

Exmouth Townsite Structure Plan

August 2011



Prepared for
Department of Planning and Shire of Exmouth



Taylor Burrell Barnett
Town Planning & Design





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Adopted by Council 17th December 2009

Bill Price
Chief Executive Officer

Handwritten signature of Bill Price in blue ink.

Date

12/9/11

WAPC Approval

Handwritten signature of Leah Loan in blue ink.

Date:

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TABLE OF CONTENTS

PART 1

1.0	INTRODUCTION	3
1.1	PURPOSE OF STRUCTURE PLAN	3
2.0	STRUCTURE PLAN PROCESS	4
2.1	STUDY AREA	4
2.2	THE METHODOLOGY	4
2.3	THE OUTCOMES	4
3.0	PLANNING CONTEXT	7
3.1	STATE POLICIES AND INITIATIVES	7
3.1.1	STATE SUSTAINABILITY STRATEGY	7
3.1.2	STATEMENT OF PLANNING POLICIES	7
3.1.3	TOURISM PLANNING TASKFORCE REPORT	9
3.2	PREVIOUS STUDIES	9
3.2.1	EXMOUTH-LEARMONTH (NORTH-WEST CAPE) STRUCTURE PLAN 1998	9
3.2.2	NINGALOO COAST REGIONAL STRATEGY CARNARVON TO EXMOUTH 2004	11
3.2.3	EXMOUTH STRUCTURE PLAN 2004	11

PART 2

4.0	SITE CONTEXT	17
4.1	THE ENVIRONMENT	17
4.1.1	CLIMATE	17
4.1.2	LANDFORM AND GEOLOGY	17
4.1.3	HYDROLOGY	18
4.1.4	FLORA AND FAUNA	18
4.1.5	LAND CAPABILITY	19
4.1.6	HERITAGE	19
4.2	THE REGION	21
4.3	THE ECONOMIC AND SOCIAL CONTEXT	22
4.3.1	TOURISM	22
4.3.2	RETAIL, COMMERCIAL AND INDUSTRIAL USES	22
4.3.3	HOUSING	23

PART 3

5.0	PLANNING ISSUES	27
5.1	FLOODWAY AND FLOOD FRINGE AREAS	27
5.2	WATER SUPPLY	28
5.3	LAND USE BUFFERS	30
5.3.1	EXISTING WASTE WATER TREATMENT PLANT	30
5.3.2	PROPOSED RELOCATION OF WASTE WATER TREATMENT PLANT	32
5.3.3	DEPARTMENT OF DEFENCE COMMUNICATIONS TOWER	32
5.3.4	CAMERON'S CAVE	32
5.3.5	EXMOUTH POWER STATION	33
5.4	CONSTRAINED LAND	34
5.5	OPPORTUNITIES AND CONSTRAINTS MAPPING	35
6.0	CONSULTATION AND DESIGN VISION	37
6.1	STAKEHOLDER CONSULTATION	37

6.2	VISIONING WORKSHOP	37
6.2.1	PURPOSE	37
6.2.2	OUTCOMES	38
6.3	DESIGN VISION AND OBJECTIVES	41
<u>PART 4</u>		
7.0	THE STRUCTURE PLAN	45
7.1	LAND USE FRAMEWORK	45
7.1.1	EXISTING RESIDENTIAL	45
7.1.2	PROPOSED URBAN	45
7.1.3	TOWN CENTRE	47
7.1.4	SERVICE COMMERCIAL/SERVICE INDUSTRY	48
7.1.5	MIXED USE	49
7.1.6	LIGHT INDUSTRY	49
7.1.7	TOURISM	50
7.1.8	PUBLIC PURPOSES	51
7.1.9	MARINA AND BOAT HARBOUR PRECINCT	52
7.1.10	RURAL-RESIDENTIAL	53
7.1.11	RESTRICTED RURAL	54
7.1.12	CONSERVATION/FORESHORE RESERVE	54
7.2	POPULATION CAPACITY	54
7.3	RETAIL	55
7.4	MOVEMENT NETWORK AND INFRASTRUCTURE	56
7.4.1	ROAD NETWORK	56
7.4.2	WATER SUPPLY INFRASTRUCTURE	56
7.4.3	WASTE WATER INFRASTRUCTURE	57
7.4.4	POWER GENERATION	57
7.5	LAND USE DECISIONS OUTSIDE TOWNSITE	57
8.0	DEVELOPMENT INITIATIVES	59
8.1	TOWN CENTRE	60
8.2	WELCH STREET PRECINCT	61
8.3	MIXED USE PRECINCT – TRUSCOTT CRESCENT	63
8.4	TOWNSITE BOUNDARY ADJUSTMENT	65
8.5	HARBOUR EXPANSION	65
8.6	MIXED USE PRECINCT – MADAFFARI CRESCENT/WARNE STREET	67
8.7	INDUSTRIAL SITE INVESTIGATION	67
<u>PART 5</u>		
9.0	IMPLEMENTATION	71
9.1	STATUTORY PLANNING REQUIREMENTS	71
9.1.1	ADOPTION OF STRUCTURE PLAN	71
9.1.2	LOCAL PLANNING STRATEGY	71
9.1.3	SHIRE OF EXMOUTH LOCAL PLANNING SCHEME	72
9.1.4	DETAILED DESIGN AND DEVELOPMENT CONTROL	72
9.2	RECOMMENDED ACTIONS	72
10.0	REFERENCES	76

FIGURES

Figure 1	Study Area and Regional Context
Figure 2	Land Tenure Plan
Figure 3	Exmouth Structure Plan 2004
Figure 4	Regional Context
Figure 5	Floodway and Fringe Areas
Figure 6	Land Use Buffers and Constrained Land
Figure 7	Opportunities and Constraints Plan
Figure 8A	Consolidated Workshop Outcomes Plan
Figure 8B	Consolidated Workshop – Town Centre
Figure 9	Development Initiative 1
Figure 10	Development Initiative 2
Figure 11	Development Initiative 3
Figure 12	Development Initiative 4
Figure 13	Development Initiative 7

08/024/001D0741 Structure Plan

APPENDICES

Appendix A	Visioning Workshop Outcomes (Extract from Exmouth Community Visioning Workshop Outcomes [DPI/TBB September 2008])
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PART

1

Introduction and Background

1.0 INTRODUCTION

1.1 PURPOSE OF STRUCTURE PLAN

This Structure Plan has been prepared on behalf of the Department of Planning and the Shire of Exmouth to provide an overarching framework for the future development of the Exmouth Townsite. The Structure Plan builds on the previous strategic planning direction provided by the 1998 and 2004 Exmouth Structure Plans and, moving forward, is intended to provide the context for land use decisions within the townsite based on the current understanding of regional and local planning and environmental issues affecting the study area.

A Structure Plan is a forward-planning document, intended to address broad land use and infrastructure matters, and to establish the general design layout and principles to guide the unfolding of development over the life of the Plan. Structure Plans are not intended to provide definitive land use boundaries or development control, but to be a guiding framework for future more detailed precinct and site planning. Structure Plans generally adopt a 25 year planning horizon, and should be subject to periodic review, with major structure plan revisions ideally taking place at five year intervals.

The Exmouth Townsite Structure Plan and Map, once approved, will be the reference for future local structure planning, subdivision and development within the Exmouth Townsite. Importantly, the Structure Plan will also guide the Shire of Exmouth's Local Planning Strategy (LPS) formulation, and the translation of the LPS into the Shire's new Local Planning Scheme.

The primary focus of the Structure Plan is therefore:

'To provide a framework for sustainable development within the Exmouth Townsite that has regard to Exmouth's role as a sub-regional tourism and service centre, and that respects the unique environmental and aesthetic fragility of the environment in which it is situated.'

The report outline comprises:

- Part 1** *Introduction and Background* - including methodology, planning context and reference to past studies relevant to the Structure Plan study area.
- Part 2** *Site Context* - summarising physical characteristics of the site based on previous reporting and regional context.
- Part 3** *Planning Issues* - overviewing key planning issues affecting the study area, opportunities and constraints.
- Part 4** *The Structure Plan* - describing the recommended land use framework.
- Part 5** *Implementation and Recommended Actions*.



2.0 STRUCTURE PLAN PROCESS

2.1 STUDY AREA

The Shire of Exmouth is located within the Western Australian Planning Commission's (WAPC's) Gascoyne Planning Region of Western Australia, along with the Shires of Carnarvon, Upper Gascoyne and Shark Bay. Exmouth Townsite is the principal settlement of the North West Cape, the largest service centre between Carnarvon and Karratha and is referred to as the northern tourist gateway to the Ningaloo Marine Park.

Originally established as a support town for the nearby Harold E Holt Naval Base, Exmouth now generates most of its activity in association with the tourist industry accessing the Coral Coast that stretches for more than 250 kilometres, much of which is to be considered as a declared World Heritage Site. Other than tourism, the fishing industry is the next highest contributor to the region's economy reflecting the importance of the natural assets upon which these industries are based.

The study area focuses on the Exmouth Townsite as the main settlement area, although for the purposes of providing background to the Structure Plan, it will be placed in regional context with the area of interest extending south to the Learmonth Airport and north to Vlamingh Head. This study area is depicted on **Figure 1**. **Figure 2** shows the land tenure specifically within the Exmouth Townsite.

2.2 THE METHODOLOGY

The Structure Plan report focuses on the establishment of a land use framework for the Exmouth Townsite that will guide the preparation of an up to date local planning strategy, and in so doing will assist the implementation of development initiatives and land use decisions over time following the statutory review of the Shire of Exmouth Town Planning Scheme No 3.

As the Structure Plan brief did not seek input from a multi-disciplinary consultant team; the plan has evolved with strong reliance on input from key stakeholder groups and community representatives with direct involvement in the Exmouth Region. In addition, past reporting and valuable technical information applicable to the study area has been considered during the preparation of this plan.

With the benefit of engaging in community consultation early in the Structure Plan review process, through the Exmouth Visioning Workshop, the Structure Plan process has incorporated the structural elements of the workshop outcomes plans into the draft recommendations of the plan. This enabled the plan to be informed about local planning issues that are of importance to the community, and whilst not normally a structure plan requirement, where possible these community outcomes have been reflected as development initiatives cross-referenced on the face of the plan.

2.3 THE OUTCOMES

In undertaking a rigorous review of the Exmouth Structure Plan (2004), the Exmouth Townsite Structure Plan (2009) as presented in this report has specifically:

1. Identified opportunities and constraints to be accommodated by future development within the Townsite, with the foremost land use determinant being flood management.

LOCATION

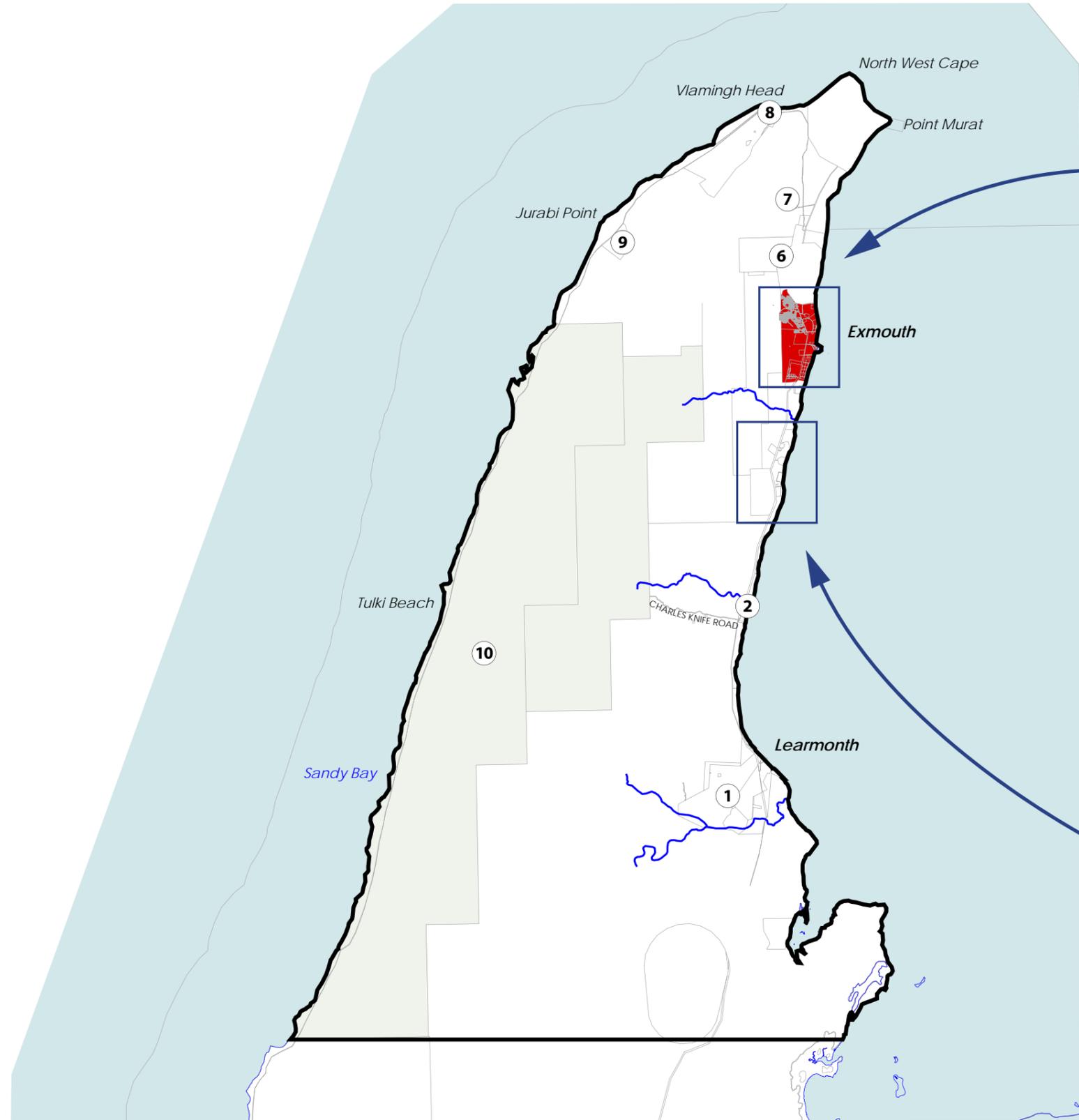


LEGEND

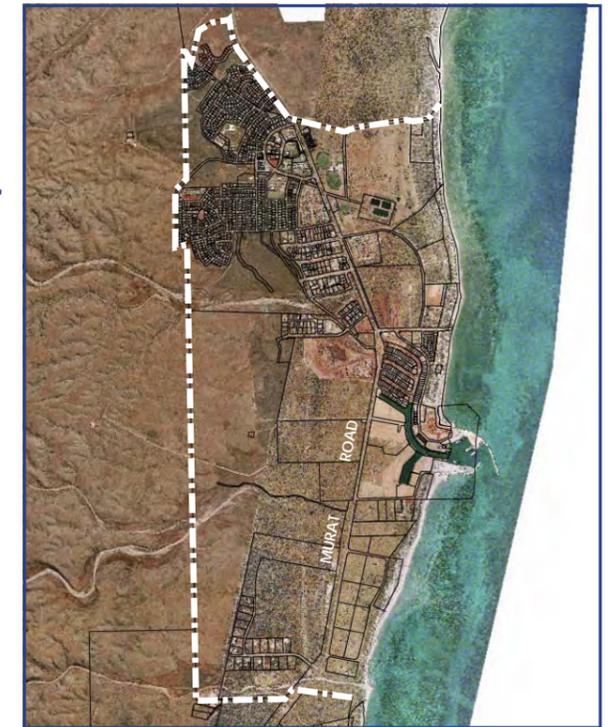
- Study Area - Exmouth Townsite
- Study Area - Regional Context

NOTES

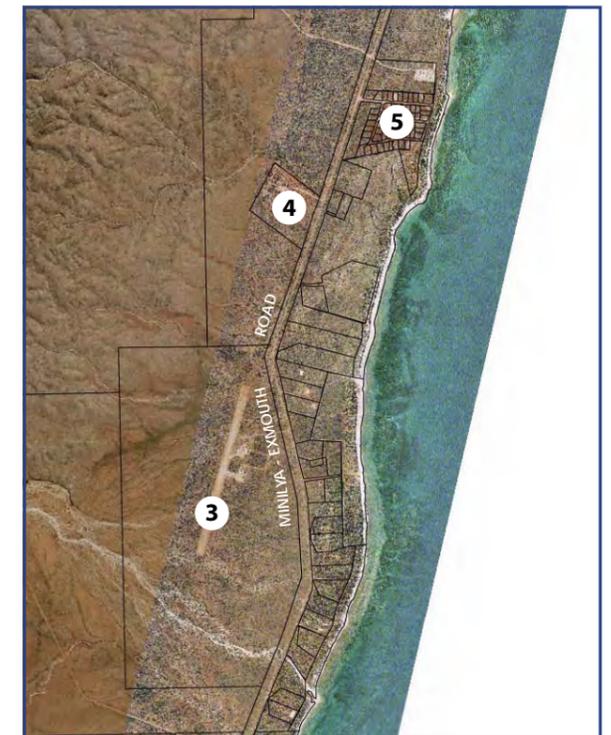
- ① Learmonth Airport
- ② Kailis Processing & Retail Outlet
- ③ Light Aircraft Strip
- ④ Waste Disposal Area
- ⑤ Industry - Lot 51
- ⑥ Naval Base
- ⑦ Pindan Pit
- ⑧ Vlamingh Head Caravan Park
- ⑨ Yardi Creek Caravan Park
- ⑩ Cape Range National Park



EXMOUTH TOWNSITE

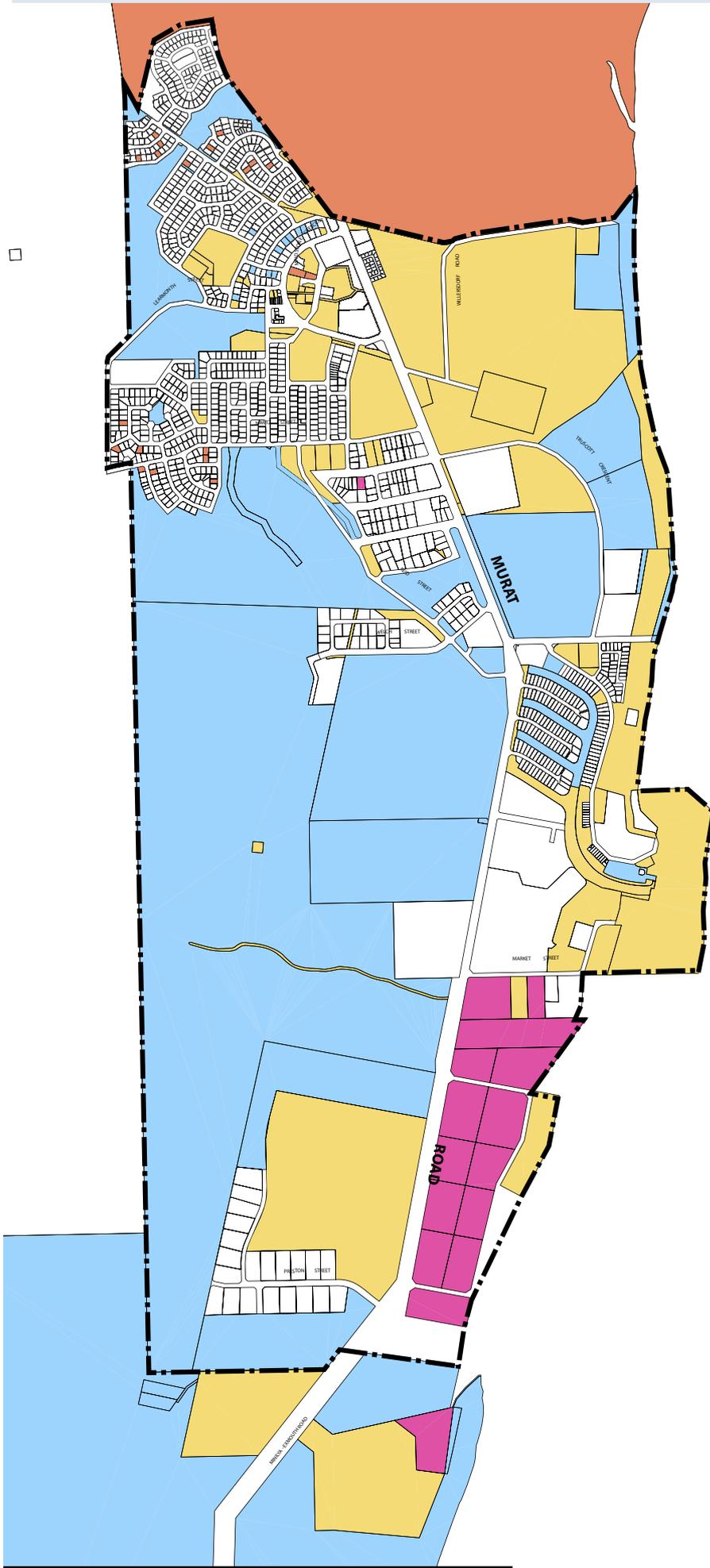


EXMOUTH TOWNSITE (south)



-  Townsite Boundary
-  Government Owned Land
-  Reserve
-  Crown Lease
-  Unallocated Crown Land
-  Freehold

Source : State Land Services as @September 2009



JOINS MAP B





2. Identified the need for flood mitigation works to be undertaken to establish clear parameters for future development on land affected by the floodway/flood fringe.
3. In so doing, identified the likely framework for development within the Townsite, including areas for housing, open space and recreation, commerce, employment, community and cultural activities and conservation.
4. Promoted a strategic framework to ensure the Town Centre is maintained in its present location and enhanced as Exmouth's focal point for core land uses, including retail, commerce, service, administration, community, education, recreation and tourism needs.
5. Provided for the opportunity to formalise the endorsement of the proposed relocation of Exmouth Waste Water Treatment Plan onto Commonwealth Land north of the Townsite as funding is prioritised.
6. Provided the opportunity for the identification of additional tourism sites guided by the Local Tourism Planning Strategy recommendations (TWA, 2009).
7. Introduced a 'mixed use' land use category into the fabric of Exmouth, defined in more contemporary terms to allow a range of compatible uses to co-locate on sites that have high exposure, demand landmark architecture and have frontage to an important road link.
8. Re-defined the existing mixed use zone as a service commercial/service industry area, allowing for a range of permitted uses consistent with the existing land use framework, with specific guidance given to the location of light industry uses.
9. Provided for limited expansion of the Welch Street Light Industrial Area (LIA) within the landuse buffer of the Exmouth power station.
10. Specified the need for a Buffer Definition Study to be undertaken as a priority to define the off-site buffer requirement of the Exmouth power-station assuming full capacity, acknowledging best management practices, and assuming the land use preference for urban/tourism use on adjacent landholdings.
11. Identified site selection criteria for future industrial land south of the Exmouth Townsite for industrial and strategic industrial use with buffer requirements.
12. Confirmed the movement system within Exmouth including the potential for a new north-south neighbourhood connector road with linkages to the existing road system.
13. Supported the extension of the buffer requirements of Cameron's Cave including provision for linkages with Exmouth Gulf related to groundwater flow.
14. Supported the longer term investigation of land identified as "constrained land" by the Structure Plan and provided guidance as to limiting factors.
15. Identified the potential to investigate minor adjustment to the Townsite boundary only where management of the groundwater resource, subterranean fauna and karst formations and other limiting factors of the landform have been determined and mitigated.
16. Acknowledged the government initiative to investigate the proposed expansion of the Exmouth harbour and corresponding need for infrastructure.

