p>
<p>Wickham</p> <p>20. Consider closer monitoring of compliance with leashing regulations in the town of Wickham</p>
OTHER MATTERS
<p>Signage and Written/Digital information</p> <p>21. Review the adequacy of onsite signage in terms of location and accuracy of information.</p> <p>22. Prepare a management/service level guidelines that defines where signage will be installed.</p> <p>23. Review the need for more comprehensive information on council's website in relation to dog off and on-lead areas.</p>
<p>Dog Control Regulations</p> <p>24. Consider introducing a clear definition of 'dog control' into its local laws</p> <p>25. Consider introducing specific requirements relating to the use of fenced DEAs if they are introduced.</p>
<p>Accuracy and Consistency with Site Referencing</p> <p>26. Update databases to ensure reserves are defined by title as opposed to a component of the reserve such as the name of the oval or the playground; and ensure accurate location descriptors/references.</p>
<p>Provision of Dog Litter Bags and Bins</p> <p>27. Prepare management/service level guidelines that define when and where litter bag dispensers and bins will be installed.</p>
<p>Resourcing of Compliance Monitoring Services</p> <p>28. Review resourcing for compliance monitoring services to ensure service level requirements are accurately addressed.</p>
<p>Caravan Parking</p> <p>29. That priorities relating to these sites be investigated and resolved to minimise future potential planning conflicts</p>

Attachment 2 - Dog Population Data and Projections

Table 6 - Dog Registrations and Projected Actual Dog Populations								
		2025				2036 Projections		
	Suburbs	Households 2026*	Dog Reg's	Probable Actual Reg's		Households 2036*	Projected Dog Reg's	
				pre Covid	post Covid		pre Covid	post Covid
1	Baynton - Baynton West - Madigan	2,138	917	1109	1329	2,347	1,217	1,458
2	Bulgarra-Mulataga (incl. Industrial Estates- Karratha Balance)	1,889	580	980	1174	2554	1,011	1,211
3	Dampier	443	242	230	275	535	278	332
4	Nickol - Nickol West	1,837	1,117	953	1142	1,998	1,036	1,242
5	Pegs Creek-Millars Well (incl. Karratha CBD)	1,911	780	991	1187	2,117	860	1,030
6	Point Samson	124	54	64	77	174	90	108
7	Roebourne	286	165	148	178	365	189	227
8	Wickham	1,077	329	559	669	1,161	602	721
	Total	9,705	4,184	5,034	6,031	11,251	5,836	6,991
<p>* REMPLAN data provided by KCC Nov. 2024</p> <p>Council records dog registrations for Karratha Industrial Estates, CBD and surrounds in with either Peg's Creek or Bulgarra data. To enable relative comparison, REMPLAN household and population data has been similarly integrated.</p>								

Attachment 3 – Expanded Summary of Project Survey Results

Information in the Attachment provides an expanded summary of project survey information. Caution should be applied in interpreting the results of the survey because of the small number of respondents.

Use of Environments for Dog Walking

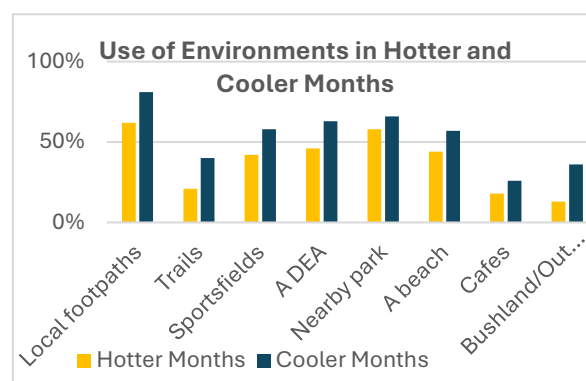
Footpaths followed by a nearby park (not necessarily a DEA) were the environments most frequently used by dog walkers in both cooler and hotter months.

Predictably, the use of outdoor environments dropped during the hotter months. The use of bushland/out of town areas, footpaths, trails and sports fields decline the most in frequency of use²⁸ during this time of the year.