3.0 PLANNING CONTEXT

3.1 STATE POLICIES AND INITIATIVES

3.1.1 STATE SUSTAINABILITY STRATEGY

The State Sustainability Strategy (SSS) was produced by the State Government in 2003, and establishes a sustainability framework containing key principles, visions and objectives. The Strategy seeks to ensure that sustainability is considered and incorporated into decisions and actions for the future of WA at all levels. Six key areas are identified as follows:

-  Ensuring that governance drives the transition to a sustainable future;
-  Valuing and protecting the natural environment and ensuring the sustainable management of natural resources;
-  Planning and providing for settlements that reduce the ecological footprint and simultaneously enhance the quality of life of citizens;
-  Supporting of communities to actively participate in achieving a sustainable future; and
-  Assisting business to benefit from and contribute to sustainability.

The planning for the future growth of the Exmouth Townsite has been underpinned by these sustainability principles and objectives outlined in the SSS. The Structure Plan is responsive to the sensitive regional natural environment, identifies existing and future employment, business and tourism opportunities and promotes the strengthening of community interaction with additional and improved civic facilities and spaces.

3.1.2 STATEMENT OF PLANNING POLICIES

A number of Statement of Planning Policies (SPP) have been adopted by the WAPC and are applicable to future land use planning for the Exmouth Townsite. Particularly relevant policies are as follows:

ENVIRONMENTAL AND NATURAL RESOURCES (SPP 2)

SPP 2 seeks to ensure environmental and natural resource considerations are integrated with planning decisions and actions and the conservation of important areas. The policy identifies a series of general measures to achieve this goal including avoiding development that may result in unacceptable environmental damage; actively seeking opportunities for improved environmental outcomes; protecting significant natural, indigenous and cultural features; ensuring coastal development is sustainable; and taking into account the impact of environmental change.

STATE COASTAL PLANNING POLICY (SPP 2.6)

SPP 2.6 has a number of objectives regarding the planning for coastal environments in WA, including the need to protect, conserve and enhance environmental and heritage coastal values; provide public access to the foreshore and coast; identify land that is appropriate for development; and ensure coastal development addresses environmental change and processes. The SPP requires that development adjacent to coastal areas should be supported by coastal planning strategies and/or a foreshore management plan, and identifies setback requirements for coastal development in response to environmental and sea level changes across a 100 year timeframe.



PUBLIC DRINKING WATER SOURCE POLICY (SPP 2.7)

SPP 2.7 outlines the importance of ensuring that land use and development within Public Drinking Water Source Areas (PDWSAs) protects and manages water resources for long-term supply. Competing land use activities such as urban development often place pressure on surface water and groundwater catchments, therefore appropriate decision-making and management should be adopted in order to protect public water supply.

The Department of Water's Land Use Compatibility Table identifies the suitability of various land uses within Priority 1, Priority 2, or Priority 3 PDWSAs. Priority 1 (P1) areas offer the highest level of protection, allowing for no degradation of drinking water sources to be caused by the development of incompatible land use activities.

WATER RESOURCES (SPP 2.9)

SPP 2.9 presents a number of objectives relating to protecting, preserving, managing and improving the state's water resources through land use planning. An integrated management approach, focused on achieving sustainable outcomes will ensure that economic, social, cultural and/or environmental values are considered and enhanced.

The Department of Water's Better Urban Water Management 2008 document emphasises the use of integrated water cycle management to achieve more efficient use of water resources and sustainable outcomes for the environment and urban form. Principles of integrated water cycle management can be achieved through the evaluation of development, whereby land use planning and water planning are undertaken concurrently in order to achieve water sensitive urban design.

URBAN GROWTH AND SETTLEMENT (SPP 3)

SPP 3 sets out requirements for well planned and coherent settlements. Planning should ensure that settlements have a strong, diversified and sustainable economic base to provide employment; sufficient and capable land in suitable locations for housing, employment, commercial, recreational and other purposes; co-ordination of various land uses; a choice of housing and lifestyle opportunities; and proper consideration of the environment. Importantly for Exmouth, the policy requires that in regional areas growth should be accommodated through consolidation and expansion of existing settlements rather than creation of dispersed new settlements.

STATE INDUSTRIAL BUFFER POLICY (SPP 4.1)

SPP 4.1 is directly applicable to the determination of an appropriate buffer to the Exmouth Power Station and waste water infrastructure. It is noted that SPP 4.1 State Industrial Buffer (Amended) is currently under review and the assessment of land use buffer for infrastructure must also have due regard for this Draft version of the Policy.

NINGALOO COAST (SPP 6.3)

Perhaps the most significant of the SPPs to the Exmouth Townsite, SPP 6.3 was prepared to accompany The Ningaloo Coast Regional Strategy (see Section 3.2.2 below), and has the following key objectives:

-  Provide state agencies, local government, community and proponents with clear guidance regarding acceptable and sustainable development on the Ningaloo coast.
-  Maintain the Ningaloo coast as an all-seasons recreation and nature-based tourism destination and limit growth with managed staged development, to ensure that the community continues to enjoy a remote and natural experience.

-  Preserve and protect the natural environment and enhance and rehabilitate degraded areas within the environment.
-  Consolidate future residential, commercial, higher-impact tourism and industrial development in the towns of Carnarvon and Exmouth and provide strategic directions for their future growth.

3.1.3 TOURISM PLANNING TASKFORCE REPORT

The Tourism Planning Taskforce Report, prepared by the Department for Planning and Infrastructure and endorsed by Cabinet in January 2006, contains 26 recommendations regarding the planning for tourism sites. Most of these recommendations relate to the preparation and implementation of local planning strategies and schemes.

The Exmouth Townsite Structure Plan is intended to guide formulation of the Shire's Local Planning Strategy and new Town Planning Scheme. Accordingly, the Taskforce Report's recommendations for Local Planning Strategies and Schemes are relevant. According to the Report, local planning strategies and schemes are required to specifically address the needs of tourism as part of identifying the rationale behind any land identified for tourism development. Key issues to be addressed include the role, focus and range of tourism; the principal attractions and development opportunities; projected demand for accommodation, infrastructure and facilities in the short and longer term; identification of strategic tourism sites; and identification of requirement for site and building design guidelines.

3.2 PREVIOUS STUDIES

3.2.1 EXMOUTH-LEARMONTH (NORTH-WEST CAPE) STRUCTURE PLAN 1998

The *Exmouth Learmonth (North West Cape) Structure Plan 1998* provides a planning framework for the whole of the North West Cape. As part of this scope, a series of specific proposals and objectives were identified for different planning units, including the Exmouth to Learmonth Planning Unit. The following were the key objectives identified for the Townsite and surrounds:

-  To provide for the orderly development of the Exmouth Townsite – the Structure Plan aimed to consolidate development within the townsite in order to maximise efficiencies of services and infrastructure.
-  To provide for sufficient and appropriately serviced land to accommodate future housing needs – the Plan identified additional land for urban development, strictly within the existing townsite boundary, and acknowledged that potable water supply is one of the most significant constraints to future growth of Exmouth's population.
-  To provide appropriately located rural residential/special residential lots, within the Exmouth Townsite, connected to services whenever possible – given the arid and fragile nature of the North West Cape, the Structure Plan considered that there was limited capacity for larger and remote lots. Accordingly only limited expansion of the existing rural residential area in the southern portion of the townsite was recommended.

- 
-  To locate on Commonwealth land adjoining the townsite activities that complement the Exmouth Townsite and do not conflict with defence activities – given the ongoing use of the Commonwealth land for naval communications activities, and the desire not to allow discrete uses to locate on the land under lease arrangements that might that conflict with the objective of consolidating the townsite, the Structure Plan sought to discourage non-defence activities on the naval communications station. The Plan did promote the relocation of the wastewater treatment plant from within the townsite boundary onto Commonwealth land.
 -  To provide adequate land, appropriately located and serviced, for the commercial needs of Exmouth – the Structure Plan sought to ensure that the town centre, bound by Murat Road, Maidstone Crescent and Kennedy Street, remain the focus for all major commercial development in the region. In order to achieve this, the Shire of Exmouth was encouraged to facilitate development of available land in the townsite for commercial uses. The Exmouth Marina was to be restricted to only smaller scale, tourist related retail and commercial uses.
 -  To provide adequate land, appropriately located and serviced, for a range of industrial uses; and to minimise the impact of the natural environment on future industrial development – the Structure Plan identified a conflict with the Welch Street industrial area and nearby residential uses, and promoted the future use of this precinct mainly for service and light industrial uses, while land outside the townsite (at 50 and 51 Lyndon Location) was to be investigated as a future general industrial precinct, a ‘strategic industrial site’.
 -  To provide adequate appropriately located land for the recreational, community and cultural needs of Exmouth – the Structure Plan acknowledged the importance of recreation areas and cultural facilities for a growing population, and proposed that opportunities be taken to expand the existing sporting and recreation precinct as other uses relocate, and encouraged the development of cultural facilities such as a theatre, cinema, and education facilities.
 -  To identify and agree a defined character for Exmouth, in the context of its environmental and aesthetic fragility; to initiate and adopt design guidelines for the townsite that promote the defined character and sustainable built outcomes; and to minimise the visual and physical intrusiveness of all development within the townsite – in order to ensure that all future development contributes to the unique ‘sense of place’ that characterises Exmouth, the Structure Plan promotes the formulation of a Townscape Plan, a Public Places Enhancement Strategy, and a set of Design Guidelines. This was intended to include a detailed plan for the Town Centre that addressed car parking, pedestrian and traffic movement.
 -  To appropriately locate large-scale tourism development in serviced areas and provide opportunities for a range of accommodation types – given the existing infrastructure and servicing, and the fragility of the west coast of the peninsula, the Structure Plan determined that large scale tourist development should be encouraged to locate within the townsite boundary. Only day visits and low-impact/small-scale accommodation were to be considered for the west coast.
 -  To conserve land with significant environmental value; and protect groundwater as part of the human and subterranean environment – various extensions to the Cape Range National Park and to different conservation areas were recommended in the Structure Plan, as was protection of the Exmouth Groundwater Catchment.

Many of the recommendations contained in the North West Cape Structure Plan remain relevant today, and have been carried through in preparation of the Townsite Structure Plan.

3.2.2 NINGALOO COAST REGIONAL STRATEGY CARNARVON TO EXMOUTH 2004

The Ningaloo Coast Regional Strategy was prepared in conjunction with the Ningaloo Coast Statement of Planning Policy 6.3, and was intended to provide the strategic framework for sustainable tourism and land use on the Ningaloo Coast for a 30 year timeframe. The Strategy was split into separate sections, the first of which dealt with regional scale issues, particularly providing the guidelines for coastal tourism and regional land use. The second section established individual Structure Plans for the three main settlements in the region – Carnarvon, Exmouth, and Coral Bay (the Exmouth Structure Plan is further described in Section 3.2.3 below).

The most significant elements of the Strategy to the Exmouth Townsite Structure Plan were those contained in the Exmouth Structure Plan section of the report, as detailed below. Significantly, the key recommendation was that the towns of Carnarvon and Exmouth were to serve as the gateways to the Ningaloo coast, with coastal development in other areas limited to small-scale, low-impact development. This gives the context for the Townsite Structure Plan, and the importance of ensuring that future development in Exmouth is appropriate and well-managed.

3.2.3 EXMOUTH STRUCTURE PLAN 2004

The existing Exmouth Structure Plan (see **Figure 3**) identifies the growth opportunities for the townsite. Department of Defense land to the north of the townsite, and eastern areas towards the Exmouth Gulf are identified as having limited growth potential, with the southern area of the townsite identified as the main focus for future urban development. Topographical and geological constraints to the west of the townsite limit growth opportunities in this direction.

The existing Exmouth Structure Plan outlines a number of key land use planning objectives and proposes a number of actions and guidelines. These include:

-  Promote Exmouth and Carnarvon as the gateways to the Ningaloo coast;
-  Ensure efficient water use and the prioritization of desalination plant investigations;
-  Consider and conserve aboriginal heritage and environmental features;
-  Locate all new development within the existing townsite, with a focus on infill development, and consider environmental constraints such as flooding;
-  Integrate the Exmouth Marina Village with surrounding development;
-  Relocate the existing water treatment plant to Commonwealth land and restrict other non-defense uses in this area;
-  Locate major commercial development in the town centre and restrict commercial development in the Marina;
-  Identify and develop new industrial land in appropriate locations; and
-  Continue implementation of townscape initiatives and town centre plan.

The 2004 Structure Plan was very similar to the 1998 North West Cape Structure Plan for the Exmouth Townsite, with only minor variations due to changes in some of the contextual issues over the intervening years. The 2004 Plan did not attempt a wholesale review of the 1998 Plan, instead it accepted the majority of the assumptions of the earlier formulation work, and carried those through unchallenged.



This is in large part due to there being only limited change in the contextual parameters within which the two Structure Plans were prepared. Formulation of the Townsite Structure Plan subject of this report however provided the opportunity for a wholesale review of the policy, environmental, design and consultation context with the resulting proposals providing a wholly updated plan for the Exmouth Townsite for the first time in over ten years.



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Produced by project mapping section,
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Commission Perth WA August 2004
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Legend

-  recreation and open space
-  residential
-  future urban
-  town centre
-  mixed use light industrial and commercial
-  industry
-  public purpose
-  tourist
-  rural-residential
-  special residential and long-term future urban
-  marina precinct
-  marina and boat harbour
-  coastal park
-  townsite boundary
-  AREAS OF REVIEW



PART 2

Site Context



4.0 SITE CONTEXT

4.1 THE ENVIRONMENT

4.1.1 CLIMATE

Exmouth is located within a hot, semi-arid climatic zone. Summers (October to April) are very hot, with an average maximum temperature of 36.8° C in January. Conditions are more temperate during the rest of the year, with an average maximum temperature of 23.7° C in July. Average minimum temperatures range from 24.6° C in February to 14.1° C in August.

The average annual rainfall for Exmouth is 300 mm, however this is highly variable, and is offset by high evaporation rates. Most rainfall occurs during the 'wet season' from January to July, with heaviest falls occurring early in the season (February to March) as a result of tropical cyclones. Cyclones in late summer can contribute 40-60% of the annual rainfall, whilst winter rainfall is lighter and less intense, but more regular.

Severe tropical cyclones with wind speeds in excess of 75-90 km/hr occur every three to five years over Exmouth, typically between November and April, and in addition to wind damage can cause extensive flooding. Less intense cyclones are experienced in the period between January and March approximately two years in every three. Cyclone Vance passed within 30 km of Exmouth during its passage down the Exmouth Gulf in 1999, and wind speeds of up to 267 km/hr, the strongest ever recorded on mainland Australia, were measured at the Learmonth weather station.

Southerly winds dominate the wind pattern, with south to south-east winds between 5 and 30 km/hr occurring in the morning, with winds tending slightly more south-easterly in the winter months. During the summer, afternoon sea breezes arise from the west and south-west, while easterly directions are more common during winter afternoons. Strong winds from the north and north-east are infrequent but are commonly associated with tropical cyclones when they do occur.

The nature of the area's climate has two main implications for land uses in the region. Firstly, the provision of a suitable water supply is likely to be limited to groundwater sources, requiring protection of this resource. Secondly, the occurrence of tropical cyclones needs to be considered in relation to the location and design of buildings and infrastructure.

4.1.2 LANDFORM AND GEOLOGY

The Exmouth Townsite is located within the Carnarvon sedimentary basin, on the north-eastern portion of the North West Cape peninsula. This peninsula is composed of Cainozoic (Tertiary and Quaternary) marine limestone and sediments.

The Cape Range is composed of Tertiary limestone, and forms the spine of the North West Cape peninsula. Cape Range peninsula is approximately 80 km long, 20 km wide, with rugged topography reaching a maximum elevation of 314 m. The range is bordered on the west by the Indian Ocean and a narrow continental shelf about 12 km wide containing the Ningaloo Reef, and to the east by the shallow Exmouth Gulf. Caves, gorges and other karst features occur throughout the peninsula and are abundant within the Range itself.



The Quaternary sediments make up the eastern coastal plain, the terrestrial dunes of the northern peninsula, the beach dunes surrounding the peninsula, and the saline mud flats and mangrove communities in the southern and eastern parts of the peninsula.

4.1.3 HYDROLOGY

The groundwater of the Cape Range Peninsula occurs in confined and unconfined aquifers. The unconfined aquifer of porous limestone along the eastern slopes of Cape Range between Learmonth and Exmouth contains substantial potable groundwater resources. This aquifer supplies Exmouth's water supply and is replenished by direct infiltration of rainfall and runoff from storm events on the Range. The groundwater discharges into the Exmouth Gulf and, in addition to the effects of seasonal recharge, there is a natural variation in groundwater levels and the extent of saltwater intrusion due to tidal fluctuations in the Gulf.

The upper part of the aquifer is permeable karst, while the underlying limestone is less permeable. In general, a 20-30 m thick layer of fresh groundwater overlies a saltwater wedge, with the transition zone located about 5 km from the coast. The overlying fresh groundwater diffusion zone in the karstic aquifer is a major habitat for stygofauna.

The water supply for the Exmouth Townsite is drawn from the northern part of this aquifer. The Water Corporation has operated the borefield for an extended period of time and has not reported any evidence of reduced freshwater availability. In the northernmost sector of the borefield, there is evidence of increasing salinity in bores with high abstraction rates and in the vicinity of domestic bores.

The coastal dunes of the Cape Range retain runoff to capture ponded water behind the coastal dunes, providing a suitable environment in low lying areas for sparse vegetation species. The upper reaches of the catchments feature exposed, fractured limestone, allowing rainfall runoff to infiltrate directly into the groundwater aquifer, except in heavy rainfall events.

4.1.4 FLORA AND FAUNA

4.1.4.1 FLORA

Despite its aridity, the Cape Range is very rich in flora with a range of habitat types found over the Peninsula. The Peninsula is situated in the Carnarvon Botanical District of the Eremacean Botanical Province, which extends from Shark Bay northwards to the Exmouth Gulf, and is dominated by arid, perennial shrub associations. The distribution of vegetation across the Peninsula generally varies with geology and geomorphology, and a number of unique minor vegetation complexes can be found in the areas that are confined to the Cape Range.

4.1.4.2 FAUNA

Terrestrial fauna is rich and diverse in the region, particularly the reptile species. There are fourteen species present which have been declared rare or are likely to become extinct.

Two types of subterranean fauna, troglobites (terrestrial) and stygofauna (aquatic) can be found in the area, inhabiting the extensive karst formations which have contributed to the possible identification of the region as a World Heritage Site. The stygofauna found in the Cape Range peninsula contains classes, orders, genera and species not otherwise found in the Southern Hemisphere. At least 55 species of troglobite also give the peninsula some of the most diverse karst fauna in the world.

Protection of the caves and karst formations of the Cape Range will be of critical importance in maintaining the biodiversity of fauna in the region.

4.1.5 LAND CAPABILITY

The preparation of a land capability/suitability study was identified as an important component of previous structure planning processes, namely the implementation of the Exmouth-Learmonth (North West Cape) Structure Plan (1998). The *Exmouth Learmonth Structure Plan Land Capability Study*, prepared in 1997 by Land Assessment Pty Ltd, collated land resources data from field survey and mapping to report on:

-  The physical characteristics of the study area
-  Physical and other constraints to future development
-  The capability of the land to support a range of land uses
-  Recommendations on the suitability of those uses

The results of the study assisted the formulation of future land use and development decisions for the North West Cape at that time, and they continue to be an important tool for decision making.

The 1997 Land Capability Study has also been used as a key consideration in assessing preferred land uses in the 2009 Structure Plan. The Exmouth Townsite is comprised of three land systems which can be used as the framework for capability mapping. The Exmouth Townsite is dominated by the *Learmonth Land System* correlating with the coastal plain. This system is framed either side by the *Range Land System* to the west, correlating with the dissected limestone plateaus, and the *Coast Land System* to the east, running parallel to the Exmouth Gulf coastline.

The land capability study assesses land units within each system for their capability to support a range of given uses. This assessment of land units was used particularly to define constrained landholdings within the study area which have been defined on the face of the Structure Plan. These areas are identified as requiring more detailed site investigation to ascertain development potential. The land capability mapping has assisted in identifying limiting factors to be alleviated such as the extent of the underlying karstic formations and need for their protection, the ability of soils to purify wastewater disposal due to poor drainage or lack of soil depth, and coastal stability and setbacks. The land capability mapping has also reinforced the definition of the floodway and flood fringe areas as defined by the Department of Water flood management study.

4.1.6 HERITAGE

4.1.6.1 INDIGENOUS HERITAGE

The Cape Range peninsula has significant archaeological heritage. It provides the earliest confirmed evidence of Pleistocene marine resource use in Australia, and it has an important role in the conservation of Indigenous culture. Aboriginal habitation of the North West Cape and Exmouth area is thought to have commenced at least 38,000 years before the present, and it continues to the present day. The North West Cape area is of ongoing cultural significance to Aboriginal people and to the Gnulli Native Title Claimants Group, recognised by the Aboriginal community as custodians of Aboriginal culture for the area. Archaeological surveys undertaken in the area, and the wealth of material uncovered, indicate that the peninsula is also important because it provides unique opportunities for increasing contemporary understanding of traditional Aboriginal life.



Advice from the Department of Indigenous Affairs (DIA) indicates that there are three Registered Aboriginal Sites in the Exmouth Townsite Structure Plan area. There are many more Registered Sites throughout the surrounding region, both within Cape Range and across the coastal plain and dunes. Given the archaeological significance of the area, it is very likely that other sites exist within the townsite and in the region that have not yet been entered on the Register of Aboriginal Sites, and the *Aboriginal Heritage Act 1972* protects all Aboriginal sites in Western Australia whether they are known to DIA or not.

The Aboriginal Heritage Act requires that approvals are sought for any works that may affect Indigenous heritage values. While Registered Aboriginal Sites are explicitly protected through this requirement, sites that are unknown to the Department of Indigenous Affairs (DIA) may not be. In order to ensure that the Aboriginal heritage within the structure plan area is conserved and protected from any damage or alteration, it is recommended that the use of sensitivity mapping be investigated as a means of reinforcing heritage legislation.

Sensitivity mapping involves the preparation of ethnographic and archaeological desktop surveys of the whole Structure Plan area, and in this instance would ideally be undertaken as part of the formulation of the Shire of Exmouth Local Planning Strategy. The preliminary desktop surveys of the townsite area would need to be prepared by suitably qualified consultants to highlight those areas that have the potential to contain Aboriginal sites and intact archaeological deposits, with this usually being dependent on the level of previous disturbance of the land. The mapping would classify areas as having a high, medium or low potential archaeological significance, generally determined through archival research including review of previous studies, interpretation of geological/landform mapping and aerial photography; consultation with Aboriginal interest groups; and on-site inspections.

The sensitivity mapping would conclude with recommendations as to the appropriate strategy for ongoing management of Aboriginal heritage across the study area. These recommendations are likely to include a requirement for more detailed ethnographic and archaeological studies to be undertaken in areas identified as having high to medium potential archaeological significance, and will outline other procedures that should be followed in order to prevent accidental or deliberate damage to culturally significant sites across the Structure Plan area as planning and development of the townsite progresses.

To ensure that the recommendation to undertake Archaeological Sensitivity Mapping is carried through in future planning for the Exmouth area, notation has been included on the face of the Structure Plan referencing the townsite as an investigation area requiring further Indigenous heritage assessment.

4.1.6.2 NON-INDIGENOUS HERITAGE

The first recorded landing by non-Aboriginals on the North West Cape was by the Dutch ship *Mauritius* in 1618, which arrived at the Australian coast by accident on its way to Java. Two centuries later in 1801, French ships visited the area and named Cape Murat after Napoleon's brother-in-law.

Since this time, exploration, settlement and development of the area have occurred, and today several places within the Shire of Exmouth have been identified as having non-Aboriginal cultural significance, whether to the nation, the State, or more locally.

The Vlamingh Head Lighthouse and Quarters is included on the Register of the National Estate and the Western Australian Register of Heritage Places, as well as being classified by the National Trust. The Lighthouse was built in 1912, and was operated by two lightkeepers until its decommissioning in 1967.

Other historical sites in the Exmouth area include Yardie Station Homestead, the WWII Radar Site, Mildura Wreck, Yardie Creek, the Operation Potshot Site, Rough Range and Cape Range Oil Well Sites and Wapet Creek. It is important that planning makes provision for the preservation of all these sites.

4.2 THE REGION

Exmouth is the only townsite on the North West Cape, and is the second largest town in the Gascoyne Region. The population of the Exmouth Townsite represents approximately 80% of the total population of the Shire of Exmouth.

Figure 4 shows the Exmouth Townsite in its Regional Context. To the south-west of the townsite, and stretching for much of the length of the west coast of the peninsula, is the Cape Range National Park. The Park comprises 50,581 hectares of heavily dissected limestone range and fringing coastal plain directly adjacent to the northern part of the Ningaloo Marine Park, with plateaus of up to 314m high. The Park is vested in the National Parks and Nature Conservation Authority and is managed by DEC to accommodate public recreation within the context of long-term natural stability and conservation of resources.

North of the National Park, much of the land at the northern end of the peninsula has been identified by DPI, the Shire of Exmouth and the Department of Environment and Conservation as being considered for inclusion in the National Park management area. While this land is still subject to investigation for its environmental value, this does place constraints on the possibility for any other land uses to locate here until final decisions on the future National Park boundary are made.

Close to the northern tip of the Cape Range peninsula, the Vlamingh Head Lighthouse was built and completed in 1912. It was decommissioned in 1967, and is now the only restored lighthouse powered in the traditional way with a kerosene burning light. In the 1980s, the Vlamingh Head Caravan Park was developed around the original lighthouse keepers cottages, and is now the only significant pocket of development north of the townsite and the Commonwealth defence land.

Yardie Creek Homestead Caravan Park is located almost directly west of the Commonwealth defence land on the other side of the peninsula. It is the last settlement on the road from Exmouth Townsite round to the entry to the National Park 15km south of the Caravan Park. Both Yardie Creek and Vlamingh Head Caravan Parks have been identified in the Ningaloo Coast Regional Strategy as coastal tourism nodes allowed to accommodate up to the equivalent of 500 beds, and both are already developed to this extent.

Directly north of the townsite, and at the very tip of the peninsula, land is vested in the Department of Defence (DoD). At this stage, the Australian Government intends to continue its operations in the area, comprising of numerous installations including the Harold E. Holt Naval Communications Station, the Learmonth Air Base and other miscellaneous land parcels used for communications infrastructure. Investigation is currently being undertaken by the DoD into the future of the Harold E. Holt Naval Base, however for the purposes of this Structure Plan it is to be assumed that the status quo will be maintained. Until the future of the site is decided, the Australian Government has indicated its willingness to lease or transfer some parcels of land for activities that would not impact on the station's operations. However, from a planning perspective it is considered important that any such uses should not be of a kind that would replicate the role and function of the Exmouth Town Centre, particularly given that any development on Commonwealth land would not be subject to the planning framework imposed by the State Government or the Shire of Exmouth.

LOCATION



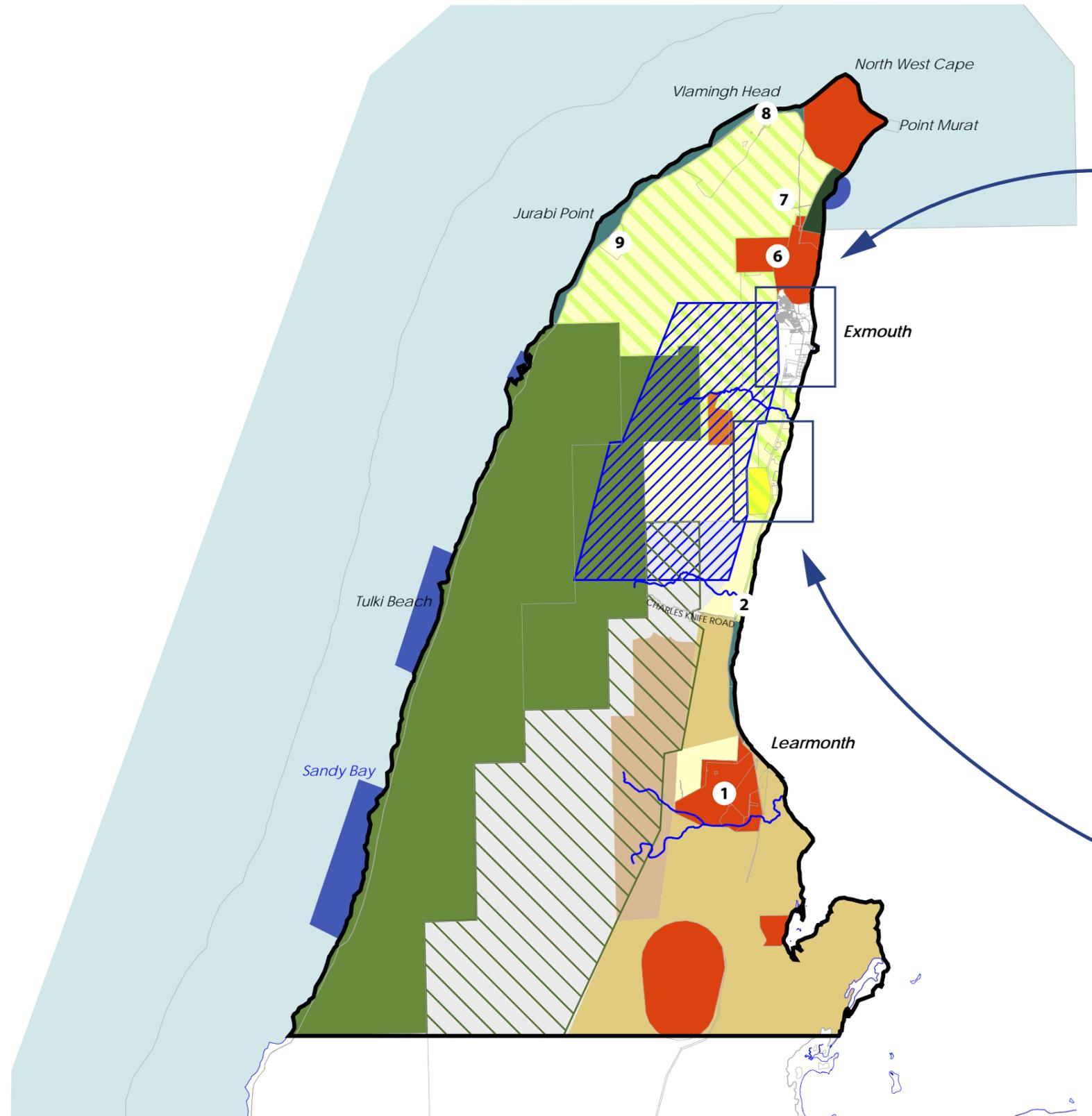
LEGEND

- Study Area - Context
- Cape Range National Park
- Areas Proposed for Addition to the Public Conservation Estate
- Reserve for Conservation & Recreation
- Proposed Reserve for Conservation & Limestone Reserve Management
- Exmouth Groundwater Catchment Reserve
- Coastal Reserve
- Department of Defence Land
- Pastoral Land
- Ningaloo Marine Park
- Marine Sanctuary Zone
- Limestone Mining Lease Area
- Public Purposes
- Pastoral Lease Exclusion Areas
- Unallocated Crown Land (VCL and Other Crown Reserves)
- Conservation & Landuse Investigation Areas subject to further DPI Study

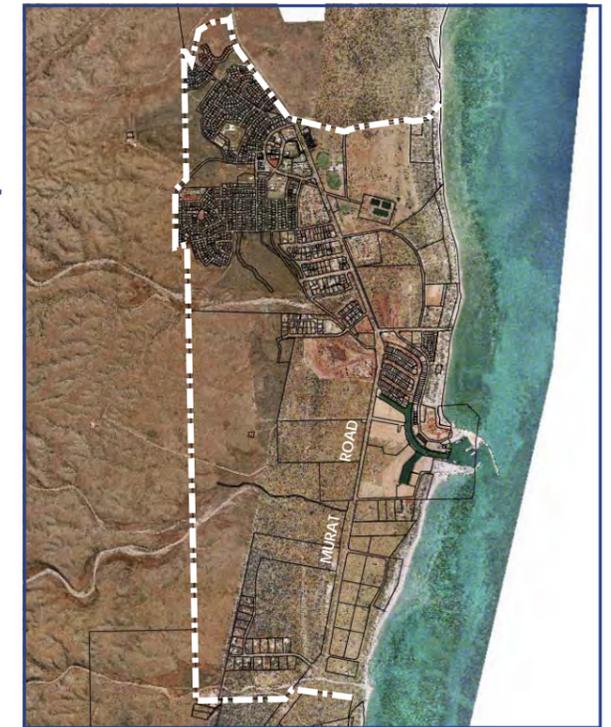
Source : Cape Range National Park Draft Management Plan 2005

NOTES

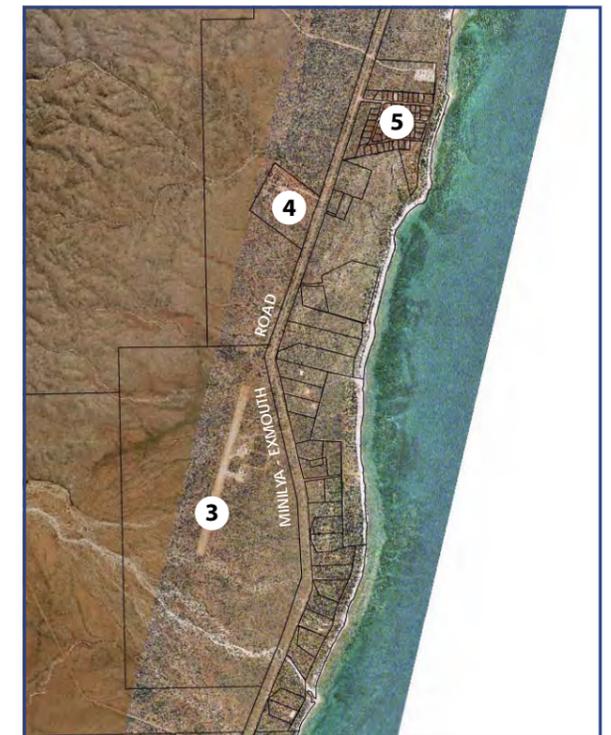
- ① Learmonth Airport
- ② Kailis Processing & Retail Outlet
- ③ Light Aircraft Strip
- ④ Waste Disposal Area
- ⑤ Industry - Lot 51
- ⑥ Naval Base
- ⑦ Pindan Pit
- ⑧ Vlamingh Head Caravan Park
- ⑨ Yardi Creek Caravan Park



EXMOUTH TOWNSITE



EXMOUTH TOWNSITE (south)





The Exmouth Water Reserve, located directly to the west of the townsite and land to the south, was established by the Department of Environment and Conservation (as was) to protect Exmouth's public water supply source from contamination. The Reserve is managed as a Priority 1 Protection Area, and any development of the land is restricted. The townsite's water supply and the Reserve are discussed in greater detail at Section 5.2.

The final land use of significant note in the regional context of the townsite is the strategic and composite industrial area located approximately eight kilometres south of the town centre on the Minilya-Exmouth Road. The site was identified for general and noxious industrial uses to ease the pressure on the Welch Street industrial area, ensuring only light and service industrial development could locate close to the townsite.

4.3 THE ECONOMIC AND SOCIAL CONTEXT

Exmouth's economy is based on its natural resources. The most significant of economic contributors is tourism, but the region has a diverse economic base with other important industries including mining (oil, gas and limestone), fishing, aquaculture and pastoralism. Work associated with maintenance of the Commonwealth defence communications infrastructure also generates additional economic wealth for Exmouth.

4.3.1 TOURISM

Exmouth's significance as a tourist destination is key to the town's function and character. During peak periods Exmouth's population increases from around 2400 to over 6000, presenting challenges for service and facility provision, and for ensuring that the amenity and needs of the permanent residential community are protected whilst the tourist population is provided for.

Tourism WA data indicates that over the years 2006 to 2008, an average 98,000 visitors came to the Shire of Exmouth each year, with an average total annual spend of \$44 million. The eco-tourism and budget side of the tourism industry dominates in the region, with the majority of visitors staying in caravan parks or camping grounds. While this sector of the tourism market is likely to remain strong and expansion planned for, there will also be a need to plan for expansion of the hotel and motel tourism markets if the townsite is to continue to meet the needs of the tourism economy.

Improving air access is linked to providing more quality accommodation, as providing more high and mid level accommodation will attract the international and interstate markets, which in turn will attract air carriers. This will particularly help maintain the tourism economy in the domestic off-season. Sufficient and appropriate sites for tourism need to be accommodated in the new Structure Plan.

4.3.2 RETAIL, COMMERCIAL AND INDUSTRIAL USES

The ongoing growth in tourism in the region, and the potential for future growth in resident population as other industries such as mining and aquaculture expand, provides growing demand for retail, commercial and industrial uses to support this population. Expansion of these uses, and the appropriate locations for this expansion, will need to be carefully planned as development of the town progresses.

4.3.3 HOUSING

As the market for housing diversifies and is exposed to living trends being adopted in more urban parts of the State, there will be a need to ensure that the available housing supply in Exmouth responds to the range of choices and lifestyles of the community. A mix of appropriate residential densities, lot sizes, and housing typologies will be required in future urban development areas, and where infill opportunities exist, to meet this demand.

Housing affordability is another important issue to consider and to plan for. While increasing overall supply, adding to the range of housing types available, and providing a greater number of smaller lot sizes will go some way to ensuring access to housing for all sectors of the community, further measures should be investigated as part of more detailed planning for the townsite. Provision of suitable accommodation for seasonal workers is another important aspect of the housing affordability challenge for Exmouth.

PART 3

Planning Issues



5.0 PLANNING ISSUES

5.1 FLOODWAY AND FLOOD FRINGE AREAS

The Exmouth Townsite and North West Cape generally is subject to cyclones, which cause strong winds and storms leading to inundation of the coastal zone. More frequently, flooding of the coastal plain occurs as a result of the combination of rain, high tides and low lying landform. Flooding associated with run-off from the Cape Range and storm/cyclone events is of particular concern, with the Exmouth Townsite having experienced two recent flood events that have dominated the records of major flood events for Exmouth. These events included severe Tropical Cyclone Vance in March 1999 and a significant winter rain event that occurred in June, 2002. Damage to property, roads and the boat harbour was notable during both flood events.

To date, development within the Exmouth Townsite has generally taken place based on an existing strategy of recording evidence of past flooding events, with the exception of hydraulic modelling undertaken to support the development of the Exmouth Marina Village. In carrying out its role of providing advice and guidelines for development on floodplains, in December 2007 the Department of Water (DoW) developed a floodplain management strategy for the Shire of Exmouth based on detailed hydrologic and hydraulic modelling. The *Exmouth Floodplain Management Study* has been endorsed by the Shire of Exmouth and the DoW and has enabled a management strategy to be put in place to better understand flood issues and predict potential flood impacts.

In summary, the study recommended both non-structural and structural mitigation measures, as follows:

 The *non-structural flood mitigation measures* are based on 100 year Average Recurrence Interval (ARI) floodplain mapping, the definition of high flood risk/hazard areas and the promotion of appropriate planning and development controls for future development.

- Land Use Planning: Defining the ‘floodway’ and ‘flood fringe’ areas on the face of the Structure Plan
- Building Approval: Setting a minimum floor level (500 mm) for future building applications to ensure adequate 100 year ARI flood protection
- Flood Emergency Response Planning: Planning for flood emergencies by ensuring plans are in place for evacuating isolated communities and avoiding damage or isolation of critical Council and emergency services infrastructure
- Monitoring and Review: Installation of streamflow and rainfall gauging to provide ongoing data to assist monitoring and review

 The *structural flood mitigation measures* include the Reid Street (Light Industrial Area) flood mitigation works and the upgrading of the existing Market Street bund.

- Light Industrial Area (LIA) Creek: The improvement of drainage structures where LIA Creek crosses Reid Street and the extension and upgrade of floodway levees to contain the 100 year ARI flow in bank for conveyance to the east of Murat Road.
- Replacement/Upgrading of Market Street bund: Engineering assessment of the Market Street bund for adequacy. Raising and extending the levee and potentially replacing/upgrading the existing structure to convey Market St Creek across Murat Road.



- Murat Road Causeways: Initial work to upgrade the crossing of Market Street Creek over Murat Road, to allow for the increased flow due to the Market St bund and the gradual replacement of floodways along Murat Road, with culvert or bridge structures to increase accessibility along Murat Road to the town centre during flood events.

The land use framework of the Structure Plan defines the ‘Floodway’ and ‘Flood Fringe’ areas assuming the Developed Case Scenario, that is, the implementation of the structural flood mitigation measures referred to above (see **Figure 5**). The ‘Floodway’ has no development potential. The ‘Flood Fringe’ area may support development subject to hydraulic modelling and assessment by the Department of Water (DoW). The Structure Plan also defines an ‘investigation area’ north of the Market Street bund and west of Murat Road. Consultation with the DoW will be required during the detailed planning stage within this investigation area to determine flood relief areas and development setbacks associated with the upgrade of the Market Street bund.

The DoW floodplain mapping (2007) has been invaluable in reviewing the extent of developable land identified in previous Townsite structure plans. The main difference between the 2004 and current Structure Plan is the ability to now define developable areas in an informed manner, guided by the recommendations of the Flood Management Study and flooding mapping.

5.2 WATER SUPPLY

Water availability is recognised as one of the most important considerations in determining the extent of appropriate land use activity within the region. Exmouth’s water supply comes from the Cape Range Group superficial aquifer. Recharge is by direct infiltration of rainfall events, and indirectly through the beds of ephemeral streams that also come about through rainfall events. All developments outside the main townsite have their own bore water supplies, and the quality of the town water supply varies. Fresh water supply across the study area is very limited and subterranean fauna, particularly stygofauna, have the potential to be affected by changes in groundwater levels. The resource, therefore, requires careful control and management.

The Department of Water is responsible for managing the groundwater and surface water resources of the Exmouth area. The Exmouth Groundwater Sub Area is managed in accordance to the *Groundwater Allocation Plan* released in 1999. In summary the Plan outlines the groundwater uses, groundwater availability, licensing process and allocation issues.

The Exmouth Groundwater Sub Area is divided into 5 further sub areas (Exmouth West, North, Town, Central and South). The following table outlines the groundwater availability within each sub-area as documented in the 1999 Groundwater Allocation Plan:

SUBAREA	GROUND-WATER AVAILABILITY (kL/annum)	ALLOCATED RESOURCES (kL/annum)	NUMBER OF LICENSES	REMAINING RESOURCES (kL/annum)	GROUND-WATER SALINITY
Exmouth West	Limited	13 100	3	Nil	Potable to Marginal
Exmouth North	200 000	258 000	4	-58 000	Potable to Marginal
Exmouth Town	300 000	310 450 *	73	-10 450	Potable to Marginal
Exmouth Central	1 000 000	878 900 *	15	121 100	Potable to Marginal
Exmouth South	4 700 000	376 000	5	4 324 000	Potable
TOTAL	6 200 000	1 631 000	100	4 569 000	

Source: (WRC, 1999)



LEGEND

- FLOODWAY**
No development potential
- FLOOD FRINGE**
Future land use decisions / development potential subject to hydraulic modelling and DoW assessment
- FLOOD MITIGATION WORKS - DEVELOPED CASE**
- F1 F1: Upgrade of Market Street Bund
- • • Investigation Area:
Consultation required with DoW on flood relief areas and development setbacks associated with the upgrade of the Market Street Bund.
- F2 F2: Upgrade of Reid Street & Culvert & LIA Bund

Source: Exmouth Floodplain Management Plan SKM/DoW (2007)





Licensing of all wells in the Cape Range region is required. In terms of water availability, the Exmouth West sub area is set at the current level of use and no further licences should be issued. Exmouth Town and North are over-allocated and similarly, no further licences should be issued. Exmouth Central and South have groundwater available for allocation, with new applications to be considered on local availability.

The Groundwater Allocation Plan is scheduled for review in 2009/10. Key points to be considered in this review include water use efficiency, fit for purpose uses and environmental water requirements of ground water resources. Monitoring data and allocation limits will also be re-considered as part of the review.

It is essential to protect the underground water resource from pollution risk as Exmouth's water resources are limited and also support unique subterranean fauna. The Exmouth Water Reserve was declared under the Country Areas Water Supply Act 1947 and has since been amended in accordance with the recommendations outlined in the *Exmouth Water Reserve Water Source Protection Plan* (WRC 2000). The Exmouth Water Reserve abuts the western boundary of the Exmouth Townsite and extends southwards (see **Figure 4**). This Water Protection Reserve is managed as a Priority 1 Protection Area whereby strict limitations on land use apply. The Structure Plan recognises the boundaries of the Water Protection Reserve and the need for it to be reflected as a Special Control Area in the Shire of Exmouth local planning scheme currently under review.

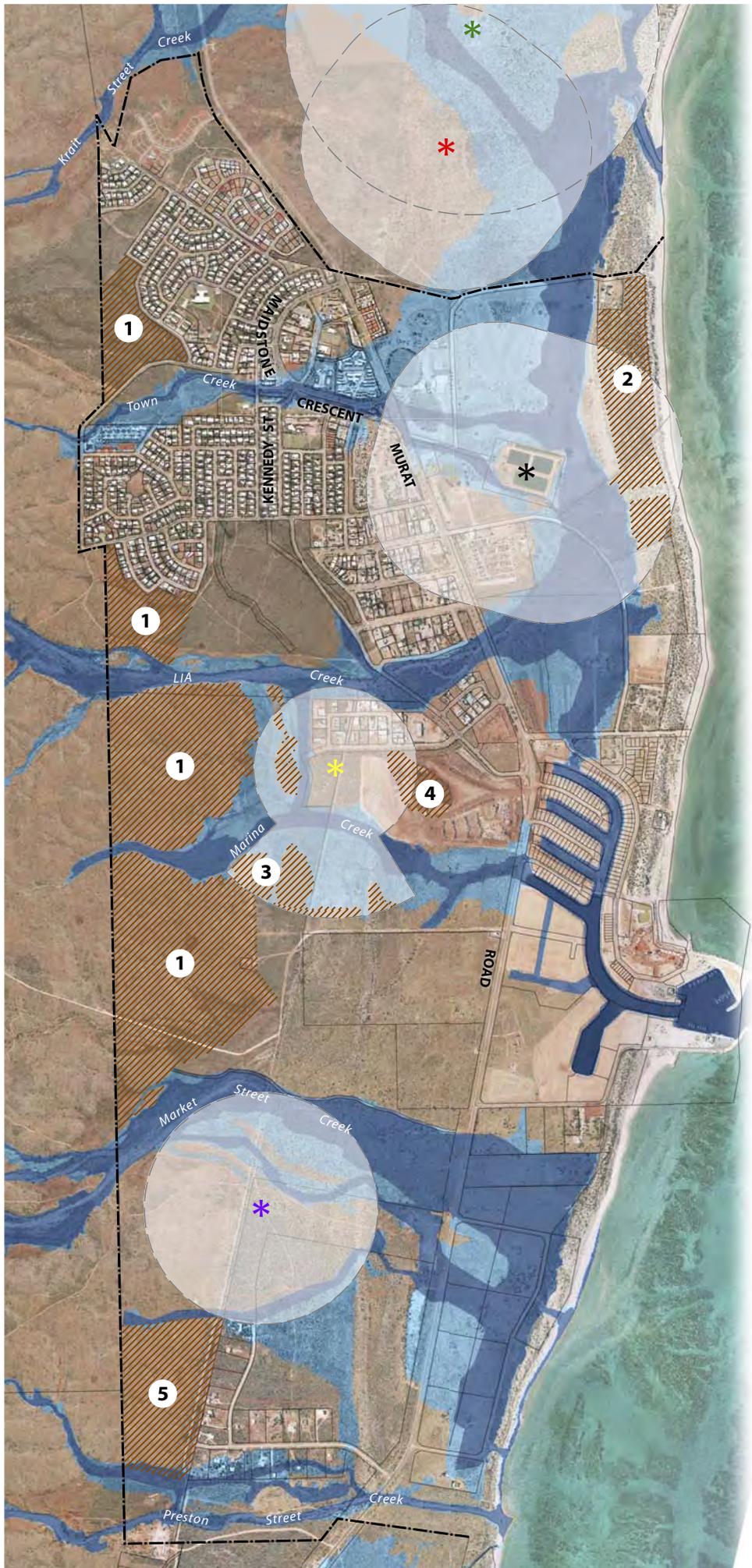
Water use efficiency measures could significantly enhance the long-term viability of Exmouth's groundwater resource. The application of water sensitive urban design principles can achieve more efficient and effective use of water and better outcomes for the environment. The over allocation in the Exmouth North and Exmouth Town sub-areas however is so great that even with significant application of water efficiency measures, it is unlikely that additional water licenses would be issued. With reference to the Western Australian Planning Commission SPP 2.9 Water Resources, the development of a District Water Management Strategy as part of the preparation of the Shire's Local Planning Strategy should be investigated as a means of further promoting total water cycle management.