In hotter months DEAs were the third most frequently used environment (46% of respondents) after footpaths and a nearby park.

In cooler months DEAs dropped to 5th in terms of frequency of use (53% of respondents) after footpaths (81% of respondents), a nearby park (66% of respondents), a sports field (58% of respondents) and beaches (57% of respondents).

Twenty-eight percent of survey respondents said they always/mostly prefer to walk their dog than go to a DEA and 38% said they sometimes prefer to walk than go to a DEA.



Compliance with Leashing Regulations

Sixty-seven percent of survey respondents let their dogs off the lead in a park that is not a DEA. This is consistent with survey results that highlight local parks as the most frequently used area for off-lead activity. Seventy-one percent of respondents let their dog walk with them off-lead, because they feel they can control them. This includes 31% who walk with their dogs off-lead always/most of the time and 40% who do so sometimes or infrequently.

Casual observation of dogs in parks more generally, demonstrates that a significant number of owners let their dogs off the lead in on-lead areas. A survey of dog owners in Mildura identified that 67% of respondents were of the attitude that dogs should be allowed off-the lead when the park is not being used for other activities. Fifty-three percent of respondents to the project survey also agree with this practice.

This indicates the practice is likely to be commonplace even though dogs being off-lead in on-lead areas is one of the key issues of complaint by both dog owners and other park users.²⁹

Feedback from council staff indicates the practice is commonplace, especially during sport training when owners take dogs and let them run lead free. Thirty-three percent of survey respondents stated that dogs often interrupt competition or training on sports fields. Casual discussion with a resident at each of the Cattrall Park Oval and the Kevin Richards Memorial Oval playground indicates this behaviour is prevalent at some venues.

Research indicates³⁰ an under-reporting of incidents relating to dogs. Generally, only significant incidents such as dog attacks or serious dog bites get reported, but often only at hospitals. Anecdotal feedback from these projects indicates a high level of community frustration and scepticism as to the importance LGAs place on this matter

Use of DEAs

In the cooler months Tambrey and Baynton West Ovals get the most frequent use with approximately 30% of survey respondents stating they use these sites daily or at least weekly.

The next most popular sites are Bulgarra Oval and the Dampier foreshore areas with 23% and 21% of respondents respectively, using sites on a daily to weekly basis.

²⁸ 'Frequently' refers to use at least once a week, including daily use

²⁹ Surveys undertaken by LMH Consulting/Paws4Play with various LGAs including Joondalup (WA)Hume, Stonnington, Brimbank, Melton and Whitehorse Councils

³⁰ LMH/P4P research 2016-2022

DEAs never or rarely used by survey respondents in cooler months are Roebourne (84 or 94% of respondents), Pegs Creek (51 or 55% of respondents) and Kevin Richards Memorial Oval (50 or 53% of respondents) DEAs.

In the hotter months Baynton West Oval gets the most frequent use with approximately 30% of survey respondents stating they use the site daily or at least weekly. This is followed by Tambrey Oval, Bulgarra Oval and Dampier Foreshore DEAs with 22%, 20% and 18% of respondents respectively using the DEAs on a daily or weekly basis.

Tambrey Oval DEA has the most significant drop (8%) in frequent use between the hotter and cooler months.

Peg's Oval and Baynton West Oval had the most consistent level of frequent use between the cooler and hotter months. This is likely due to the treed and shaded amenity of considerable sections of the DEA and/or the wider parkland where dogs should be on-lead.

Table 7 - Use of DEAs in Cooler Months (Total respondents = 110)

	Tambrey Oval	Baynton West Oval	K R Memorial Oval	Bulgarra Oval	Peg's Crk. Oval	Dampier Oval	Dampier Foreshore	Roebourne	Pt. Samson Foreshore
Daily	14%	8%	1%	6%	3%	3%	3%	2%	0%
At least weekly	15%	22%	13%	17%	8%	15%	18%	0%	3%
A few times month	11%	7%	15%	10%	16%	21%	34%	3%	6%
Few times a year	12%	20%	19%	23%	17%	22%	26%	0%	28%
Rarely/Never	47%	41%	53%	44%	55%	39%	19%	94%	100%