5.3 LAND USE BUFFERS

The Structure Plan identifies five land use buffers that have been defined in consultation with key stakeholders and government agencies responsible for the principal land use. The buffers include land associated with the existing and proposed waste water treatment plants; the Department of Defence Communications Tower north of the townsite; the Exmouth Power Station; and Cameron's Cave (see **Figure 6**).

5.3.1 EXISTING WASTE WATER TREATMENT PLANT

The existing waste water treatment plant on Willerdorf Road requires a 500m buffer measured from the outer boundary of the facility. The separation distance adopted by the Structure Plan has been confirmed by the Water Corporation and is in accordance with the EPA Guidance Statement No. 3 which assesses odour impacts. Given that the infrastructure has been in place for some time, the buffer adopted is not based on site specific modelling, but rather a generic readily accepted separation distance of 500m. Some variation in the extent of the impact on the amenity of surrounding land uses can therefore be expected. Odour issues are experienced under certain climatic conditions and occasionally during the use of recycled water when the town ovals are being irrigated. The Water Corporation is presently working closely with the Shire to assist in the better management of recycled water.



LEGEND

-  Department of Defence Communication Tower (800m Landuse Buffer)
-  Proposed Waste Water Treatment Plant - Indicative Location (500m Landuse Buffer)
-  Existing Water Corporation Waste Water Treatment Plant (500m Landuse Buffer)
-  Exmouth Power Station (35dB(A) Landuse Buffer for Noise Sensitive Land Uses - 350m)
Variation to 350m landuse buffer to be subject to detailed assessment including the preparation of a buffer definition study in accordance with the requirements of WAPC SPP No 41 - State Industrial Buffer Policy
-  Cameron's Cave (500m Landuse Buffer)
-  Constrained Land
Further Investigation required prior to development
-  1 Abutting Townsite Boundary
-  2 Coastal
-  3 South of Power Station
-  4 Disposal Site
-  5 West of Preston Street

Source: Exmouth Floodplain Management Plan SKM/DOW (2007)





5.3.2 PROPOSED RELOCATION OF WASTE WATER TREATMENT PLANT

The Water Corporation advised that the current wastewater treatment plant has adequate capacity to accommodate growth in the short to medium term, subject to the Shire of Exmouth's re-use system being operated at a high level performance. The Water Corporation has, however, supported the longer term relocation of the facility to improve the amenity of surrounding land uses. Negotiations have taken place with the Department of Defence to enable the facility to be located on Commonwealth land to the north of the Townsite. The Water Corporation is currently undertaking detailed investigations in relation to the final siting of the proposed facility including odour modelling, archaeological and ethnographic reporting, geotechnical assessment and Department of Environment and Conservation clearing permits.

The Structure Plan nominates an indicative location for the proposed facility at this time and adopts a generic 500m land use buffer to indicate the principle that there should be no impact upon townsite uses. Whilst the site nominated achieves this objective, the Water Corporation is also investigating the suitability of an accessible site located further to the north-east on land outside of the floodway and flood fringe and with a greater separation from townsite uses. This site was identified by the initial opportunities and constraints mapping that informed the Exmouth Visioning Workshop (2008) (see **Figure 7**). Should this site be assessed as being suitable prior to the finalisation of the Structure Plan, a revised location for the proposed waste water treatment plant and a modelled land use buffer will be reflected on the endorsed final Structure Plan.

The licensing of the new infrastructure will require the Water Corporation to ensure disposal of waste water takes place in a sustainable manner with it being feasible that 100% of treated output from the facility will have the potential to be recycled by the Shire of Exmouth in line with current practice. The Water Corporation's current budgetary programme does not make provision for the relocation of infrastructure before the year 2016-18.

5.3.3 DEPARTMENT OF DEFENCE COMMUNICATIONS TOWER

A Communications Tower and associated substantial infrastructure is located approximately 1 km north of the Exmouth Townsite. To secure protection and long term security of this infrastructure, the Department of Defence (DoD) have advised of the need for an 800m land use buffer to be defined by the Structure Plan. The proposed relocation of the waste water treatment plant onto Commonwealth Land further enforces the long term protection of the DoD buffer.

5.3.4 CAMERON'S CAVE

Cameron's Cave is located within the southern section of Exmouth Townsite just north of the Preston Street rural residential area. It is the habitat of the Cameron's Cave Troglitic Community, including both aquatic and terrestrial animals, and is unique. The community is a 'Threatened Ecological Community' and has been assessed as Critically Endangered. The cave extends downwards to the water table on which the animals depend, and it consists of a narrow freshwater lens above salt water.

The importance of ongoing protection of Cameron's Cave (and corresponding ecological community) is recognised by the Structure Plan and in advance of the formal identification of a Reserve under the Land Act, the Department of Environment and Conservation, based on advice from the North West Cape Karst Management Advisory Committee, has recommended a 500m land use buffer be defined by the Structure Plan. This buffer, reinforced through the identification of the area surrounding Cameron's Cave as Conservation/Foreshore Reserve, will remove any potential for development in this location.

LEGEND

-  Townsite Boundary
- OPPORTUNITIES**
-  Possible Development Sites
 - RI 1 & RI 2 - Residential Infill
 - MU 1 - Tourist, Residential, Community, Light Industry
 - MU 2 - Tourist & Residential
 - MU 3 - Unconstrained
 - RR 1 - Rural Residential
-  Town Centre
-  Murat Road Upgrade - Ongoing
-  Possible Extension of Exmouth Boat Harbour
-  Views - Exmouth Gulf and Cape Range
-  Possible Site of Ningaloo Research Centre (NRC) and combined Government Offices
-  Game Fishing Club Site
-  Beach Access
-  Strategic Tourist Site
-  Green Linkages connecting neighbourhoods and open spaces
- CONSTRAINTS**
-  Floodway - Development Excluded
-  Flood Fringe - Development Subject to Department of Water Consultation and modelling to assess regional flood effects.
-  Floodway Mitigation Measures - Developed Case
 - F1: Upgrade of Market Street Bund
 - F2: Upgrade of LIA bund & culvert
-  Land Use Buffer
-  Fair-Low capability to support longer term urban use; constrained by landform and/or floodway
-  Investigate capability to support longer term urban use; constrained by landform/water protection reserve
-  Department of Defence Communications Tower
-  Extent of Commonwealth Land (Department of Defence)
-  Gas-fired Power-Station
-  Water Protection Reserve (Borefields) - Development Excluded
-  Cameron's Cave
-  Broadcast Australia Landholding
-  Disposal Site - Subject to remediation

NOTES

- 1** Department of Defence Communication Tower (800m Landuse Buffer)
 - Buffer requirements of tower to be defined as limiting factor for the possible longer term residential use of land north of Exmouth Townsite.
- 2** Commonwealth Land
 - Future use constrained by buffer requirements of the Department of Defence communications tower and the proposed site for the allocation of the Waste Water Treatment plant.
- 3** Indicative location of Waste Water Treatment Plant as recommended by 2004 Structure Plan. Final Location currently subject to detailed investigation (Water Corporation)
- 4** Existing Water Corporation Waste Water Treatment Plant (500m Landuse Buffer)
- 5** Town Centre
 - Opportunity for detailed assessment of Town Centre Structure
 - Continued implementation of Town Centre Plan & 2001 Townscape Strategies
- 6** Residential Infill. Planning and engineering assessment to address:
 - Local Drainage
 - Native Title Clearance
 - Liveable Neighbourhood Principles
- 7** Existing Tourist Zoned Land - Unconstrained
- 8** Possible Development Site subject to consultation with Department of Water
- 9** Gas Fired Power Station (350m Landuse Buffer) subject to preparation of buffer Definition Study - WAPC SPP No 4.1
- 10** Possible Development Site. Planning and engineering assessment to address:
 - Native Title Clearance
 - View Corridors
 - Buffer requirements of Gas-fired Power Station (noise and safety buffers up to 350m)
 - Open space/Landscaped Interface between Industrial & Residential Land Use
 - Land constrained by past waste disposal activity corresponding need for geotechnical assessment
 - Liveable Neighbourhood Design Principles
 - Green Linkages and movement system
- 11** Town Beach
- 12** Possible development site subject to assessment of:
 - Native Title Clearance
 - Views/Aspect of Exmouth Gulf
 - Consultation with Department of Water regarding development setbacks and allowance for flood relief relating to upgraded Market Street bund
 - Treatment of Murat Road
 - Possible relocation of Broadcast/Australia Site
 - Liveable Neighbourhood Design Principles
 - Green Linkages and movement system
- 13** Nominated Strategic Tourist Site
- 14** Possible Harbour Expansion
- 15** Cameron's Cave (500m buffer). Linkages to coast line to be maintained.
- 16** Limited extension of Rural Residential Use
 - Consultation with Department of Water required to confirm engineering response to development within the flood fringe
 - Consultation with Department of Environment and Conservation required to confirm impact of proposed Cameron's Cave reserve
 - Possible subdivision of existing lots subject to environmental impact and effective functioning of onsite efficient disposals systems.

5.3.5 EXMOUTH POWER STATION

In September 2003, Horizon Power entered into an 18 year agreement with the Exmouth Power Station Pty Ltd to allow the construction of a new gas-fired power station in Exmouth fuelled by compressed natural gas. The power station became operational in September 2006 and is situated on Welch Street within the town's light industrial area. The 2004 Structure Plan identified the need for buffers to be established to avoid potential land use conflict with future residential development, however this issue remains unresolved.

Ongoing consultation with Horizon Power and the Exmouth Power Station Pty Ltd has confirmed the need to undertake further modelling to determine the land use buffer requirements of the Exmouth power station at full capacity. In the absence of full capacity modelling, the Structure Plan has adopted a 350m setback based on the summary recommendations of the Exmouth Power Station Acoustics Study (AVT, 2003) for noise sensitive uses (35 dB(A)), and takes a policy position on the configuration of preferred land uses on land adjacent to the power station and the land use buffer which should apply. *Development Initiative 2*, referred to in section 8.2, confirms this preferred land use configuration. Based on current population projections for the Exmouth Shire of only 2500 persons by 2028, it is unlikely that the power station will reach its full capacity within the same timeframe.

The Structure Plan recommends that:

-  The WA Planning Commission's State Industrial Buffer Policy (SPP No 4.1) and the Environmental Protection Authority's Guidance Statement No. 3 – Separation Distance between Industrial and Sensitive Land Uses, be applied. (These policies set out the framework and requirements for determining acceptable uses within certain buffers requirements and under certain operative conditions. Note that a revised State Planning Policy No. 4.1 State Industrial Buffer (Amended) (Draft) has recently been released by the WAPC for public comment until 14 September 2009. All proposals must also have due regard to this version of the policy).
-  A buffer definition study should be undertaken by the authority responsible for the operation of the power station to define the extent of the buffer area required to secure the operation of the facility at its maximum capacity using best environmental management practices (BEMPs). The study will need to identify likely emissions, hazard and risk, noise or lighting; modelling of the development to show the extent of off-site impacts; incompatible uses to be avoided within a buffer area; and amelioration measures required to comply with a 350m setback (refer section 4.4 of WAPC State Industrial Buffer Policy).
-  In assessing future applications for development relating to the power station, the Shire of Exmouth should refer any proposal to the Environmental Protection Authority for assessment under Section 38 of the Environmental Protection Act (1986) prior to the issuing of a development approval, accompanied by the Exmouth Townsite Structure Plan 2009 and Development Initiatives Plan for the immediate locality, to reinforce the position of the Structure Plan and Council. Any buffer distance and industry performance criteria set by the Department of Environment and Conservation must be respected and can be reinforced as a condition of development approval.

(Note: 'The size of the buffer is normally based on a weighing up of the economic viability of incorporating management practices verses the availability and cost of securing a buffer area' – refer section 4.4, WAPC SPP 4.1.).



5.4 CONSTRAINED LAND

The Structure Plan identifies longer term investigation areas and refers to these areas as Development Issues - 'Constrained Land'. These land holdings are not constrained by the floodway or flood fringe but require detailed site specific investigation prior to development due to other environmental factors such as landform, karst formations, coastal setbacks, and impact on underground water resources. The land use expectation for these areas has been identified in the event that the constraining factor affecting future development is alleviated.

With reference to **Figure 6**, the Constrained Land classification applies to:

1. Land generally parallel to the western alignment of the Townsite boundary and west of the proposed future neighbourhood connector road linking Murat Road with Kennedy Street.

Land Use Expectation: Proposed Urban

Constraint: Low to Fair Capability to support Urban Use. Foundation soundness, ease of excavation and sub-surface water pollution are identified as being limiting factors of the Range Land System (Ra2c and Ra3c). Due to underlying geology, the Ra2c land unit is more likely to display development of karstic features with attendant foundation stability constraints than the ARA3c land unit.

2. Land adjacent to the Golf Course precinct with direct access to Exmouth Gulf.

Land Use Expectation: Tourism Nodes

Constraint: The land is characteristic of the Coastal Land Unit C1 and has been identified as having low capability to support tourism use. Notwithstanding this classification, the land capability reporting (Land Assessment Pty Ltd, 1997) acknowledges that site specific land (as opposed to regional) capability assessment is likely to confirm pockets of developable land that could sustain tourism use. Comprehensive investigation of this dunal landform would need to address land capability; storm surge assessment to define coastal setbacks; road access; and restrictions imposed by the floodway.

3. Land south of Exmouth Power Station.

Land Use Expectation: Proposed Urban

Constraint: Land within the 650m extended acoustic buffer is currently constrained by the proximity of the Exmouth Power Station, with development potential being dependent upon relocation of that facility or the reassessment of the land use buffer.

4. Disposal Site south of Welch Street.

Land Use Expectation: Proposed Urban/Tourism/Industrial/Open Space

Constraint: Remediation of disposal site prior to development taking place, with preference for the site to be retained as open space either:

- as part of the 10% POS contribution for residential use;
- for low key camping where retained as open space within the proposed tourism site; or
- as an open space buffer on industrial land separating industrial from adjoining uses.

5. Land West of Preston Street

Land Use Expectation: Rural Residential

Constraint: Land forms part of the Range Land System (Ra2c) and has a low capability to support rural residential development due to limiting factors of the landform (excavation, on site effluent disposal).

5.5 OPPORTUNITIES AND CONSTRAINTS MAPPING

An assessment of the opportunities and constraints for development within the study area was undertaken early in the Structure Plan process following initial stakeholder consultation. The assessment was also used to inform the preparation of the background briefing paper for the Exmouth Visioning Workshop (DPI, 2008). The plan has since been updated to reflect input received from the workshop and ongoing feedback from stakeholders received during plan preparation.

Figure 7 describes the planning issues, opportunities and constraints that have arisen during consultation, and is supported by **Tables 1 and 2** below which describes development parameters that formed the basis of further investigation where it was required.

TABLE 1: OPPORTUNITIES

RI 1 and 2 (Residential Infill)	These two sites represent an opportunity for infill residential development subject to assessment of local drainage, consultation with DoW in regard to modifying the Flood Fringe and native title matters being addressed prior to development.
MU 1 Reid Street	This area presents an opportunity for mixed use development that will assist in linking the existing town centre to the harbour/marina precinct. Planning to address native title clearance, 350 separation from gas fired power station, appropriate interface between industrial and residential uses and regard for past waste disposal activities and possible need for geotechnical investigations.
MU 2 Murat Road	Opportunity for additional mixed use development to synergise directly with the marina precinct and take advantage of views and access to harbour facilities. Native Title, flood mitigation, treatment of Murat Road frontage will require attention.
MU 3 Murat Road/ Warne Street	Unconstrained land with high visibility and opportunity to enhance connection from marina to town centre. Minimum floor levels to be confirmed.
RR 1 Preston Street	Potential for extension of rural residential lots is dependent on flood mitigation and land capability to support onsite effluent disposal. This site is impacted by proposed extension of the 500 metre buffer for Cameron’s Cave. Previously identified as racetrack site (no longer the preferred land use).
TC	Opportunities for consolidation of uses, increased connectivity with town centre core, activation of entry roads and improved Town Centre announcement (refer to Workshop Outcomes Report, 2008).
Possible Harbour extension	Harbour extension and potential redesign to provide for existing and anticipated demand. Outcome of harbour expansion consultation strategy and Ministerial decision will inform the structure plan review process.
T 1, 2 and 3	Additional tourist sites required to cater for additional tourist accommodation requirements. Draft recommendations of the Local Planning Tourism Strategy will inform the structure plan review process (T1: Strategic Tourism Site, T2: Approved Site, T3: Zoned land for tourist accommodation).
Murat Road Upgrade	Ongoing improvements to Murat Road including lighting, median treatment and landscaping to continue, subject to funding. Potential to enhance legibility of link from town centre to marina.



TABLE 2: CONSTRAINTS

Floodway and flood fringe land	Land classified as Floodway and Flood Fringe by the Exmouth Floodplain Management Strategy (DoW 2007) – Developed Case. No development permitted in ‘floodway’ and within the ‘flood fringe’, further modelling is required to confirm regional flood effects.
F1 and 2	Mitigation measures F1 and F2 to be implemented under the Developed Case scenario (funding to be determined). F1 – Upgrading of the Market Street Bund, F2 – Upgrading of bunding adjacent to LIA creek and upgrading of Reid Street culvert.
McLeod Road / Market Street	These lots currently leased for rural residential purposes (equestrian) and are highly constrained for additional development due to flooding.
Western townsite boundary	Undeveloped land abutting the western townsite boundary constrained by landform and extent of Water Protection Reserve. Further site specific investigation required to determine opportunity for adjustment of townsite boundary westwards.
RR1 (Rural Residential – Preston Street)	Linear Ridge abutting Murat Road with shallow soils limits the easterly extension of the Preston Street rural residential area towards Murat Road.
Truscott Crescent	Undeveloped land zoned for tourism partially constrained by primary dune system and extent of floodway.
Wastewater Treatment Plant	Existing location of Water Corporation Waste Water Treatment Plan and 500 metres buffer constrains abutting development (odour issues). The planned relocation of the facility to Commonwealth Land north of the townsite is a viable though long term option (2018) due to budgetary constraints.
Power Station Buffer	350 metres buffer area for noise-sensitive uses; subject to further assessment.
Cameron’s Cave Buffer	The DEC is increasing the existing 200 metre development control buffer to 500 metres.
DoD Communication Tower Buffer	DoD have confirmed an 800 metre buffer requirement for the existing communications facility adjacent to the townsite. The buffer limits the strategic development of land immediately north of the townsite which otherwise displays a high capability to support urban use. Land is also potentially constrained by the combined buffer of the communications tower and planned relocation of the Waste Water Treatment plant.
Broadcast Australia Landholding (MU 2)	The prominence of the Broadcast Australia Facility on Murat Road is a potential constraint to effective planning within MU 2. Relocation options westwards to be investigated.

6.0 CONSULTATION AND DESIGN VISION

6.1 STAKEHOLDER CONSULTATION

As an initial phase of the Structure Plan review process, consultation with government and community stakeholders within the region was considered a critical component in identifying issues affecting the Exmouth Townsite. Consultation principally involved formal meetings with stakeholders, and where not practical to meet, phone contact was made. The following key government agencies were invited to provide comment, and were also given the opportunity to prepare written statements to feed into the wider visioning work for the Structure Plan:

-  Shire of Exmouth
-  Department of Environment and Conservation
-  Department of Planning and Infrastructure – Coastal Infrastructure
-  Department of Water – Floodplain Management
-  Department of Water – Resource Protection/Water Allocation
-  Tourism Western Australia
-  Department of Defence
-  Department of Health
-  Department of Housing and Works
-  Main Roads WA
-  Water Corporation
-  Horizon Power/Exmouth Power Station Pty Ltd
-  LandCorp
-  Fisheries Department of WA
-  Department of Indigenous Affairs
-  State Land Services

The outcomes of the stakeholder consultation were carried forward to feed into the Visioning Workshop process, described below, and formed the basis of a number of the assumptions made as the Workshop outcomes were derived.

6.2 VISIONING WORKSHOP

6.2.1 PURPOSE

The comments from these key stakeholders were then considered along with the views of community representatives and the wider community, who were invited to participate in a Visioning Workshop held early in the Structure Plan formulation process. Registration for the Workshop was by direct invitation of the Exmouth Council, and by responding to notices in the local press.

Two workshops were held over two days, with 57 registrations for the first workshop, and 73 registrations for the second. Participants included State government representatives, a representative from the Department of Defence, Shire Councillors, Council staff, community group representatives, and members of the general public.



The Visioning Workshop allowed the community to articulate core values, identify emerging trends and their impact on the community, build consensus on preferred future directions, and develop strategies and actions to achieve their visions and promote implementation of plans over time.

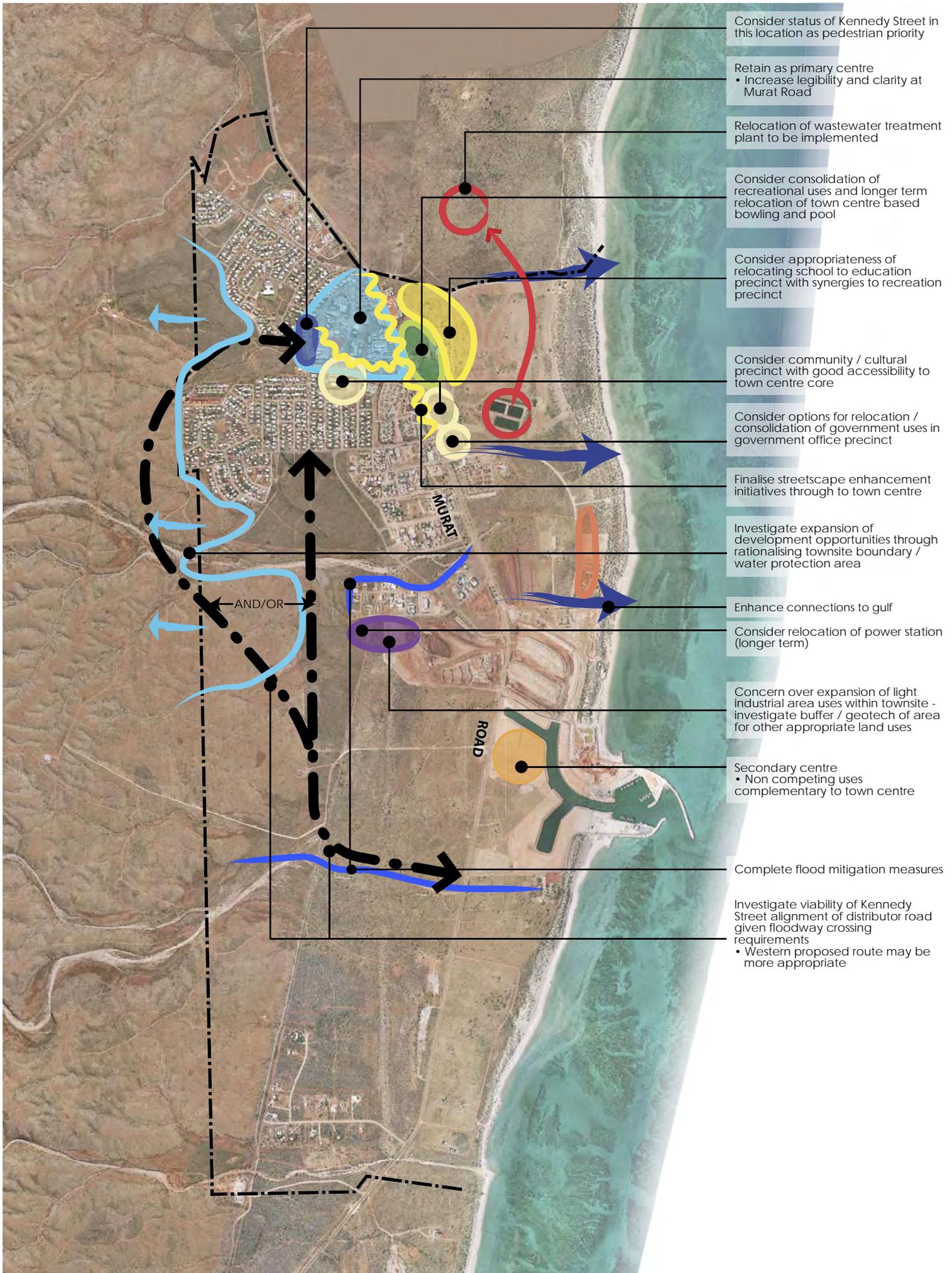
6.2.2 OUTCOMES

The two day of workshop assisted participants in understanding what they value about living in Exmouth, and helped to establish a vision for the future of the Townsite. Participants were encouraged to consider those aspects of the town that were most important to them, and those aspects that they wanted to see changed. The outcomes of this part of the workshop are provided at **Appendix A** to establish the context for the discussion on key issues below.

The second day of the workshop focused on deriving key outcomes that participants wished to see addressed in the Structure Plan proposals. The Consolidated Workshop Outcomes Plans shown at **Figures 8A** and **8B** graphically present a summary of the key issues identified during workshop discussion, where it was possible to establish overall group consensus. The principal issues as highlighted on the plans are as follows:

-  Town Centre to be retained and consolidated and potentially expanded in present location with better articulation of entry points, Maidstone Crescent activated as a 'Main Street', consolidation or relocation of civic uses to be considered, changes made to the vehicle and pedestrian movement network to improve connectivity, and synergies with recreation, cultural and community uses to be addressed.
-  Relocation of Wastewater Treatment Plant to the north of the Townsite to be progressed.
-  Consolidation of recreational uses east of Murat Road, with possible longer term relocation of bowls and swimming pool to this site.
-  Consideration of a community and cultural precinct, with strong synergies to the Town Centre.
-  Consideration of relocation of Government uses to a location outside the Town Centre.
-  Investigation of possible longer term opportunities for adjustment of water protection area boundary and expansion of Townsite.
-  Enhancement of connections to the Gulf and Town Beach.
-  Restriction on expansion of use of Light Industrial Area for general industrial uses.
-  Ensure Marina accommodates only limited non-residential land uses, that won't compete with Town Centre.
-  Implementation of Flood Mitigation Measures.
-  Consider alignment of local connector road west of Murat Road, to ensure floodway crossing requirements are addressed.

All of these issues were considered and given a high priority for resolution during preparation of the Townsite Structure Plan.



Consider status of Kennedy Street in this location as pedestrian priority

Retain as primary centre
 • Increase legibility and clarity at Murat Road

Relocation of wastewater treatment plant to be implemented

Consider consolidation of recreational uses and longer term relocation of town centre based bowling and pool

Consider appropriateness of relocating school to education precinct with synergies to recreation precinct

Consider community / cultural precinct with good accessibility to town centre core

Consider options for relocation / consolidation of government uses in government office precinct

Finalise streetscape enhancement initiatives through to town centre

Investigate expansion of development opportunities through rationalising townsite boundary / water protection area

Enhance connections to gulf

Consider relocation of power station (longer term)

Concern over expansion of light industrial area uses within townsite - investigate buffer / geotech of area for other appropriate land uses

Secondary centre
 • Non competing uses complementary to town centre

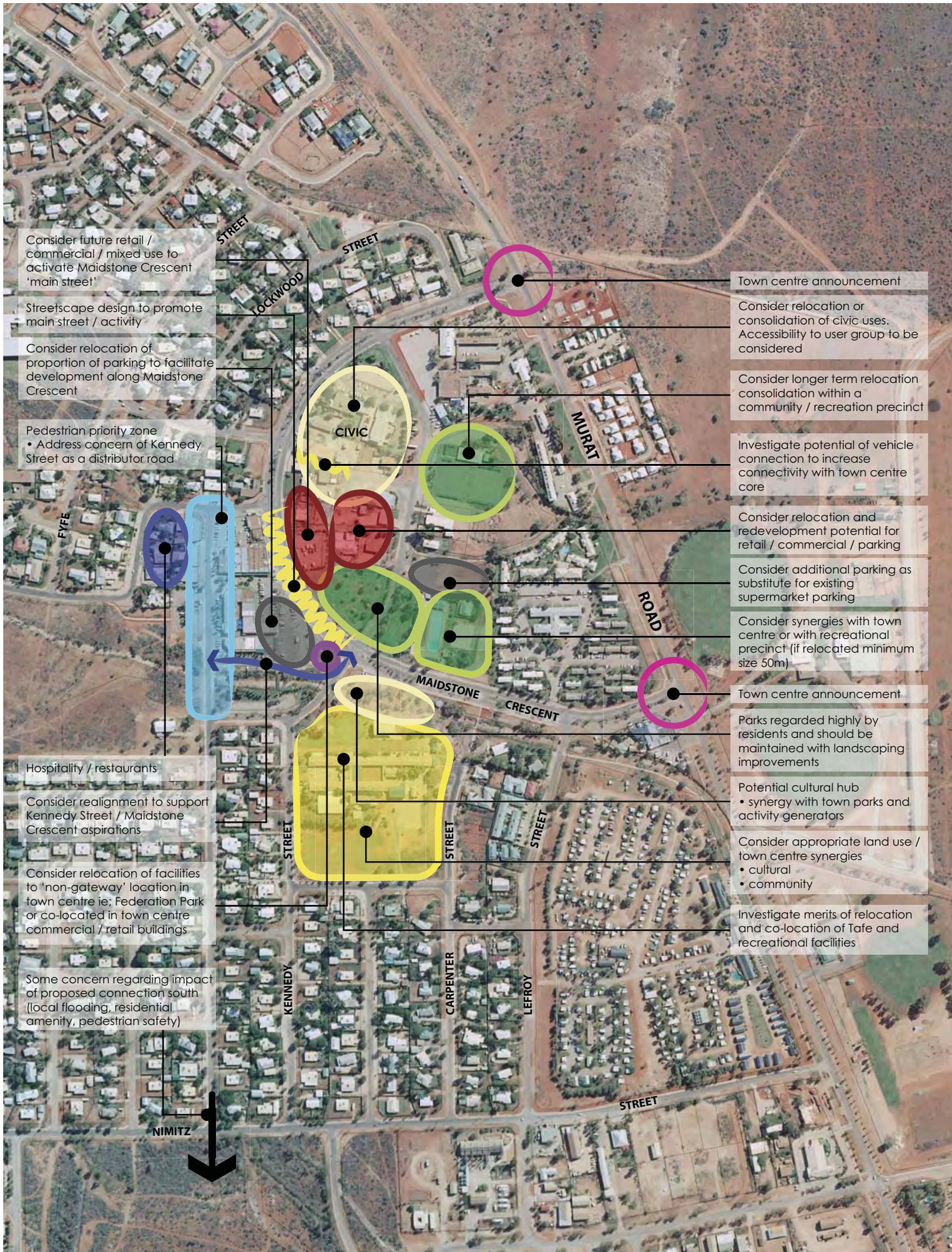
Complete flood mitigation measures

Investigate viability of Kennedy Street alignment of distributor road given floodway crossing requirements
 • Western proposed route may be more appropriate

AND/OR

MURAT ROAD

ROAD



Consider future retail / commercial / mixed use to activate Maidstone Crescent 'main street'

Streetscape design to promote main street / activity

Consider relocation of proportion of parking to facilitate development along Maidstone Crescent

Pedestrian priority zone
• Address concern of Kennedy Street as a distributor road

Hospitality / restaurants

Consider realignment to support Kennedy Street / Maidstone Crescent aspirations

Consider relocation of facilities to 'non-gateway' location in town centre ie; Federation Park or co-located in town centre commercial / retail buildings

Some concern regarding impact of proposed connection south (local flooding, residential amenity, pedestrian safety)

Town centre announcement

Consider relocation or consolidation of civic uses. Accessibility to user group to be considered

Consider longer term relocation consolidation within a community / recreation precinct

Investigate potential of vehicle connection to increase connectivity with town centre core

Consider relocation and redevelopment potential for retail / commercial / parking

Consider additional parking as substitute for existing supermarket parking

Consider synergies with town centre or with recreational precinct (if relocated minimum size 50m)

Town centre announcement

Parks regarded highly by residents and should be maintained with landscaping improvements

Potential cultural hub
• synergy with town parks and activity generators

Consider appropriate land use / town centre synergies
• cultural
• community

Investigate merits of relocation and co-location of Tafe and recreational facilities

6.3 DESIGN VISION AND OBJECTIVES

Based on the physical and policy context of the Exmouth Townsite, the issues and opportunities, and consultation outcomes outlined above, an overall Structure Plan vision and set of objectives have been formulated to guide the preparation of the new Structure Plan.

This new phase of Structure Planning provides a unique opportunity to create a legible, identifiable and vibrant development future for Exmouth, to facilitate improvement in the quality of the area's built form, and to respond to the existing pressure for land release to cater for residential, commercial, industrial and tourism demand.

A significant challenge for the Structure Plan is to consolidate the currently disparate areas across the Townsite, to create a shared sense of place for Exmouth, both for the residential community and for the significant tourist population that uses the Town as a base for their enjoyment of the Ningaloo Marine Park and Cape Range National Park.

With this as context, the key vision for the Structure Plan is to create a development future for Exmouth that is appropriate to the particular needs of the Town – that facilitates the creation of a diverse and well-functioning permanent residential community; that provides for tourist needs by offering visitors something in addition to the natural assets of the region; that responds appropriately to the environmental conditions of the town, particularly reflecting the constraints of the floodplain; and that continues to build on the Town's economic base, and its contribution to the local region and to the State as a whole.

In support of this vision, the following key objectives have guided the formulation of the Structure Plan described in the following sections, and these objectives will continue to guide the actions and implementation phase following Structure Plan adoption:

-  Ensure that the goals of environmental protection, social advancement and economic prosperity are given equal priority in establishing Structure Plan outcomes.
-  Acknowledge and ensure consistency with the Townsite's existing land uses, built form and natural features in formulating the future development framework.
-  Respond to and incorporate the outcomes of the Exmouth Flood Management Study in determining locations for future developable land and in managing growth within the constraints of the identified floodplain.
-  Plan for an appropriate intensity, diversity and type of land use, reflecting Exmouth's particular character and development objectives.
-  Encourage the mixing of uses across the Townsite, to create a well functioning and economically sound community, whilst appropriately managing relationships between different uses.
-  Improve the circulation and legibility of the movement network, and providing suitable movement systems for all vehicle and pedestrian needs.
-  Facilitate upgrading and improvement of the quality of public realm, civic spaces, cultural and community facilities across the townsite.



-  Improve the street structure and street environment to ensure integration with the existing land uses, and ensure the creation of safe, attractive, friendly, efficient and climatically appropriate public spaces.
-  Facilitate the development of a diversity of lot sizes and housing types, to improve the choice of product in the local housing market.

PART 4

The Structure Plan



7.0 THE STRUCTURE PLAN

Based on the contextual issues identified during the research phase of the Structure Plan formulation, as described in Sections 3, 4 and 5 above; and particularly reflecting the outcomes of the Visioning and Consultation process described in Section 6, a design and planning process was undertaken to produce a new Structure Plan for the Exmouth Townsite.

This Structure Plan, **Plan Number 08/024/001G**, provides the framework for future planning of the Townsite. The following sections of the report describe in detail the proposals contained within the Structure Plan.

7.1 LAND USE FRAMEWORK

7.1.1 EXISTING RESIDENTIAL

The Structure Plan separately classifies existing residential areas, including lots located generally north of Nimitz Street through to Skipjack Circle in the northern corner of the townsite, and the subdivided residential component of the Exmouth Marina Precinct.

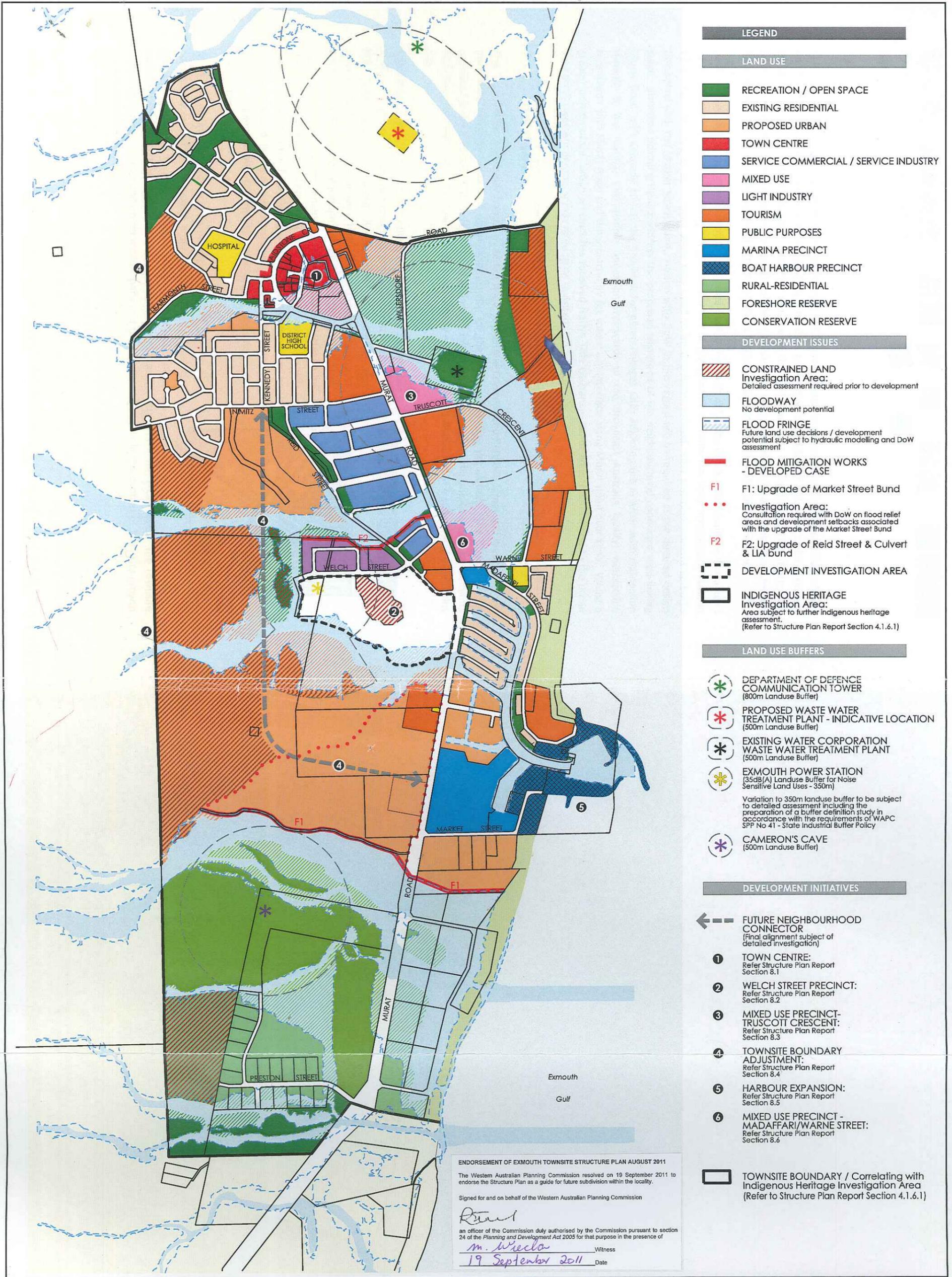
The existing residential areas predominantly comprise traditional/conventional single residential lots coded R17.5, with small pockets of R20 and R30 where medium density housing has been developed or, as in the case of the Exmouth Marina, has the potential to be developed.

Within the existing residential areas, the opportunity exists for a mix of densities and built form character to be introduced to provide increased access to a wider choice of housing types and lifestyles within the community. The potential exists to increase densities in existing residential areas where there is good access to services and facilities and within areas that might benefit from redevelopment as the condition of the housing stock declines over time. Further assessment of residential densities in appropriate areas and housing design options encouraging more affordable housing will be important and could be the subject of a separately funded local housing strategy.

7.1.2 PROPOSED URBAN

For the purposes of this Structure Plan, 'Proposed Urban' is defined as, *'predominantly providing for residential development and a range of compatible associated uses including local employment, recreation and open space, local shopping, schools and other community facilities, with the requirement for comprehensive investigation and structure planning to define the appropriate distribution of land uses and to resolve any environmental and planning requirements relating to the development of land'*.

The expansion of the Townsite is constrained by the fragile environment of the Cape Ranges, the Exmouth Water protection reserve to the west and associated water supply borefields, and Commonwealth landholdings to the north. Hence for the timeframe of this Structure Plan, the growth of the Townsite is limited to a southerly direction within the confines of the existing Townsite boundary. Based on current population projections (refer Section 7.2), the extent of land allocated for proposed urban use within the Townsite boundary alone and undeveloped land within the Exmouth Marina, will adequately cater for population growth within the timeframe of the Structure Plan.



- LEGEND**
- LAND USE**
- RECREATION / OPEN SPACE
 - EXISTING RESIDENTIAL
 - PROPOSED URBAN
 - TOWN CENTRE
 - SERVICE COMMERCIAL / SERVICE INDUSTRY
 - MIXED USE
 - LIGHT INDUSTRY
 - TOURISM
 - PUBLIC PURPOSES
 - MARINA PRECINCT
 - BOAT HARBOUR PRECINCT
 - RURAL-RESIDENTIAL
 - FORESHORE RESERVE
 - CONSERVATION RESERVE

- DEVELOPMENT ISSUES**
- CONSTRAINED LAND Investigation Area: Detailed assessment required prior to development
 - FLOODWAY No development potential
 - FLOOD FRINGE Future land use decisions / development potential subject to hydraulic modelling and DoW assessment
 - FLOOD MITIGATION WORKS - DEVELOPED CASE
 - F1: Upgrade of Market Street Bund
 - Investigation Area: Consultation required with DoW on flood relief areas and development setbacks associated with the upgrade of the Market Street Bund
 - F2: Upgrade of Reid Street & Culvert & LIA bund
 - DEVELOPMENT INVESTIGATION AREA
 - INDIGENOUS HERITAGE Investigation Area: Area subject to further indigenous heritage assessment. (Refer to Structure Plan Report Section 4.1.6.1)

- LAND USE BUFFERS**
- DEPARTMENT OF DEFENCE COMMUNICATION TOWER (800m Landuse Buffer)
 - PROPOSED WASTE WATER TREATMENT PLANT - INDICATIVE LOCATION (500m Landuse Buffer)
 - EXISTING WATER CORPORATION WASTE WATER TREATMENT PLANT (500m Landuse Buffer)
 - EXMOUTH POWER STATION (35dB(A) Landuse Buffer for Noise Sensitive Land Uses - 350m)
 - Variation to 350m landuse buffer to be subject to detailed assessment including the preparation of a buffer definition study in accordance with the requirements of WAPC SPP No 41 - State Industrial Buffer Policy
 - CAMERON'S CAVE (500m Landuse Buffer)

- DEVELOPMENT INITIATIVES**
- FUTURE NEIGHBOURHOOD CONNECTOR (Final alignment subject of detailed investigation)
 - 1 TOWN CENTRE: Refer Structure Plan Report Section 8.1
 - 2 WELCH STREET PRECINCT: Refer Structure Plan Report Section 8.2
 - 3 MIXED USE PRECINCT-TRUSCOTT CRESCENT: Refer Structure Plan Report Section 8.3
 - 4 TOWNSITE BOUNDARY ADJUSTMENT: Refer Structure Plan Report Section 8.4
 - 5 HARBOUR EXPANSION: Refer Structure Plan Report Section 8.5
 - 6 MIXED USE PRECINCT - MADAFFARI/WARNE STREET: Refer Structure Plan Report Section 8.6
 - TOWNSITE BOUNDARY / Correlating with Indigenous Heritage Investigation Area (Refer to Structure Plan Report Section 4.1.6.1)

ENDORSEMENT OF EXMOUTH TOWNSITE STRUCTURE PLAN AUGUST 2011

The Western Australian Planning Commission resolved on 19 September 2011 to endorse the Structure Plan as a guide for future subdivision within the locality.

Signed for and on behalf of the Western Australian Planning Commission

R. [Signature]

an officer of the Commission duly authorised by the Commission pursuant to section 24 of the Planning and Development Act 2005 for that purpose in the presence of

M. [Signature] Witness

19 September 2011 Date

Exmouth Townsite Structure Plan 2011
SHIRE OF EXMOUTH / DEPARTMENT FOR PLANNING AND INFRASTRUCTURE

plan: 08/0247001G	designed: SB	scale: 1:20 000@A3
date: 29/08/2011	checked: WHB	0 200 400
projection: MGA94-250	drawn: [Signature]	

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To accommodate the staged release of urban land within the Townsite, the Structure Plan classifies approximately 120 ha of land as Proposed Urban. This has included residential infill areas within or adjacent to the existing residential areas and larger parcels of land west of Murat Road.

Three residential infill areas have been defined:

-  Learmonth Street south: This landholding is constrained by the proximity of Town Creek and the corresponding flood fringe area. Hydraulic modelling and consultation with the DoW will be required to confirm the extent of developable land. Native Title clearance consultation is currently ongoing. Reserve 27484 in this locality has also been designated proposed urban, which is consistent with its current use as a church site.
-  Lot 300 King Place: The feasibility of developing Lot 300 as a group housing site is being investigated. Excavation constraints are anticipated due to landform. Native title clearance is also ongoing.
-  Nimitz Street south: This land parcel is comprised of approximately 35 ha. Whilst the land is only partially affected by the flood fringe areas associated with LIA Creek, detailed engineering design would need to address local drainage constraints. Structure planning should make provision for the alignment of the proposed neighbourhood connector to facilitate the Kennedy Street link. Native Title clearance has not yet been obtained.

The 1998 and 2004 Exmouth Structure Plans designated a large area of urban land west of Murat Road as providing for the longer term growth of the Townsite. With the completion of the Exmouth Floodplain Management Study and a better, though not definitive, understanding of the buffer requirements of the Exmouth Power Station, the 2009 Structure Plan has more accurately delineated the extent of land with capability to support further urban development.

The most obvious impact on the extent of urban land identified in previous structure plans, is the definition of the floodway and flood fringe areas associated with Marina Creek. This floodway has defined a proposed smaller urban precinct to the north (bounded by Welch Street, Reid Street, Murat Road) and to the east of the buffer for the power station as presently understood. The precinct has been identified by the Structure Plan as a Development Investigation Area. Development options for this area are to be guided by Development Initiative 2 referenced in Section 8.2.