Table 8 - Use of DEAs in Hotter Months by respondents (Total respondents = 110)

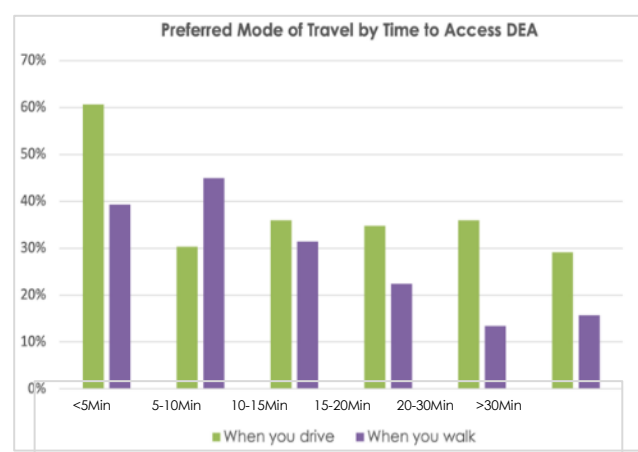
	Tambrey Oval	Baynton West Oval	K R Memorial Oval	Bulgarra Oval	Peg's Crk. Oval	Dampier Oval	Dampier Foreshore	Roebourne	Pt. Samson Foreshore
Daily	9%	9%	0%	2%	3%	3%	2%	0%	0.00%
At least weekly	13%	20%	10%	18%	7%	11%	16%	0%	1.15%
A few times month	11%	8%	11%	9%	11%	23%	27%	1%	3.45%
Few times a year	14%	14%	16%	20%	16%	20%	24%	2%	17.24%
Rarely/Never	53%	48%	63%	51%	64%	43%	31%	97%	78.16%

Method of Travel to a DEA

Survey respondents indicate they will generally drive rather than walk to get to a DEA regardless of the likely time of travel. Even when the commute is likely to take less than 5 minutes significantly more respondents drive than walk.

The exception is the DEA within a 5-10 minute commute when walking is the preferred mode of travel.

Further research would identify whether the visit to a DEA as part of the dog walk has an influence on the 5-10 minute and possibly the 10-15 minute 'commute'.



Issues of Concern for Survey Respondents

Survey respondents were asked to comment on issues generally relating to dogs. Over 70% of survey respondents were 'significantly' concerned about aggressive dogs (73%) and/or owners letting their dogs annoy other people (73%). Over 50% were significantly concerned about owners not actively supervising their dogs (55%) or aggressive/impolite dog owners (51%). This rose to over 90% for respondents 'concerned' and 'very concerned'.

Dog litter is likely to be one of the most significant issues of complaint by dog owners and non-dog owners alike, yet most dog owners surveyed claim to 'always' pick up their dog's litter.

Of note is the 85% of survey respondents that identify dog litter as a concern/significant concern in view of the 92% of project survey respondents who state they 'always' pick up their dog's litter.

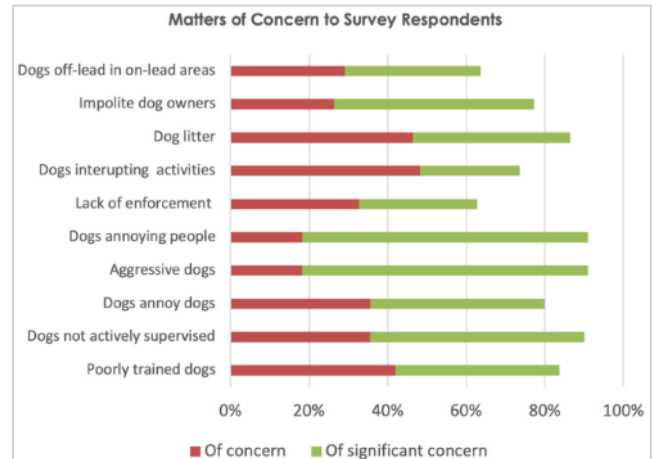
Priority Inclusions for Fenced DEAs

Ninety percent plus survey respondents nominated the following as 'very important' or 'important' in a DEA:

- Surfaces that don't get too hot (99% of respondents)
- Drinking water (98% of respondents)
- Grassed surfaces (97% of respondents)
- Natural shade/trees (95% of respondents)
- Double gating (90% of respondents)

The following were separately requested by some survey respondents:

- Litter bags and/or bins (14 respondents)
- Separate small and large dog areas (9 respondents)
- Signage (9 respondents)



Attachment 4 – Summary of Existing DEAs

Baynton West Park DEA

Overview:

- The DEA site is:
 - located on the sports field and so off-lead activity is restricted to times when sport training and competition is not occurring.
 - Is unfenced.
 - is owned by the Department of Planning Lands and Heritage (DPLH) and under a management order with the City of Karratha.
- The park is in the south-west sector of the Karratha township

It is highly structured in design with a busy network of concrete pathways, especially throughout the north/north-west and southern sectors. A concrete pathway circles the sports field.

- Key facilities include an irrigated sports field and cricket nets; senior and junior playground; picnic/BBQ facilities; and two carparks.

Bulgarra Recreation Reserve DEA (Bulgarra)

Overview:

- The DEA site is:
 - located on the multi-purpose sports field and so off-lead activity is restricted to times when sport training and competition and other community events (e.g. gymkhanas, music festivals, circuses and the annual Fenacle festival) are not occurring.
 - primarily fenced along the north, south and east boundaries apart from pedestrian openings. Most of the western boundary is fenced apart from the rope barrier in the north-west corner
 - owned by the Department of Planning Lands and Heritage (DPLH) and under a management order with the City of Karratha.
- The reserve is major sport and recreation hub located in the eastern sector of Karratha.
- Key facilities include a primary irrigated sports field, an irrigated primary sports field with flood lighting and pavilion; 8 tennis courts and pavilion; playground and exercise equipment installations; a skate park and half-court basketball area.

Hampton Oval and Hampton Foreshore (Dampier)

Overview:

- The DEA site is:
 - located on the sports field and so off-lead activity is restricted to times when sport training and competition and other community events (e.g. gymkhanas, music festivals, circuses) are not occurring.
 - unfenced, relatively level with the occasional tree around the boundary which is surrounded by undulating gravel hillocks.
 - owned by Hamersley Iron Pty Ltd and the oval is managed by the City of Karratha.
- Key facilities at the site include an irrigated sports field and small pavilion and a large playground between the sports field and the beach.
- There is no barrier fencing or barrier landscaping between the DEA and the playground to prevent uncontrolled dogs from entering the playground.

Kevin Richards Memorial Oval

Overview:

- The DEA site is:
 - located on the sports field so off-lead activity is restricted to times when sport training and competition is not occurring and during school hours.
 - primarily fenced apart from pedestrian openings fence lines.
 - owned by the Department of Planning Lands and Heritage (DPLH) and is under a management order with the City of Karratha.
- The site is a major sporting hub with facilities that include a primary sports field with irrigation and flood lighting and a large pavilion; 2 netball courts; a junior cricket pitch,

cricket nets and secondary pavilion; a playground and two car parking areas. There are no trees on the DEA in keeping with the site's primary function as a sports field.

- There is no barrier fencing or barrier landscaping between the DEA and the playground to prevent uncontrolled dogs from entering the playground.

Tambrey Sports field

Overview:

- The DEA site is:
 - on the sports field so off-lead activity is restricted to times when sport training and competition is not occurring.
 - Unfenced
 - owned by the Department of Planning Lands and Heritage (DPLH) and is under a management order with the City of Karratha.
- The site is a sporting hub with facilities that include a multi-purpose sports field with irrigation, flood lighting and a small pavilion; relocatable soccer nets; a picnic/BBQ area and toilets; a playground and modest car park. To the south of the drainage easement adjoining the sports field is a playground and additional picnic shelter.
- The irrigated area extends to the east of the sports field where there are scattered shade trees. There is no fencing around the sports field which allows off-lead activity to extend into the part shaded area. Dog walkers are observed walking dogs off-lead in this area.
- Signage at the site is inconsistent with its function/designation as a DEA.