The primary land use consideration for the precinct is the need for overall structure planning to guide the configuration of land uses in this locality. The outcome of the buffer definition study for the Exmouth Power Station discussed in Section 5.3.5, is of particular importance in the forward planning of the proposed urban precinct. In the event that the power station buffer can be maintained at 350 metres, the configuration and interface between potential residential, tourist and public purpose uses in this locality should have regard for the development opportunities set out by Development Initiative 2 (Option 1). In particular, detailed planning should address the determination of the subdivisional boundary between residential use and the tourism site; the opportunity for mixed use adjacent to Murat Road; controlled access along the Murat Road frontage; provision being made within the residential layout for a road connection between the tourism site and Welch/Reid Streets; and the feasibility of remediating the disposal site. A preliminary design exercise suggests that a lot yield of 60 residential lots is achievable within DI 2 – Option 1.

In the event that modelling identifies that the impact of the power station is greater than the 350m setback shown on the face of the Structure Plan, noise sensitive land uses within any revised buffer will need to be excluded. Service Commercial/Service Industrial uses may emerge as the preferred land use in this location (Option 2). Under this scenario, structure planning should address the need for design guidelines to deal with the interface between development and Murat Road in terms of controlled access and acceptable built form outcomes.

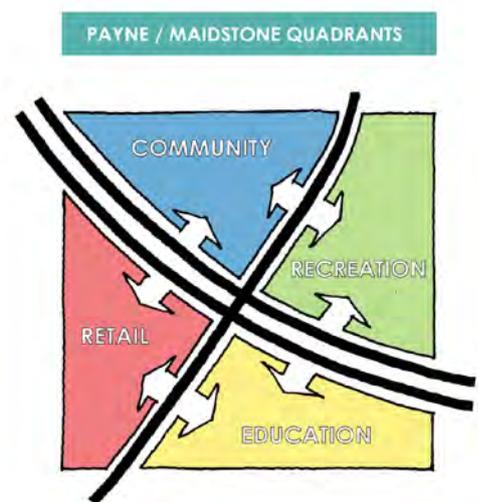
A second urban precinct is defined by the Structure Plan to the south of Marina Creek. This locality will also need to be subject to structure planning. A greater portion of this precinct is within the DoW Investigation Area in which the definition of open space areas may need to be cognisant of flood relief and development setbacks associated with the Market Street Bund. Liaison with DoW in this regard will be required at the detailed design stage. Structure planning should address the proposed alignment of the neighbourhood connector road linking Murat Road with Kennedy Street; the provision for green linkages with adjoining urban areas with connection through to the marina; the possible relocation westwards of the Broadcast Australia facility; intersection treatments with Murat Road and the opportunity for mixed use interface along Murat Road over time. Whilst a greater portion of this urban precinct has received Native Title clearance, minor adjustments made to the urban area on the western perimeter may need to be revisited.

7.1.3 TOWN CENTRE

The Town Centre is generally framed by Murat Road, Maidstone Crescent and Kennedy Street and is currently the main focal point for retail and commercial activity for the local and visiting population. The Structure Plan provides for the function of this precinct to be enhanced and expanded upon given the unique structural elements and character displayed by the town centre as an activity centre not easily duplicated in a comparable greenfields site.

The fundamental structure of Exmouth’s Town Centre is recognised in the strength of its land use quadrant formation, which provides the framework for focussed development to enhance and consolidate the existing activity hub. This provides a robust strategic framework for development principles to be identified, whilst considering the recommendations and work undertaken by the Exmouth Townscape Committee to date. These principles will seek to ensure that the Town Centre is maintained and enhanced as the town’s focal point for core land uses, including retail, commerce, service, administration, community, education, recreation and tourism needs.

The Exmouth marina and boat harbour precinct will provide the opportunity over time for second order shopping and commercial activity, particularly to service tourist trade (restaurants, cafes, tourist retail outlets), however the primacy of the town centre as the retail and commercial core of the Townsite should be retained. Discussion on retail floorspace and town centre expansion in the context of Townsite growth is addressed in section 7.3.





Through the generation of a Development Initiative Plan (DI 1 – Town Centre), the Structure Plan provides guidance and principles to be considered in assessing land use and development in the area classified as Town Centre. The potential relocation of some land uses have been explored (High School, swimming pool), but not actively promoted, given the role these uses play in maintaining the strong ‘community, retail, education, recreation’ quadrant framework that is viewed as a positive structural element of the town centre to be celebrated.

These uses provide the opportunity for community interaction and engagement and ‘chance’ meetings to take place, and whilst the Structure Plan does not preclude relocation options to be considered in the future, careful consideration would need to be given to maintaining community formation, accessibility and the safe movement for a majority of user groups. The DI 1 Plan also explores the opportunity for a multi-purpose community centre to be established within the town centre with the opportunity to activate the northern edge of Federation Park and improve connectivity.

The vision for the Town Centre is further outlined in Section 8.1, where a Development Initiative Plan provides a strategic framework for the town centre to guide the preparation of a more detailed Town Centre Study.

7.1.4 SERVICE COMMERCIAL/SERVICE INDUSTRY

A Service Commercial/Service Industry classification is proposed by the Structure Plan to reflect the existing employment precinct currently zoned Mixed Use in TPS 3. This area is bounded by Murat, Nimitz, Reid and Welch Streets and historically functioned as the town’s light industrial area characterised by wide road reserves and an assortment of land uses. It has now evolved as a predominantly quasi-service industrial area with intermittent residential use. The landscape amenity of the precinct is generally limited.

The Structure Plan proposes to reflect the existing zoning of this precinct providing for service commercial, residential and service industry, with the exception of light industrial uses which are favoured to be located within the light industrial area within the townsite or as part of the industrial precinct south of the townsite. Under this scenario, existing light industrial uses will retain non-conforming use rights. Alternatively, to improve the overall amenity of the area, scheme provisions could be revised to limit the location of light industry to lots other than those with frontage to Murat Road.

Due to its elongated shape, the precinct has extended frontage to Murat Road. It is therefore a highly visible precinct at the entry to town that requires deliberate interface guidelines to be enforced to ensure the visual amenity of the Murat Street Road frontage is not compromised. Zoning alone will not preclude poor interface outcomes. The introduction of design guidelines to control built form, setbacks, access, fencing, and landscaping standards is considered to be a minimum requirement of development control along the Murat Road frontage. This is of particular importance for landholdings which previously were viewed as landscape buffers and are now included within the service commercial/service industry precinct as a land use preference of the Shire of Exmouth.

It is intended that bulky goods retail and service industrial uses will operate from this area with the residential caretaker, shop/office component being retained where incidental to the predominant use.

7.1.5 MIXED USE

The Structure Plan strategically allocates land to a new Mixed Use definition to provide flexibility in assessing development opportunities on sites that have high exposure, demand landmark architecture, have frontage to an important road linkage, eg Murat Road, and are in the vicinity of activity nodes such as the Visitor Centre and Exmouth Marina.

The Structure Plan defines a mixed use area as *‘a vibrant and sustainable environment that over time has the potential to integrate living, working, cultural, community and leisure opportunities’*. This contemporary interpretation of mixed use allows a range of compatible uses to co-locate both adjacent to one another and vertically within individual buildings.

This interpretation of mixed use by the Structure Plan is at variance with the current interpretation of mixed use in the Shire of Exmouth Town Planning Scheme No 3 which refers to mixed use as *‘a mixture of uses including light and service industry with some commercial and some residential uses’*. The anomaly will be overcome by the amended classification of Council’s existing mixed use zone as a service commercial/service industry area with a range of discretionary uses (as described in Section 7.1.4).

There may be circumstances where small-scale retail uses are appropriate in strategic locations within the mixed use areas identified by the Structure Plan. The overarching policy position should be to focus core retail activity in the Town Centre, however if a proposal for lower order retail use in an alternative mixed use location would not compromise the viability of retail uses with the Town Centre, such an application should be considered on its merits. The same principle applies to residential or short stay accommodation such that these uses are not prohibited within the mixed use area but should not be developed as the principal use.

Two areas of mixed use have been identified on the Structure Plan, focusing on the strategic location of each parcel of land and its demand for landmark architecture, presence and activity generation. Sections 8.3 and 8.6 provide further direction on the design intent for the two precincts.

7.1.6 LIGHT INDUSTRY

The Structure Plan has taken the position of limiting the extent of industrial land within the townsite, whilst recognising it as an important employment base. Industrial land accommodates the manufacturing industry, storage and distribution, and other associated uses.

Limited expansion of the existing Welch Street light industrial area, excluding the power station lot, is proposed, amounting to 8.8 ha which coincides with the extent of the landuse buffer requirements of the Exmouth Power Station (refer Section 5.3.5). The area is to be limited to light industrial land uses with general/light industrial uses being encouraged to locate within the existing and proposed strategic industrial areas south of the townsite.

The 2004 Structure Plan identified land west of the Exmouth Power Station as being suitable for industrial expansion. The 2009 Draft Structure Plan now relocates this potential to the land area east of the Power Station on the basis that:

-  The Flood Management Study (DoW, 2007) has identified the area west of the power station as being constrained by a north south floodway and associated flood fringe, which limits access and development feasibility.



-  Industrial land uses are considered a compatible use within the 350m power station acoustics buffer defined by the Structure Plan.
-  The waste disposal remediation area is potentially constrained land which, subject to geotechnical investigation, has more likelihood of being developed for industrial use than residential following cost benefit analysis.
-  Adequate open space buffers are to be established within the buffer of the power station to provide a robust interface between residential/tourism uses and to facilitate green linkages with adjoining development areas.

7.1.7 TOURISM

Tourism is the predominant activity and economic generator in the Shire of Exmouth. The warm winters of the North West create a tourist season from June through to October, with periods of highest demand corresponding with school holidays. During peak times, accommodation is booked to capacity, and overflow caravan sites are provided on local sporting reserves to cater for this demand.

Tourism WA advise that visitor accommodation is the most significant limiting factor to growth in the Exmouth tourism industry. In response to this sustained demand, a number of new tourist accommodation facilities are currently under construction or in planning stages. Much of this new development, including the Novotel Resort, is located near the harbour. Tourism Western Australia has identified the need for a legible transport link from the harbour to the existing town centre as a priority, thus ensuring that both areas grow to complement each other.

The proposed Exmouth harbour expansion has significant tourism implications, particularly if provision is made for the berthing of cruise ships. Cruise ships are infrequent visitors to Exmouth, and the existing harbour has no facilities for these vessels to berth, requiring disembarkation via ship lifeboats. In addition, the local tourist facilities struggle to cope with this sudden influx of up to 2000 visitors. The proposed harbour expansion is considering making provision for the docking of these ships, and if constructed to this standard is likely to result in more frequent visits. Tourism WA advises that as a result, tourism facilities and infrastructure will require substantial growth to cope with these additional visitors.

Tourism WA, in conjunction with the Shire of Exmouth, is in the process of completing the *Shire of Exmouth Local Planning Tourism Strategy*. This strategy will consider the role of tourism within the local economy, identify future land requirements including strategic tourist sites, make reference to the range and type of facilities and services required to support the industry and establish guidelines to encourage desirable tourism development.

Following consultation with Tourism WA and an assessment of the suitability of developable land for tourism purposes, the Structure Plan assigns land for tourism use reflecting existing and proposed sites. The sites shown are endorsed by the preliminary recommendations of the Local Planning Tourism Strategy and include:

ZONED LANDHOLDINGS - UNDEVELOPED

-  Land to the east of the Town Centre with access from Willersdorf Road: This site is zoned Tourist under the existing TPS No 3 and is partially constrained by the flood fringe. Consultation with DoW and hydraulic modelling investigations will be required to determine the final extent of developable land in this location.



Proposed Exmouth Townsite Structure Plan

-  Corner of Truscott Crescent and Murat Road: This site is zoned Tourist and is occupied by the Exmouth Tourist Village. There is some potential for expansion subject to assessment of the flood fringe in consultation with the DoW.
-  Truscott Crescent: Comprises three land parcels zoned Tourist under the existing TPS No 3. Lots 715 and Lot 848 have development approval in place. Lot 1403 is undeveloped and is partially constrained by the floodway. Significant bulk earthworks would be required prior to development of this lot.

PROPOSED TOURISM SITES

-  Development Initiative 2 nominates a tourist site on Murat Road south east of the Welch Street LIA. Tourism WA is currently undertaking a feasibility study of the landholding for the purposes of a caravan park site. The site is approximately 11 ha of which 4 ha is constrained by the flood fringe and a disposal site subject to remediation. The constrained land has the potential to support camping subject to supporting infrastructure being located outside the flood fringe. Detailed planning of the residential area to the north should be undertaken to determine the final alignment of the subdivision boundary between the residential and tourism uses. Furthermore, the residential subdivision layout should provide for the opportunity for road linkages between the tourist site and Welch/Reid Street.
-  A 4.4 ha site is identified further south, also on the west side of Murat Road. This site has linkages to the Strategic Tourist Site on Exmouth Gulf via the pedestrian overpass bridge immediately to the east and the mixed use development proposed within the marina precinct. The site contains the existing Water Corporation pump station site which will attract a 20 m landscape buffer area. Controlled access onto Murat Road will be permitted with the option for access internally upon full development.

CONSTRAINED LAND WITH A LANDUSE EXPECTATION

-  A tourism investigation area has been identified on land classified as constrained land by the Structure Plan. This area is located adjacent to the Golf Course precinct and having direct access to Exmouth Gulf. The Land Capability Assessment Study (1997) identifies this locality as having a low capability to support tourism use. However, on-site assessment confirms that there is likely to be some nodal tourism development potential subject to comprehensive site specific assessment of landform capability and coastal setbacks.

7.1.8 PUBLIC PURPOSES

The Structure Plan allocates land for public purposes and facilities where identifiable. This encompasses the existing land uses on larger landholdings that fulfil community needs in terms of:

-  Education – Exmouth Primary and High School
-  Health – Exmouth Hospital
-  Cemetery on Warne Street
-  Proposed Waste Water Treatment Plant on Commonwealth Land



A public purpose precinct has also been defined at the intersection of Reid and Welch Street to facilitate the proposed extension of the Shire depot and the establishment of a emergency services facility. The public purposes classification is supported as an acceptable interface between the light industrial uses to the north and the proposed residential area to the south. Development within the public purpose site will need to address scale and architectural built form, landscaping, noise attenuation, traffic movement and distance separation from adjoining uses.

7.1.8.1 PRIMARY SCHOOLS

The Structure Plan identifies potential unconstrained urban land to accommodate an estimated additional 1510 lots, in addition to the existing 892 lots across the Exmouth Townsite. Given the potential for a maximum extra 697 lots to be developed on environmentally constrained land, the total capacity of the Exmouth Townsite, as shown on the Structure Plan, is 3078 lots.

Based on Department of Education and Training requirements to provide one primary school for every 1500 – 1800 lots, Exmouth will need one to two primary schools if it reaches total development capacity.

Currently Exmouth's primary education requirements are met by the existing joint primary and high school facility located adjacent to the Town Centre on Maidstone Crescent. This school should meet the requirements of Exmouth's school-age population for at least the short to medium term (particularly given the DPI's projection that the total population for Exmouth will only be 2500 by 2021, a population which could be accommodated on approximately 2000 lots. Significant government funding has recently become available to upgrade the existing infrastructure.

As the population grows, an additional primary school site can be provided as part of the development of any of the land identified for urban development in the Structure Plan. The exact location of the school can be determined through future detailed design of these areas.

7.1.9 MARINA PRECINCT AND BOAT HARBOUR PRECINCT

The Exmouth Marina is a project facilitated by LandCorp over the last fifteen years, to create a marina village consisting of tourist, residential, commercial/residential mixed use development, and marine based industrial development around the boat harbour south of the Townsite. The development area comprises over 100 hectares, and contains Western Australia's longest, single-span bridge providing pedestrian access across the canal from residences in the west to tourist and commercial uses, and the harbour, on the ocean-side.

The Marina area is subject to an Outline Development Plan (ODP), prepared during 2001 as a planning and design framework to guide the development of the site over time, and adopted by the Shire of Exmouth and the WAPC. The ODP divides the site into five precincts, which differ in character and predominant use, but share some uses and link to form a cohesive whole. Precinct A, canal-based residential uses; and Precinct C, a resort site, are now substantially developed. Precinct B, the mixed use heart of the Marina; Precinct D, further canal based residential with some mixed use; and Precinct E, the Marine Industrial site, are yet to be developed.

This Structure Plan supports the framework established in the Marina ODP, and has ensured that the proposals contained within the Townsite Structure Plan provide appropriate synergies with the future development in the ODP area.

Adjacent to the Marina Village is the Exmouth Boat Harbour. The Department of Transport is responsible for the planning and operation of the Exmouth Boat Harbour. The harbour contains 50 mooring pens, comprised of charter boat, general purpose and trawler pens. The harbour is designed to cater for up to 25 metre vessels, however larger boats may be accommodated for short periods of time. Vessel moorings within the boat harbour have been operating at full capacity for several years and the waiting period to lease a pen is approximately 2-3 years. There are trends emerging indicating that the operational focus of the harbour is changing, with there being a reduction in the commercial fishing fleet operating from this facility and a substantial increase in the number of large charter and deep sea sport fishing vessels servicing the tourism industry.

The Department of Transport is currently investigating the potential expansion and development of the boat harbour to cater for the current and anticipated increase in recreational fishing activities; possible berthing facilities for super yachts and cruise ships; and facilities to cater for the needs of the offshore oil and gas industry. In December 2008, the State Government endorsed the recommendations of the extensive public consultation phase on the expansion of the harbour and has sought proposals from the private sector for further assessment.

The Structure Plan acknowledges the proposal as a Development Initiative which, if implemented, will require a revision of the original ODP for the harbour and concurrent modification to the Structure Plan to reflect the extent of the harbour expansion.

7.1.10 RURAL-RESIDENTIAL

A rural-residential classification of land within the Structure Plan area has been confined to the existing Preston Street rural residential area.

Due to the proximity of Cameron's Cave, the constraints imposed by landform and the impact of the floodway to the south, limitations are placed on the expansion of this land use. The Structure Plan limits expansion of rural residential use to additional land north of the existing lots which is partially affected by the flood fringe necessitating consultation with the DoW as to the extent of modelling required. The limited expansion of this area is supported given:

-  The high quality of development on existing lots.
-  Access to reticulated water and power.

Close proximity to Townsite facilities than would be available on any site more remote to the Townsite. The potential for further subdivision of existing 1 ha lots providing for a density of R2.5 (min 4,000m²) was raised during assessment of land use options for this locality. Further planning and environmental assessment would be required before a re-classification of this area to Special Residential could be considered. In particular, any rezoning proposals under the local authority town planning scheme would need to be subject to a geotechnical investigation to determine the capability of the soils to accept effluent disposal, in addition to the approval of a structure plan to guide future subdivision. This Structure Plan retains the rural residential classification of this area until more detailed site investigations and environmental assessment are undertaken.

Constrained land immediately to the west forms part of the Range Land System (Ra2c), and has been identified as an investigation area for rural residential use by the Structure Plan. This locality may have potential for limited rural residential development subject to detailed investigation of the limiting factors of the landform (soil absorption, microbial purification ability, foundation soundness) and the extent of karstic features.



Land south of the Market Street bund between Murat Road and Exmouth gulf is currently used for grazing and rural activity undertaken on leasehold land. Previous structure planning (NCRS 2004 and Exmouth- Learmonth 1998) identified this area as an interim special residential area with the potential for longer term residential use. The subsequent Exmouth Floodplain Management Strategy (2007), described the area as substantially constrained by the floodway and flood fringe. The Structure Plan promotes the area as 'rural residential' and identifies it as constrained requiring detailed investigation with regard to flood management, land capability and effluent disposal.

7.1.11 CONSERVATION/FORESHORE RESERVE

The Structure Plan identifies land for Conservation and Foreshore Reserve purposes. The Conservation Reserve has been designated in the southern area of the Plan on land subject to the 500m buffer associated with Cameron's Cave (see Section 5.2.4); and on land to the west of Murat Road confirmed as being of low development capability due to its linear ridge landform and shallow soils. These land areas have both been reserved in the Structure Plan to protect them from future development.

Land identified as Foreshore Reserve in the Structure Plan is intended to conserve the Town's coastal dune formation abutting the Exmouth Gulf. The Foreshore Reserve is subject to the requirements of WAPC Policy SPP 2.6 State Coastal Planning Policy. To date, management of the foreshore has been site specific as a result of individual development applications. There is a need for a Foreshore Management Plan that comprehensively addresses SPP 2.6 particularly with regard to the public interest, and coastal setback to provide direction and consistency for development on the coast.

7.2 POPULATION CAPACITY

The Structure Plan identifies land for additional urban development, including the Marina development area which can accommodate a population of approximately 3500 people. In addition to Exmouth's existing townsite population capacity of approximately 2000 people, a total population of 5500 people could be housed within the Exmouth Townsite boundary, without needing to consider the urban development capability of the environmentally constrained land. If the constrained land were cleared for development, at reduced densities to reflect the environmental constraints, another 1600 people could be accommodated in Exmouth.

The table below outlines the population capacity of the various land uses identified in the Structure Plan, and defines the assumptions used when calculating development densities and total potential lot yield:

Proposed Exmouth Townsite Structure Plan

Land Use	Total Land Area (gross – inclusive of roads, parks, drainage etc)	Estimated Residential Density (based on gross area per lot)	Lot/Dwelling Yield	Total Population
Existing Residential	113.7 hectares	8 lots per hectare(a)	871	2003
Existing Rural Residential	24.6 hectares	1 lots per hectare(b)	21	48
Proposed Residential (unconstrained land)	120.7 hectares	8 lots per hectare(c)	965	2219
Proposed Rural Residential (unconstrained land)	8.1 hectares	1 lot per hectare(d)	8	18
Exmouth Marina			516(e)	1186
Total (unconstrained land)			2381	5474
Proposed Constrained Residential	114.3 hectares	6 lots per hectare(f)	685	1575
Proposed Constrained Rural Residential	12.2 hectares	1 lot per hectare(d)	12	27
Total (constrained land)			697	1602
TOTAL POTENTIAL YIELD			3078	7076

(a) Based on 871 residential lots across gross area of 113.7 ha = 1305m² gross land area per lot

(b) Based on 21 rural residential lots across gross area of 24.6 ha = 1.17 ha gross land area per lot

(c) Based on existing residential density

(d) Based on existing rural residential density

(e) Based on Exmouth Marina Structure Plan (2001) estimated dwelling yield

(f) Based on larger residential lots where environmental constraints exist

Given a total potential population of 7076, and a potential population of approximately 5500 if the environmentally constrained land were to remain undeveloped, the population capacity of the Exmouth Structure Plan well exceeds the estimated maximum permanent population of 2500 for the whole Shire of Exmouth by 2028 (WAPC, 2005). Accordingly, the Structure Plan is considered to identify sufficient land for urban development to accommodate the town's population growth well into the future.

7.3 RETAIL

Exmouth currently has approximately 5,500m² net lettable area (NLA) of retail floorspace, which serves a resident population of approximately 2000, and a tourist population that can be equivalent to the resident population during peak visiting periods.

Based on this existing ratio of 2.7m² NLA per person, and the Structure Plan's estimated maximum population capacity of 5474 (or 7076 if environmentally constrained land is developed), a total of approximately 14,000m² NLA retail floorspace (and possibly up to 19,000m²) may need to be accommodated in Exmouth in the future.

It is noted that the ratio of 2.7m² NLA per person is significantly greater than the standard Perth Metropolitan Centres Policy ratio of 1.74m² per person. However, given the dramatic increase in the retail catchment of Exmouth Townsite during peak tourism periods, it is considered that this higher ratio is justified and appropriate for use in future retail planning for the town.

Experience and examples of other retail centres indicate that for every 1m² NLA retail floorspace, a total of 5m² gross land area needs to be provided. Given this, approximately 7 to 10 hectares of land may be required for retail purposes across the Exmouth Townsite if population reaches capacity.



The Structure Plan identifies the potential to expand the existing Town Centre area to the north and west between the Hospital and Maidstone Crescent (see detail at Section 7.1), and along with intensification of existing Town Centre retail uses, this will accommodate a significant portion of the extra retail land that may be required over time. Additionally, there is an opportunity to allow a second minor retail core associated with the Marina Village to the south, however this should only be allowed to occur on the basis that the core retail uses remain in the existing Town Centre where they complement adjacent community, recreation and education land uses.

Local small scale retail uses, such as corner shops, may also be provided in appropriate locations in predominantly residential precincts.

7.4 MOVEMENT NETWORK AND INFRASTRUCTURE

7.4.1 ROAD NETWORK

The land use framework for the Exmouth Townsite recognises the dominance of Murat Road as the main distributor road network for the town, providing for through movement to the north and west of the North West Cape and more specifically providing the 'spine' for the Townsite movement system.

Murat Road has been progressively upgraded through the Shire's Townscape Improvement initiatives and as funding has become available. The continuation of the landscaped median, avenue tree planting and lighting treatments is encouraged.

The Structure Plan makes provision for a future neighbourhood connector road linking Murat Road with Kennedy Street. This movement system is seen as an essential to connecting a number of urban nodes that will unfold as Townsite expansion takes place. Structure planning of the proposed urban areas west of Murat Road will in particular need to address the detailed alignment of the neighbourhood connector. This movement system will also provide a secondary link for emergency services during a flood event.

7.4.2 WATER SUPPLY INFRASTRUCTURE

The Water Corporation is the agency responsible for constructing and maintaining the public water supply infrastructure for the Shire of Exmouth.

Public water is sourced from superficial aquifers in the Cape Range via series of bores located in the Exmouth Water Reserve to the west of the townsite. The Water Corporation is the largest licensee of groundwater allocated from the aquifer by the Department of Water. The Water Corporation licensed bores run parallel to the western edge of the Townsite, and then southwards. The majority are located between 500m and 1500m to the west of the Townsite. Groundwater is pumped to a storage/treatment tank that is located approximately 3.5 km due west of the Exmouth Harbour. The aquifers are recharged through periodic rainfall events and, due to their relatively shallow depth, are subject to potential salt water intrusion. The water is slightly salty, but well within acceptable parameters.

Based on current population growth estimates, the existing borefields are expected to cater for Exmouth's short to mid term growth. Beyond the mid term future, new source capacity needs to be developed, in conjunction with the implementation of water efficiency measures. Source options include development of new borefields south of Shothole Canyon, brackish desalination and seawater desalination. The Water Corporation is in the process of investigating these options.

The Exmouth Floodplain Management Study (DoW, 2007) also investigated the potential for the harvesting of floodwaters to supplement the town's water supply. This was deemed unfeasible, given the intensity and infrequency of rainfall events in Exmouth and the high evaporation rates. Harvesting could only be conducted by improving inflow into the regional groundwater aquifer.

7.4.3 WASTE WATER INFRASTRUCTURE

The Water Corporation operates the reticulated sewerage system servicing the Townsite, including the treatment ponds within the town's centrally located recreation precinct north of Truscott Crescent. The existing sewage treatment plant requires a 500 metre buffer that extends over parts of the caravan park, sporting ovals and other urbanised areas. It is important that the Water Corporation can progress the planning and construction of a new wastewater treatment plant in view of the treatment capacity of the existing wastewater treatment plant and to alleviate odour issues experienced under certain climatic conditions.

The Water Corporation supports the relocation of the existing facility and negotiations have taken place with the Department of Defence to enable the facility to be located on Commonwealth Land to the north of the Townsite, ensuring there will be no impact on Townsite uses once established. Site assessment investigations are currently being progressed.

7.4.4 POWER GENERATION

Electricity in Exmouth is supplied to Horizon Power, and to the Exmouth community by the Exmouth Power Station Pty Ltd. In September 2003, Western Power entered into an 18 year power purchase agreement with Exmouth Power Station Pty Ltd., with a new gas-fuelled power station replacing the old diesel-fired station and becoming operational in September 2006. The power station is located at Lot 1467 Welch Street and currently comprises nine power generation units, with the installation of an additional unit being planned for. The power station is designed to allow for future expansion, as the Exmouth region has been identified as a growth area by Horizon Power. The Structure Plan review process has identified the need for a buffer definition study for the power station to be undertaken, to ensure separation of noise sensitive uses is appropriately addressed from a land use, health and safety perspective (see further discussion on this issue at section 5.3.5).

7.5 LAND USE DECISIONS OUTSIDE TOWNSITE

The Regional Context Plan (see **Figure 4**) provides a regional framework for the Townsite and identifies a number of existing land uses that are operating outside the Townsite for either locational advantage, or in most cases due to the availability of suitable land.

The scope of the Structure Plan required that focus be placed on Townsite-based land use decisions and therefore is not explicit regarding the allocation of specific land uses outside the Townsite boundary. The Structure Plan does, however, acknowledge that the Shire of Exmouth has numerous requirements to allocate land outside the Townsite for specific purposes, such as the relocation of the go-cart track ahead of the development of the LandCorp landholding within the marina precinct; extension to the waste disposal site; relocation of the concrete batching plant; strategic industrial uses; BMX track; aquaculture; and resource extraction (pindan and gravel). Other decisions that need to be made relate to Commonwealth Land, the possible extension of the Cape Range National Park, and coastal management and tourism facilities at Vlamingh Head and Yardi Creek.



The allocation of land uses on unallocated crown land and crown reserves surrounding the Townsite is a process in which the Shire of Exmouth and government agencies (DoP, DEC, DoW, DIA) need to work collaboratively to identify values and land use / management options for the area. The Exmouth-Learmonth (North West Cape) Structure Plan (1998) and the Final Draft of the Cape Range National Park Management Plan, due for Ministerial approval in 2009, makes reference to a 'Conservation and Landuse Investigation Area subject to further DPI Study' (refer legend **Figure 4**).

This investigation area extends from the light aircraft reserve in the south, and northwards surrounding the Townsite. The National Park Management Plan recommends that further biological examination of this investigation area is required to help determine boundaries for the addition to the public conservation estate and to allow other land use options, such as those required by the Shire, to be assessed. In the interim period (prior to completion of further study), each land use proposal should be assessed on merit with sufficient supporting information taking into account land capability AND land suitability factors, allowing a balance of community expectations and environmental values to be achieved.

The Shire of Exmouth has submitted a revised plan to indicate proposed additional uses outside the townsite. These uses include investigation areas for strategic industrial, waste disposal and economic development purposes. The proposed uses are discussed in Section 8.7 as Development Initiative 7.

In regard to the future use of Commonwealth Land to the north of the Townsite, consultation with the Department of Defence (Canberra) has confirmed that the policy position of the Department has not changed since the preparation of the 2004 Exmouth Structure Plan. The Department, however, is currently undertaking a strategic review of its operation of the Harold E Holt Naval Base and a review of land requirements generally in the Exmouth Region. A draft report is yet to be endorsed by the DoD or Government. For the purposes of the Structure Plan, it is assumed that the status quo will be maintained. Specifically, the relocation of the waste water treatment plant to Commonwealth Land as proposed by the 2004 Exmouth Structure Plan is still supported by the DoD on the grounds that co-location reinforces the maintenance of joint land use buffers adopting long term timeframes. The Structure Plan acknowledges and promotes this land use initiative.

8.0 DEVELOPMENT INITIATIVES

As local structure planning, subdivision and development proceeds across the Townsite, certain key design elements should be incorporated to ensure sustainable development outcomes for Exmouth. The following general considerations and specific development initiatives should be considered in future detailed design formulation.

The consideration of residential densities and potential intensification of commercial and tourist uses within the study area will be important in order to:

-  Generate greater pedestrian activity.
-  Provide flexibility through robust design.
-  Provide greater diversity and choice of residential product.
-  Encourage land uses which stimulate community and tourist activity.
-  Provide further commercial and recreational opportunities for both long and short term residents.

The creation of integrated, highly connective, attractive and safe spaces for pedestrians, which respond to the local climate, should also be considered using the following urban design principles:

-  Encouraging the upgrading of streets to serve as the primary pedestrian environment.
-  Improving the amenity of streets for pedestrians, including provision of shading and shelter.
-  Ensuring a highly connected and legible movement network to facilitate the most efficient and direct movement.
-  Encouraging an active frontage to streets to maximise passive surveillance.
-  Designing streets to ensure low speed environments for pedestrian safety.

With these general principles as background, a number of Development Initiatives have been prepared to provide specific guidance as to the issues and opportunities associated with particular sites, and to indicate a vision for how future development of these sites might unfold.

Whilst it is not normal practice for a structure planning exercise to detail development initiatives for given sites in this manner, the approach adds rigour to the Structure Plan and assists to guide the interpretation of the land use framework described by the Structure Plan. The initiatives are not intended to be definitive or precise in nature, but have the potential to aid the Shire of Exmouth's assessment of development proposals and/or the preparation of guidelines or development plans for key locations. There is the opportunity for further Development Initiative Plans to be prepared on sites nominated by Council as requiring specific guidance in advance of development pressures.



8.1 TOWN CENTRE

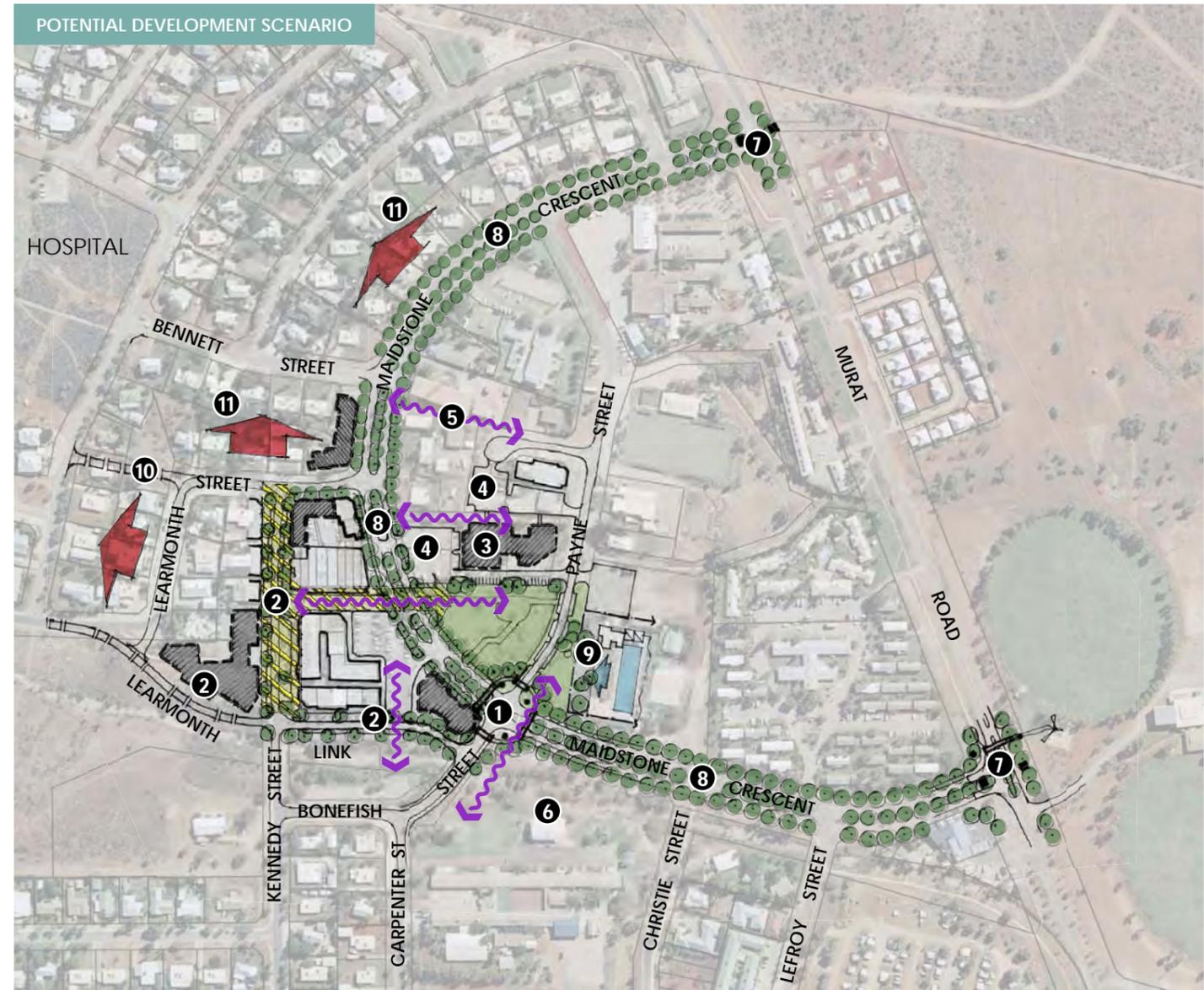
Development Initiative Plan 1 (see **Figure 9**) provides a strategic framework for the town centre to guide the preparation of a more detailed Town Centre Study. The framework presents the overriding development principles for reference and provides a development scenario within the framework principles. The key areas for consideration in the Town Centre include:

-  Improving Town Centre legibility and pedestrian/vehicular connectivity.
-  Identifying Payne Street/Maidstone Crescent as an important anchor for the reinforcement of four town centre land use quadrants – Retail, Community, Recreation and Education.
-  Retaining and ultimately upgrading Payne Street/Maidstone Crescent intersection, initially with pedestrian lights, then potentially with full signalled intersection treatment providing:
 - Access to the High School
 - Legible orientation to the Town Centre for visitors
-  Connectivity for all activity quadrants – Retail, Community, Recreation and Education.
-  Implementing the Learmonth Link road connection to improve circulation around the town centre, activating shop fronts and supporting the “main street” precinct and access to parking areas.
-  Consolidating community/child health facilities to facilitate development of the multi-purpose community centre ‘focal point’. Sensitive building redevelopment will activate the northern edge of Federation Park and promote activity in the parkland. Upgraded pedestrian links will further enhance the community hub and Federation Park.
-  Rationalising and upgrading parking facilities including relocation of the fire station to provide additional overflow parking to the community hub.
-  Presenting Kennedy Street as a ‘pedestrian focussed main street’ through streetscape treatments and ability to be closed to traffic for key events. This proposal is supported by the Learmonth link connection.
-  Future building development in the town core to consider framing of Kennedy Street and Maidstone Crescent to promote activated interfaces.
-  Supporting streetscape enhancements to Maidstone Crescent through landscaping, road pavements and pathways to promote pedestrian movement and community centre building.
-  Supporting longer term expansion of the Town Centre with consideration given to strengthening connections to the hospital.
-  Recommending maintaining the High School location given its current central location and accessibility. This site has a high synergy with the community hub, library and pool facility and forms a cornerstone of the town centre quadrant.
-  Defining Town Centre connections to improve announcement and legibility of the Town Centre particularly from Murat Road. This may be achieved through intersection pavement treatments and/or design, vertical elements such as signage, lighting, public art and streetscape enhancement.
-  Rationalising Jingles Park abutting the town pool, enhancing parkland and improving corner presentation.

DEVELOPMENT PRINCIPLES



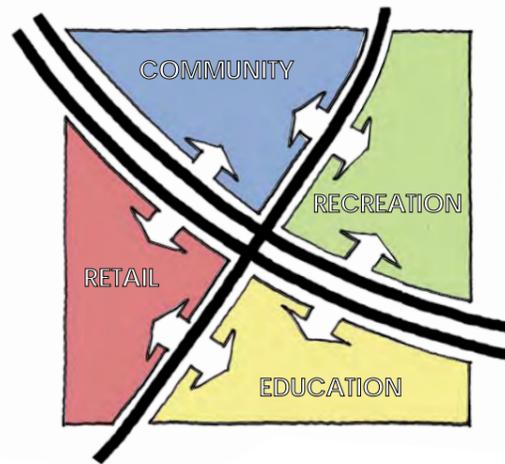
POTENTIAL DEVELOPMENT SCENARIO



The fundamental structure of Exmouth's Town Centre is recognised in its formidable land use quadrant formation. This provides a robust strategic framework for development principles to be identified, whilst considering the recommendations and work undertaken by the Exmouth Townscape Committee to date. These principles seek to ensure the Town Centre is maintained and enhanced as the town's focal point for core land uses, including retail, commerce, service, administration, community, education, recreation and tourism needs.

- 1 Payne Street / Maidenstone Crescent to be retained and ultimately upgraded, initially with pedestrian lights, then full signalled intersection providing:
 - access to High School
 - legible orientation to Town Centre for visitors
 - connectivity for all four quadrants: Retail, Community, Recreation and Education
- 2 Learchmonth link an important development initiative providing:
 - opportunity for better Town Centre circulation and access to parking
 - facilitating "main street" (Kennedy Street)
 - provides opportunity for potential closure of Kennedy Street for events and pedestrian priority
 - encourages circulation around town centre and supports main street precinct and parking areas
- 3 Consolidation of community / childhealth facilities to facilitate development of multi-purpose community centre - 'focal point'.
 - encourage re-development to activate edge of Federation Park
 - encourage activity in parkland and movement through upgraded pedestrian link

PAYNE / MAIDSTONE QUADRANTS



- 4 Upgrade parking facilities & relocate fire brigade overtime to provide overflow parking for community hub
- 5 Upgrade & define pedestrian links
- 6 Maintain High School location
 - synergy with Community Centre, Library and pool areas
 - improve and formalise pedestrian linkages to aid movement to recreation precinct
 - potential to relocate to recreation precinct currently constrained by floodfringe
- 7 Define Town Centre connections
 - consider options such as raised intersection pavement, channelise turning movements and vertical elements such as signage, lighting, landscaping and public art
- 8 Consolidate streetscape prominence to 'Town Centre route' through landscaping
- 9 Improve parkland use abutting pool area
 - relocate perimeter fence towards Payne Street to incorporate existing tree stands within pool area for increased shade and amenity - adjustment to Jingles Park
- 10 Long term consideration of hospital connections in the context of future TC expansion planning
- 11 Long term expansion of Town Centre
- 12 Redevelopment supported whilst maintaining uses in Town Centre location



8.2 WELCH STREET PRECINCT

Development Initiative Plan 2 (see **Figure 10**) sets out development opportunities for land with frontage to Murat, Reid and Welch Street. The future configuration of the land uses in this precinct is affected by the proximity of the power station and corresponding need for buffers, and the impact of the waste disposal area. As technical work to define the buffer requirements of the Power Station is currently unavailable, the implementation of the preferred land use configuration (DI2) will be subject to investigations being completed prior to rezoning and subdivision. The proposed uses for the site are yet to be determined and include proposals for 'urban/tourism' versus 'service commercial/service industry'.

The key planning and environmental considerations which need to be resolved within this precinct include:

Option 1 and 2

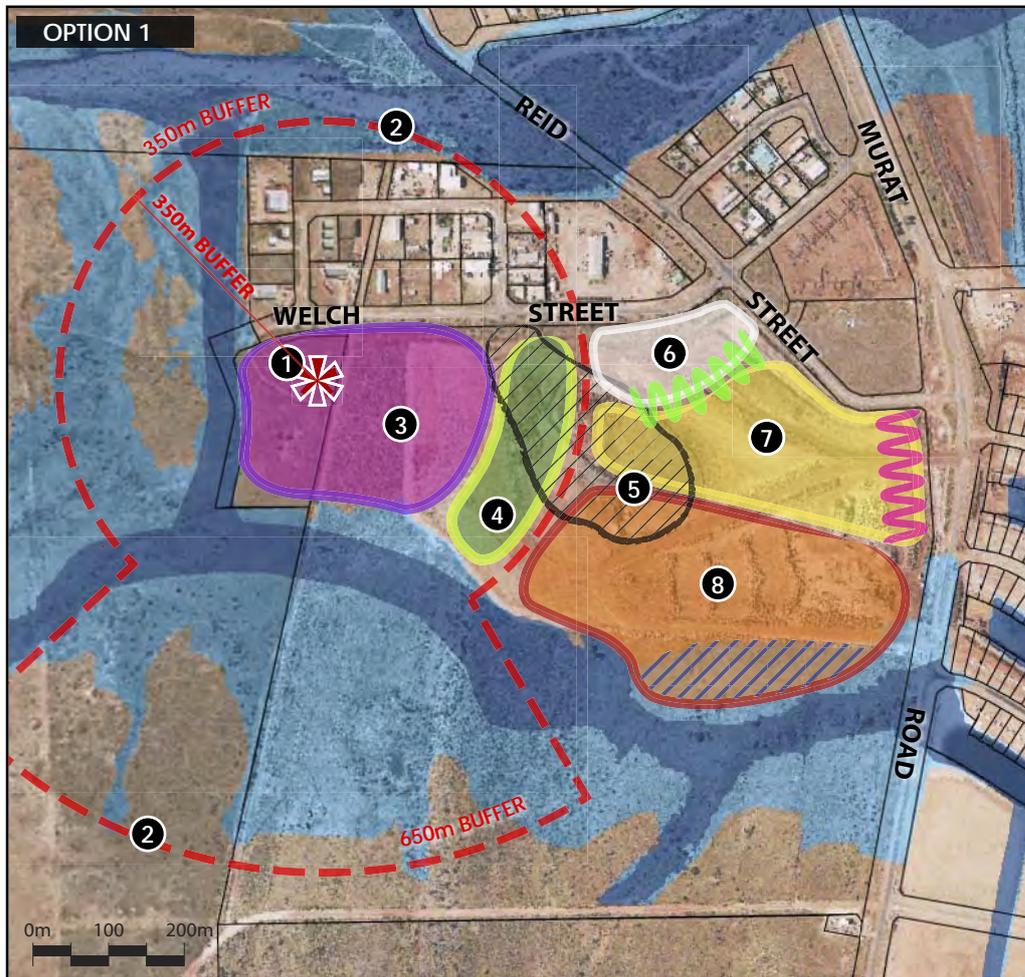
-  Outcome of the buffer definition study for the Exmouth Power Station (refer Section 5.3.5).
-  Exclusion of noise sensitive land uses from within the buffer of the Exmouth Power Station pending outcome of the buffer definition study.
-  Expansion of light industrial uses within the power station buffer with retention of trees along Welch Street.
-  Establishment of an open space interface between light industry and residential use, with this buffer to be located within the light industrial zone.
-  Investigation of the potential site remediation options for the waste disposal site. The land use preference for this area is 'open space/drainage reserve' unless investigation/cost analysis proves that another alternative use is possible.
-  Establishment of a public purpose land use interface between the light industrial uses on the northern side of Welch Street and the proposed urban area, with scale and architectural design of built form, landscaping, noise attenuation, traffic movement and distance separation incorporated within the public purpose site to be addressed at the development stage (preferred uses include extension of Shire Depot (administration) and a new emergency services facility).