Peg's Creek Oval

Overview:

- The DEA site is:
 - on the sports field so off-lead activity is restricted to times when sport training and competition is not occurring.
 - primarily fenced along the north, south and east boundaries apart from pedestrian openings. The western boundary is not fully fenced but has infrastructure and landscaping that acts as a significant physical and visual barrier for dogs.
 - owned by the Department of Planning Lands and Heritage (DPLH) and is under a management order with the City of Karratha.
- Peg's Creek Oval adjoins Catrall Park which is a major recreation and sporting hub. The oval is owned by the Department of Education and is managed on a day-to-day basis by the City of Karratha. Catrall Park is owned and managed by the City
- Catrall Park includes meandering pathways; a playground; shaded picnic/recreation/event areas; and toilets. The eastern sector includes an irrigated sports field (no flood lighting) and a pavilion.
- Dog walkers appear to walk the perimeter of the sports field and through the eastern section of Catrall Park with dogs off-lead.

Point Samson Foreshore

Overview:

- The DEA site is:
 - on the foreshore to the north-west of 19 Meares Drive
- The Point Samson Foreshore is part of a Protected Reef Area where all commercial fishing is prohibited and some recreation activities restricted.
- Dogs are prohibited from two sites in Point Samson, these being the Town Beach between Vitenbergs Drive and Meares Road and Honeymoon Bay

Roebourne Harding River Environs

Overview:

- The DEA is:
 - located in the Harding River environs between the North West Coastal Road in the south (East-west alignment) to a northern boundary approximately aligned with Harding Street.
 - owned by the Department of Planning Lands and Heritage (DPLH) and is under a management order with the City of Karratha.
- The site is rocky, sparse grassland riverine environment with vegetation (hummock grasslands, grass steppe, hard spinifex, *Triodia wiseana*) noted to be in a 'degraded condition'¹. The walking route is primarily along vehicle access tracks
- Further research and discussion with community is required to better understand the level of use of the DEA especially in hotter months and because of the likely presence of snakes and seedy weeds.

Brief discussions with a few residents indicate the oval is used as a DEA, there is an acceptance of dogs being off-lead across the township, and there is a significant issue with poorly controlled and/or aggressive dogs and impolite/aggressive dog owners.

Attachment 5 – Fenced DEA Site Assessment Criteria and Summary

Table 9 contains a summary of the criteria used to assess sites for their feasibility of incorporating a fenced DEA

Table 9 – Site Assessment Criteria		
	CRITERIA	FACTORS USED TO ASSESS A SITES SUITABILITY FOR INCLUSION OF A DEA
1	Site size and shape suitability (/10)	<p>The proposed site is open/wide to minimise linear activity by dogs, and has space available for spatial buffers between the DEA and other park activities, roads, trails etc, to distract dogs. The space should have the potential to be well-defined by landmarks such pathways, fence lines and landscape features for ease of visual reference to on/off-lead boundaries.</p> <p>In addition, if a fenced DEA is proposed: The proposed site is of a shape and large enough to incorporate a small dog area without impacting on the functionality of the main/larger area. The area must allow for visual and physical separation of spaces within the fenced area by landscape elements.</p>
2	Readiness of the site for incorporation of a DEA (/10)	<p>The site has no or limited impediments in terms of land ownership, permits, approvals, flood mitigation requirements, and likely opposition to change of use etc.</p>
3	Integration with adjoining parkland (/10)	<p>If in existing parkland, the proposed site can be easily integrated into the parkland without significantly impacting on the amenity and/or use of the parkland. The site doesn't attract a high level of use or use that cannot be reasonably relocated.</p> <p>If the site is on an undeveloped and/or stand-alone site it would be considered to have minimal impact on other activities or existing parkland environment. However, if that site is also being considered for other purposes, then relevant integration factors would need to be considered.</p> <p>In addition, if a fenced DEA is proposed: Consideration of the impact of fencing on the amenity (e.g. physical barrier, visual clutter) of the parkland; and use of the park because fencing effectively excludes other than dog related activities.</p>
4	Site addresses a gap in provision/is central to a catchment (/5)	<p>The proposed site creates a more even distribution of fenced and/or unfenced DEAs across urban areas and more easily accessible access. The site is located centrally within an existing residential catchment as opposed to on the periphery.</p>
5	Existing/proposed Infrastructure (/5)	<p>The site offers a range of parkland amenities that would be used by dog owners and/or would attract owners and their families to the site e.g. off-street car parking, toilets, built shade, access to water, playground.</p>
6	Site visibility/profile (/5)	<p>The prominence of the site encourages passive marketing and addresses safety and perceptions of safety in terms of passive surveillance by passers-by, passing vehicles and neighbouring properties. The site should also allow for easy drive-by monitoring of compliance by Rangers.</p>
7	Environmental/cultural sensitivities (/5)	<p>The site doesn't contain sensitive flora and fauna that needs to be protected and/or there are no plans to enhance environmental values on the site. The site is free of contamination that may limit use by people and dogs and does not have limiting restrictions relating to land ownership rights.</p>
8	Appeal of the site/ Connectivity (/5)	<p>The site has natural appeal in terms of trees/shade and variation in terms vegetation and landscape. The site has good access to a trail and/or footpath network.</p>
9	Existing off-lead activity (/5)	<p>Dog off-lead activity is an accepted recreation activity at the site/adjoining parkland and there is a strong community network of dog owners.</p> <p>In addition, if a fenced DEA is proposed: There is likely community support for fencing of an area of parkland. Community consultation would be required in relation to the establishment of a new DEA, especially if fencing was proposed.</p>

	Table 9 – Site Assessment Criteria	
	CRITERIA	FACTORS USED TO ASSESS A SITES SUITABILITY FOR INCLUSION OF A DEA
10	Population growth in the catchment (/3)	The site is well located to cater for increased population because of new subdivisions.

Table 10 – Sites with potential to Accommodate a fenced DEA

	SUBURB/SITE	SERVICE LEVEL CLASSIFICATIONS	SCORE (/70)	SUMMARY COMMENTARY
1	<p>Bulgarra</p> <p>Richardson Way Park</p> <p>Potential area available 1.6 - 2.0 Ha</p>	<p>Local Neighbourhood Level Park – Type C1</p> <p>Current designation is On-lead</p> <p>Opportunity for consideration as a fenced or unfenced DEA</p>	55	<p>The site is of a suitable size and shape for consideration as a medium/large size fenced DEA. The actual size and location will depend on topographical and flood mitigation measures required.</p> <p>The site is understood not to be designated for another use, has significant scope for inclusion of supporting infrastructure including off-street car park via Bayview Road, pathways etc. A DEA will help activate the site along with the playground and arts centre, and it has a good profile to Bayview Road for drive-by monitoring by Rangers and passive surveillance by the public.</p> <p>The site is relatively central to the Karratha Urban Area and fills a gap between the DEA at Catrall Park (partially fenced) 2.2 kms and Bulgarra Oval (partially fenced) a distance of 1.2 kms. It is noted that the catchment has a lower housing density because the CBD is within the catchment.</p> <p>The site is not used for other purposes so less likely to trigger community concern re a change of use. Significant costs will be associated with establishing the site with irrigation and turf after which additional costs will be associated with fencing and landscape elements in line with good/safe design and practice. However, the site has seemingly fewer impediments and offers more scope than most of the other sites investigated.</p>
2	<p>Bulgarra</p> <p>Area north-west of the Bulgarra Oval</p> <p>Potential area available 0.74 Ha</p>	<p>Regional Level Park: Oval – Type B1, Play space - Type A</p> <p>Current designation is On-lead</p> <p>Opportunity for consideration as a fenced or unfenced DEA</p>	46	<p>The site is of a suitable size and shape for consideration as a medium size fenced DEA.</p> <p>It is understood that council may be considering the site for overflow caravan parking. If this was determined to be the priority for the space, then this site would become unavailable for the purpose of a DEA.</p> <p>The site is part of a major community hub with access to toilets, car parking etc. A fenced DEA would complement the adjoining unfenced DEA. If this site does not proceed for further consideration, there is an opportunity to enhance provision for dog owners at the existing DEA.</p> <p>Noted: With additional fencing along the north-west section of the existing DEA and chicane entries this site is almost fully fenced. This would allow owners large 'corners' of the sports field away from entry points over which to run their dogs. The small openings at chicane entry points would still require owners to actively supervise their dogs, a requirement of responsible dog owner practice. However, restrictions would still apply to times of sport and recreation activity.</p>
3	<p>Millar's Well Tilbrook Close (opposite Kevin Richards Memorial Oval)</p>	<p>Type - F ('Open Areas')</p> <p>Current designation is On-lead</p>	44	<p>The site is of a suitable size and shape for consideration as a medium/large size fenced DEA.</p> <p>It is understood that council are considering the site for overflow caravan parking. If this was determined to be the priority for the space, then this site would become unavailable for the purpose of a DEA.</p>

Table 10 – Sites with potential to Accommodate a fenced DEA

	SUBURB/SITE	SERVICE LEVEL CLASSIFICATIONS	SCORE (/70)	SUMMARY COMMENTARY
	Potential area available 1.4/3.4 Ha	Opportunity for consideration as a fenced or unfenced DEA		<p>The site has significant scope for inclusion of supporting infrastructure including off-street car parking via Bayview Road or Tilbrook Close if additional to existing parking was required. However, significant establishment costs would be involved.</p> <p>The site is part of a major community hub with access to toilets, car parking etc. A fenced DEA would complement the adjoining unfenced DEA at Kevin Richards Memorial Oval. If this site does not proceed for further consideration, there is an opportunity to enhance provision for dog owners at the existing DEA with tree plantings at the northern end of the oval and along fence lines (offset to the sports field).</p> <p>Noted: The existing DEA (sports field) is fully fenced apart from pedestrian entry points. The addition of chicane entries would break sightlines for dogs at this point and allow owners large 'corners' of the oval away from entry points over which to run their dogs. The small openings at chicane entry points would still require owners to actively supervise their dogs, a requirement of responsible dog owner practice. However, restrictions would still apply to times of sport and recreation activity.</p> <p>Refer section xx of the report that discusses the likely use of a fenced DEA located close to a large open DEA.</p>
7	<p>Nickol West</p> <p>Nickol West Park</p> <p>Potential area available 0.5 Ha</p>	<p>Regional Level Park</p> <p>Park - Type C1 ('Local Neighbourhood Pk')</p> <p>Nickol West Oval - Type B1 Current designation is On-lead</p> <p>Opportunity for consideration as a fenced or unfenced DEA</p>	41	<p>The site is of a suitable size for consideration as a medium fenced DEA depending on off-street car parking requirements/street car parking impact assessment.</p> <p>The site is part of a significant community hub with access to toilets, picnic/BBQ facilities and car parking.</p> <p>There is currently no designated DEA at Kookaburra Park. The closest DEA is at Tambry Oval approximately 850 mts from the park and approximately 1.5 kms from the far north-west and south-west boundaries of Nickol West. The site is already irrigated which will significantly reduce establishment costs. There are with modest tree plantings along pathways which will provide some shade while other trees are established. The site has several open space areas that can be used for variety of recreation and sporting activities in addition to the site under consideration for a DEA.</p> <p>If this site does not proceed for further consideration as a fenced DEA then consideration could be given to designating the site as an unfenced DEA. This would retain the area as a multi-purpose space and not exclude use by other recreation activities. If this was the case, then partial fencing and or barrier landscaping could be considered along the boundary of the site with Kookaburra Parkway and Falcone Parade.</p> <p>The site is in a park that is formally landscaped and there is no other green space of this kind within the catchment of Nickol West apart from Goshawk Circuit in the far north of the suburb. While a DEA at Kookaburra Park improve access for dog owners in the suburb the community may be averse to incorporating the activity into a more formal park environment. The level of regular use of this space and</p>

Table 10 – Sites with potential to Accommodate a fenced DEA

	SUBURB/SITE	SERVICE LEVEL CLASSIFICATIONS	SCORE (/70)	SUMMARY COMMENTARY
				<p>the ease of being able to relocate this activity to another area of the parkland is unclear. Community sentiment would need to be explored in relation to these matters.</p> <p>It is likely that a significant number of dog owners let their dogs off the lead in the park regardless of leashing regulations.</p>
6	<p>Nickol</p> <p>Area between Tambrey Sports field and the parkland to the south</p> <p>Potential area available 0.62 Ha</p>	<p>District Level Park</p> <p>Type - F ('Open Areas')</p> <p>Current designation is On-lead</p> <p>Opportunity for consideration as a fenced DEA</p>	38	<p>The site is of a suitable size for consideration as a medium fenced DEA depending on off-street car parking and flood mitigation requirements.</p> <p>The site is part of a significant community hub with access to toilets, picnic/BBQ facilities and car parking to the north of the oval etc. Car parking in the immediate proximity of the site would be difficult and expensive to achieve.</p> <p>A fenced DEA would complement the adjoining unfenced DEA on Tambrey Oval. If this site does not proceed for further consideration, there is an opportunity to enhance provision for dog owners in the irrigated area to the east of the existing DEA with tree plantings.</p> <p>There would be significant establishment costs associated with a lack of irrigation and shade trees/built shelter, landscaping, car parking, pathways etc</p>
5	<p>Nickol</p> <p>Jennifer Creek</p> <p>Cnr Bayview and Bathgate Roads</p> <p>Potential area available 2.1 Ha</p>	<p>Type - F ('Open Areas')</p> <p>Current designation is On-lead</p> <p>Opportunity for consideration as a fenced or unfenced DEA</p>	34	<p>The site is of a suitable size and shape for consideration as a medium/large fenced DEA depending on off-street car parking requirements and limitations associated with flood levels.</p> <p>The site is understood not to be designated for another use by council and has scope for inclusion of supporting infrastructure including off-street car parking. The latter would impact on the size of the space remaining for inclusion of a fenced DEA. However, the site is owned by Landcorp and has been identify for potential housing (refer 'Lazy Lands') which may restrict/prevent opportunities.</p> <p>The site has a good profile to Tambrey Road for drive-by monitoring by Rangers and passive surveillance by the public. However, anti-social behaviour is known in the area.</p> <p>There would be significant establishment costs associated with a lack of irrigation and shade trees/built shelter, landscaping, car parking, pathways etc.</p>
4	<p>Nickol Jennifer Creek</p> <p>Tambrey Drive near the</p>	<p>Type - F ('Open Areas')</p>	32	<p>The site is of a suitable size for consideration as a small/medium fenced DEA depending on off-street car parking requirements and limitations associated with flood levels.</p> <p>The site is understood not to be designated for another use by council and has scope for inclusion of supporting infrastructure including off-street car parking. The latter would impact on the size of the</p>

Table 10 – Sites with potential to Accommodate a fenced DEA

	SUBURB/SITE	SERVICE LEVEL CLASSIFICATIONS	SCORE (/70)	SUMMARY COMMENTARY
	<p>intersection with Delambre Drive</p> <p>Potential area available 0.6 Ha</p>	<p>Current designation is On-lead</p> <p>Opportunity for consideration as a fenced or unfenced DEA</p>		<p>space remaining for inclusion of a fenced DEA. However, the site is owned by Landcorp and has been identify for potential housing (refer 'Lazy Lands') which may restrict/prevent opportunities.</p> <p>The site has a good profile to Tambrey Road for drive-by monitoring by Rangers and passive surveillance by the public. However, anti-social behaviour is prevalent in the area.</p> <p>There would be significant establishment costs associated with a lack of irrigation and shade trees/built shelter, landscaping, car parking, pathways etc.</p>