Under Option 1

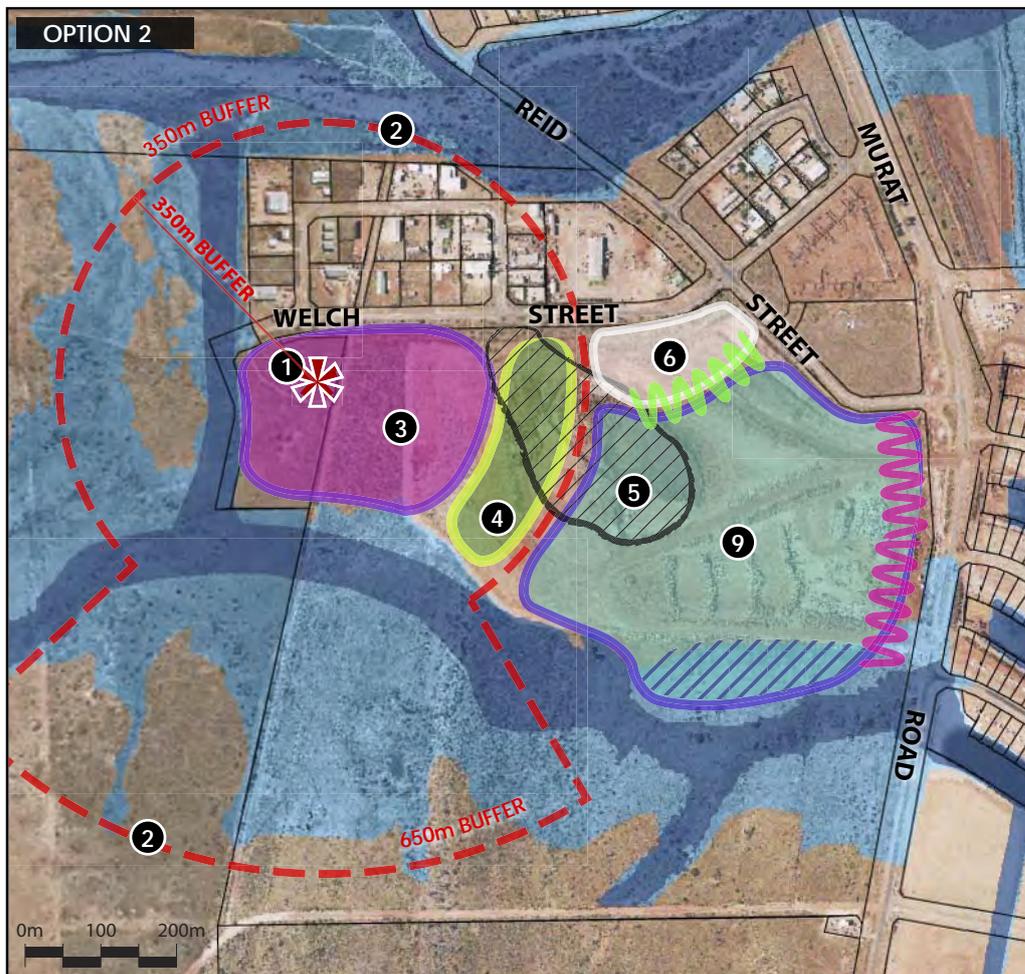
-  The determination of an acceptable subdivisional boundary between the residential and tourism site.
-  Subdivision layout for the residential area to consider mixed use interface along Murat Road with controlled access; and opportunity for internal road access link between the tourism site and Welch/Reid Street.
-  Investigating the use of the flood fringe and remediation area for camping purposes.

Under Option 2

-  Proposed service commercial/service industry use subject to further investigation.
-  The determination of an acceptable development interface with Murat Road to achieve controlled access and appropriate built form outcomes through the adoption of design guidelines.



- LEGEND**
- OPTION 1 AND 2**
- 1 Power station location
 - 2 Power station buffer for noise sensitive uses (35dB(A)) - residential (subject to further assessment)
 - 3 Expansion of light industrial land use within power station buffer
 - 4 Recommend open space interface between light industry and abutting land uses incorporating tree retention along Welch Street
 - 5 Waste disposal site to be investigated in more detail to determine potential site remediation and suitable land uses (land use preference is 'open space' unless investigation / cost analysis proves otherwise)
 - 6 Proposed public purpose site as interface to light industrial land use. Interface between public purpose site and urban land use to be mitigated. Consider distance separation, fencing design and landscaping



- OPTION 1**
- 7 Proposed urban development area with potential for mixed landuse interface to Murat Road. Extent of residential landuse subject to investigation of remediation options for waste disposal site marked (5), and determination of final subdivisional boundary
 - 8 Extent of proposed tourism development area subject to flood fringe assessment, further investigation of remediation options for waste disposal site and determination of subdivisional boundary
- OPTION 2**
- 9 Proposed service commercial / service industry use, pending further investigation to define extent of power station buffer; controlled access and appropriate built form outcomes along Murat Road frontage to be implemented via design guidelines

8.3 MIXED USE PRECINCT – TRUSCOTT CRESCENT

Development Initiative Plan 3 (see **Figure 11**) sets out development opportunities for unconstrained land at the intersection of Murat Road/Truscott Crescent. The proposed uses have a synergy with an important activity node of the existing Visitor Centre, with preferred uses identified as predominantly cultural and office. Associated residential or short stay accommodation may be considered as a consolidated development scenario. The key areas for consideration in this area include:

-  Relocating all waste water treatment plant infrastructure.
-  Establishing a cultural centre and/or multi-purpose community centre, providing a focal point and strong synergy with the visitor information centre and recreation precinct.
-  Investigating the suitability of the site for consolidated government offices, reliant upon Town Centre redevelopment decisions and combined government office/Ningaloo Research Centre initiatives.
-  Formalising road connections and improving on-site circulation pattern, particularly for visitors first arriving at the visitor centre.
-  Preparing comprehensive streetscape guidelines to apply along the Murat Road frontage to improve town centre introduction.
-  Considering the potential for the cultural centre to adopt landmark architecture as an entry statement or arrival point to Exmouth Town Centre. The Cultural and Visitor Centre node should visually connect to the Town Centre through streetscape enhancement and architectural visual cues.
-  As this mixed use area is located within the buffer of the existing waste water treatment plant, implementation of this development initiative is dependent upon the relocation of all waste water treatment plant infrastructure.

RELOCATION OF WASTE WATER TREATMENT PLANT



LEGEND

- 1 Relocation of all waste water treatment infrastructure to Commonwealth Land north of townsite
- 2 Establish cultural centre/multi purpose community centre - focal point; synergy with visitor centre and recreation precinct
- 3 Investigate suitability for consolidated government office location (this initiative is reliant on town centre redevelopment decisions and combined government office / Ningaloo Research Centre initiatives)
- 4 Comprehensive streetscape guidelines to apply to mixed use precinct; Consider design of built form & location to improve town centre introduction
- 5 Strengthen entry statement and incorporate pedestrian crossing facility
- 6 Potential mixed use expansion area with emphasis on community uses
- 7 Formalise road connections and improve circulation pattern
- 8 Maintain open space corridors in strategic locations
- 9 Proposed tourism site

8.4 TOWNSITE BOUNDARY ADJUSTMENT

Development Initiative Plan 4 (see **Figure 12**) reflects a long term development scenario that considers a number of urban nodes that require detailed investigation to confirm development potential. An indicative alignment of a future neighbourhood connector road is reflected not as a by-pass route, but as an essential link between Murat Road and Kennedy Street providing connectivity between future local neighbourhood areas. It also provides an important secondary link for emergency services during a flood event.

As part of examining the development potential of these areas, Development Initiative 4 proposes the notion of townsite boundary adjustment based on landform, rather than as an arbitrary cadastral boundary. The neighbourhood connector is notated in conjunction with possible longer term endorsement of this townsite boundary adjustment. The Department of Water advise that it is necessary to maintain a high level of protection of the P1 Water Protection Area, located immediately to the west of the townsite boundary, in view of the fragile unconfined aquifer in terms of freshwater availability and groundwater dependent ecosystems, as outlined in SPP 2.7 *Public Drinking Water Source Policy* and the land use compatibility table (LUCT) for Priority 1 source protection areas. The Structure Plan respects this level of protection, whilst maintaining the area as a longer term investigation site when alternative water supply options, such as desalination, become feasible.

8.5 HARBOUR EXPANSION

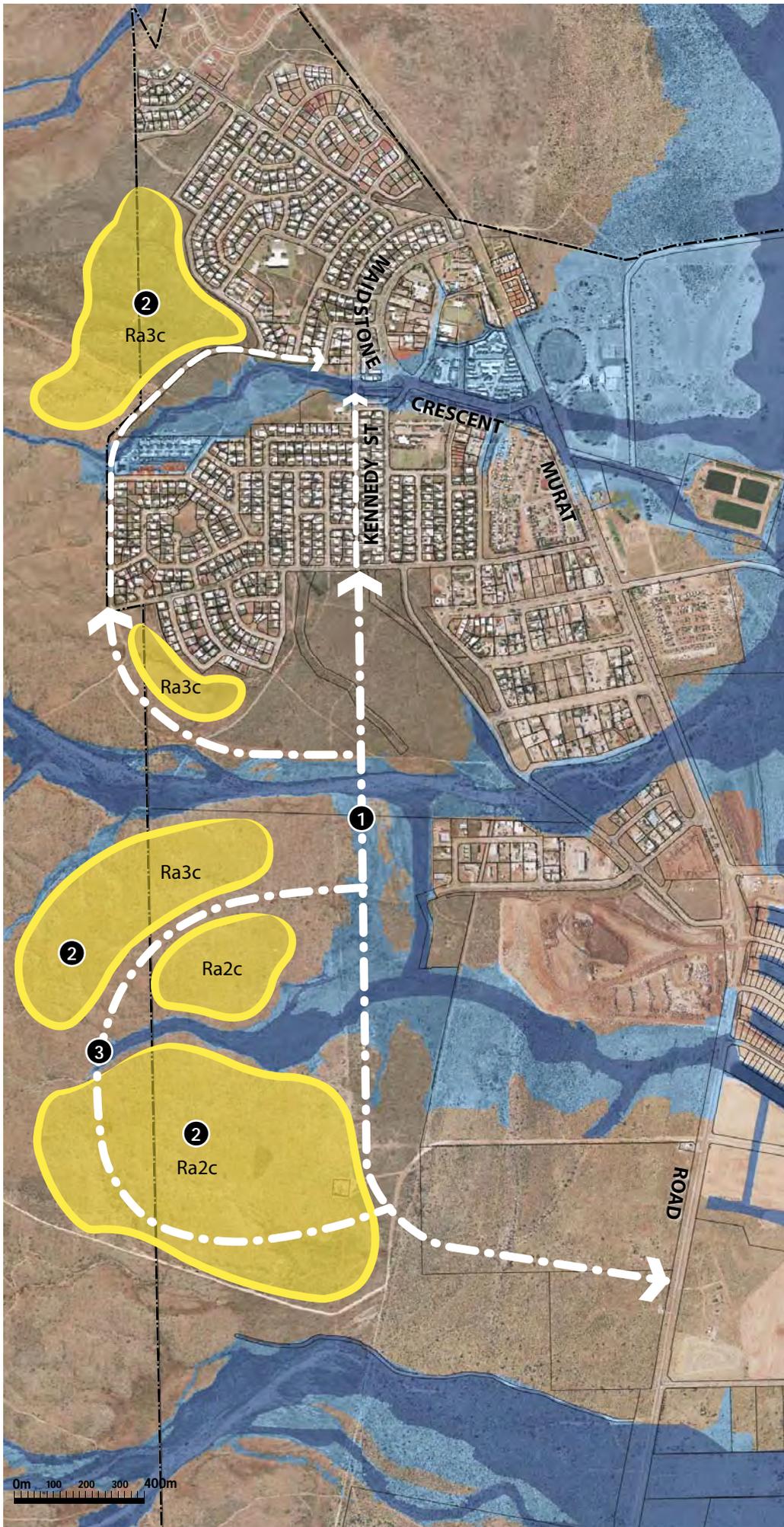
The Structure Plan text identifies the expansion of the Exmouth Harbour as **Development Initiative 5**, and endorses the outcomes of Community Consultation on the Harbour Expansion undertaken by the DPI during June 2008.

The Consultation indicated that there is widespread community and stakeholder support for expansion of the harbour, subject to there being meaningful social and economic benefits resulting from the expansion, and subject to Exmouth's attraction as a tourist destination not being undermined. It was clear from the Consultation outcomes that the community did not support harbour expansion for the exclusive use of the oil and gas industry and wished to balance conservation values.

Since the Community Consultation was held, the State Government has invited proposals for the Harbour Expansion from the private sector. These proposals will be subject to further public consultation, and will be assessed by Government agencies who should consider them in the context of the Townsite Structure Plan.



Source: Department for Planning and Infrastructure



LEGEND

- 1 Future neighbourhood connector- alignment subject to detailed design and investigation.
- 2 Long term 'development investigation area' taking into account;
 - Advice from DoW on resource protection of unconfined aquifer on karst landscape and the availability of town water supply alternatives (eg desalination).
 - The ability to address limiting factors of Range Land System as identified by land capability assessment (Land Assessment Pty Ltd, 1997) (*foundation soundness, ease of excavation, sub-surface water pollution*)

Note: Ra2c land unit more likely to display development of kartic features with attendant foundation stability constraints, than the Ra3c land unit.
- 3 Future local connector movement system may be required in the mid term to provide alternative access to the townsite.



8.6 MIXED USE PRECINCT – MADAFFARI CRESCENT/WARNE STREET

Development Initiative 6 is intended to provide guidance on the development opportunities for the land that is undeveloped and bordered by Truscott Crescent, Murat and Warne Street. This mixed use area has been subject to bulk earthworks and because of its increased site level, the site is unconstrained by the floodway and flood fringe.

The site is strategically positioned on a corner location terminating strong view corridors from the entry of the townsite along Murat Road. The mixed use classification in this area is to provide the framework for a variety of land uses that could be established on the site recognising its synergy with the Exmouth marina activity node and the high exposure offered by its strategic corner location. The key areas for consideration in this area include:

-  Preparing Design Guidelines to promote the establishment of high quality architecture on what is a landmark site for the Townsite.
-  Ensuring that development addresses Murat Road as the primary frontage in a manner that interrelates and activates with this frontage.
-  Applying comprehensive streetscape guidelines along the Murat Road frontage.
-  Controlling access from Warne Street/Madaffari Crescent and adopting appropriate sight distances for the entry point.
-  Favouring community service and tourism uses with a limited residential component, particularly at ground level.
-  Ensuring that development is robust and provides measures in the building design to permit future adaptation of commercial uses on ground floors.

8.7 DEVELOPMENT OUTSIDE THE TOWNSITE

Development Initiative 7 (see **Figure 13**) focuses on the assessment of the additional uses proposed outside the townsite including mining, waste disposal, industrial and economic development investigation areas. There is a need to provide future growth areas for local strategic light and general industrial uses in adequately serviced and accessible locations. This is particularly important where the allocation of land for industrial purposes within the Exmouth Townsite is to be limited to light industrial land uses by the Structure Plan. Furthermore, industrial land requirements connected with the potential expansion of the oil and gas industry and harbour expansion will need to be determined.

Previous structure planning exercises undertaken by the (then) Ministry for Planning examined three options for the siting of strategic industrial areas during site selection of the composite industrial area on Lot 51. In line with the general assessment as to site suitability previously undertaken, this Structure Plan endorses the identification of two investigation areas and recommends further comprehensive site analysis take place. **Development Initiative 7** refers to land adjacent to the existing composite industrial area east of Murat Road and land abutting Lot 50 to the north.

The existing structure plans had recommended Lots 50 and 51 for industrial use. This land is being developed and additional industrial land may be required. The investigation of these sites should include clarity of proposed industrial uses and suitability of the sites to accommodate the uses and the likely demand.

LEGEND

- Study Area - Exmouth Townsite
- Study Area - Regional Context

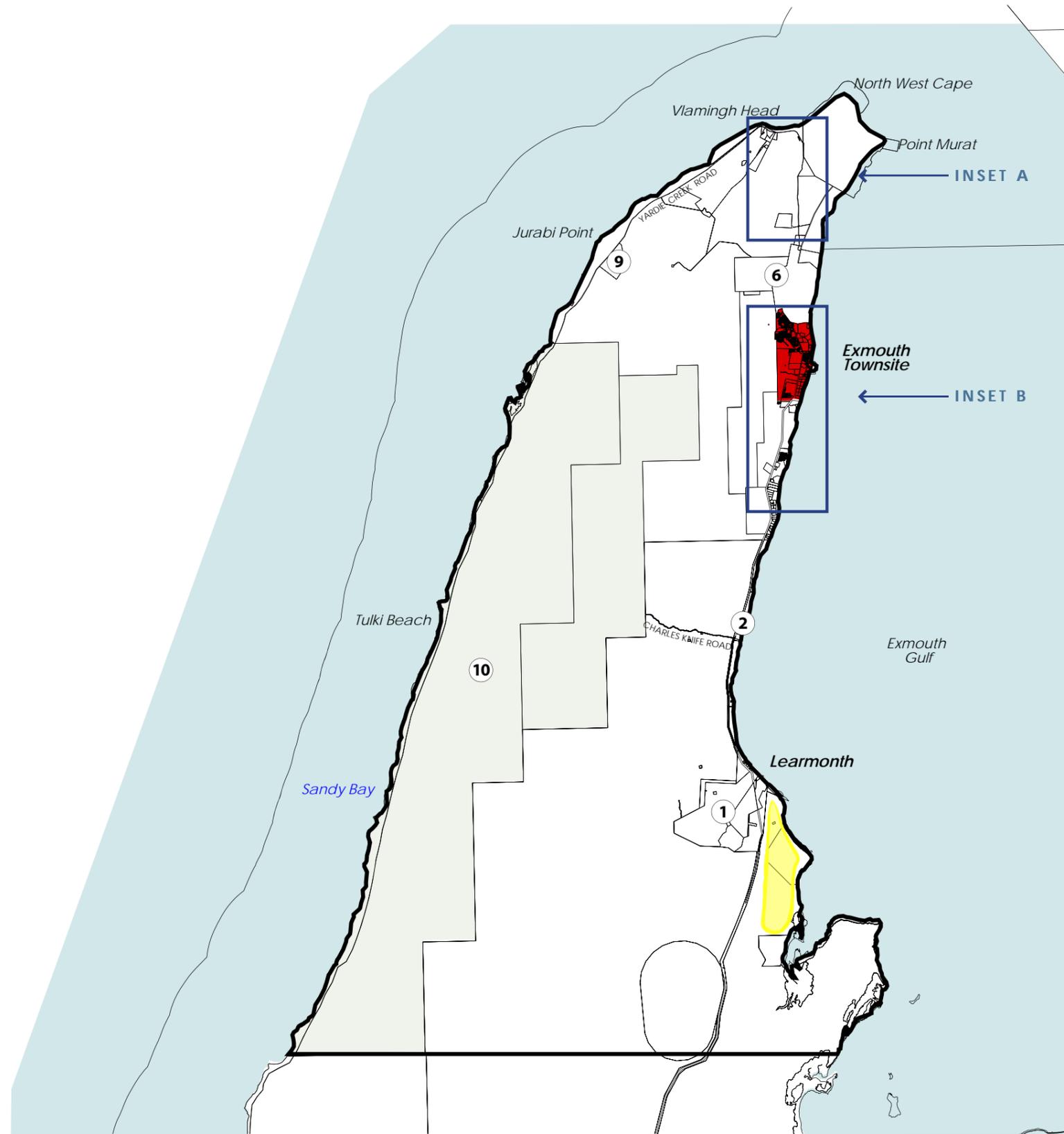
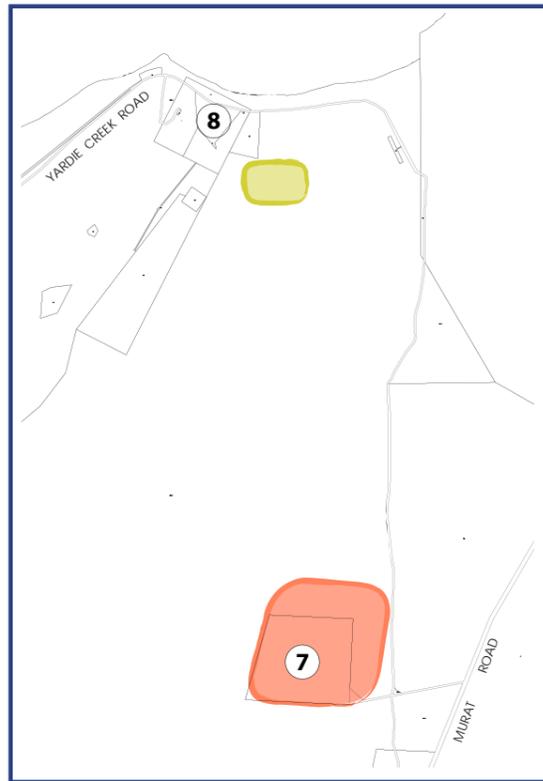
INVESTIGATION AREAS

- 'Gravel Reserve' Investigation Area
- 'Pindan Pit and Recreation Reserve' Investigation Area
- Strategic Industrial Investigation Area
- Waste Disposal Investigation Area
- Economic Development Investigation Area

NOTES - EXISTING LAND USE

- 1** Learmonth Airport
- 2** Kailis Processing & Retail Outlet
- 3** Light Aircraft Strip
- 4** Waste Disposal Area
- 5** Industry - Lot 51
- 6** Naval Base
- 7** Pindan Pit
- 8** Vlamingh Head Caravan Park
- 9** Yardi Creek Caravan Park
- 10** Cape Range National Park

INSET A



INSET B





The proposed economic development investigation area is consistent with the Department of Fisheries draft Aquaculture Plan for Exmouth aimed at identifying specific sites on the Gulf for aquaculture.

PART 5

Implementation



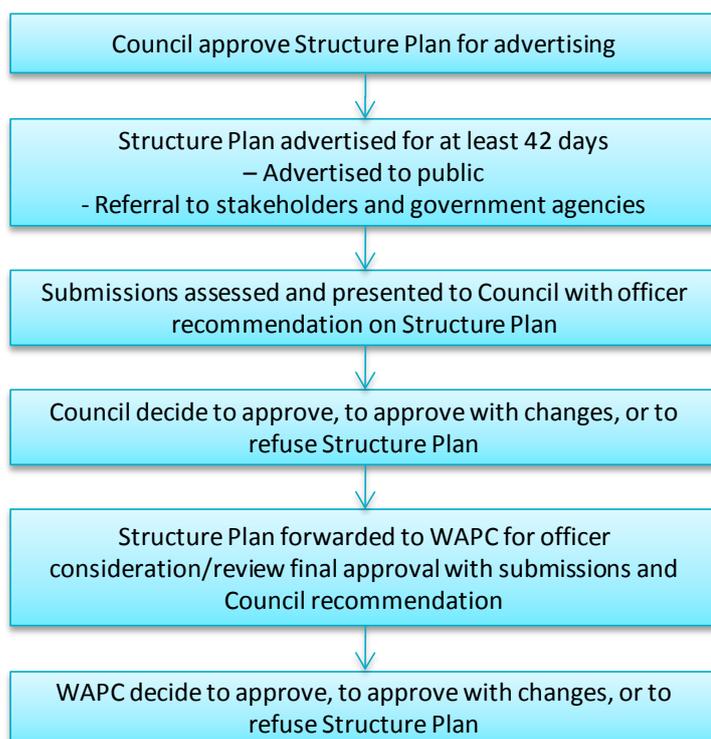
9.0 IMPLEMENTATION

9.1 STATUTORY PLANNING REQUIREMENTS

9.1.1 ADOPTION OF STRUCTURE PLAN

The Exmouth Townsite Structure Plan is to be adopted by the Shire of Exmouth and the Western Australian Planning Commission through the process outlined in Planning Bulletin No. 37, Draft Model Scheme Text Provisions for Structure Plans (WAPC, 2000), as a strategic document which will form the basis of decision-making by State and Local Government. (Note: There are no specific provisions within the Shire of Exmouth Town Planning Scheme No 3 for the Structure Plan to be adopted under the provisions of the Scheme).

The following approval procedure will apply following the agreement of the Shire of Exmouth to advertise the draft Structure Plan.



9.1.2 LOCAL PLANNING STRATEGY

Implementation of the Structure Plan as an endorsed policy relies upon the preparation by the Shire of Exmouth of a Local Planning Strategy, in accordance with the guidelines contained in the Planning Schemes Manual (WAPC, 2005), as a prerequisite to the review of the Shire of Exmouth Town Planning Scheme No 3. The Structure Plan will guide the preparation of the Local Planning Strategy document.



9.1.3 SHIRE OF EXMOUTH LOCAL PLANNING SCHEME

Implementation of the Structure Plan relies significantly on the Scheme Provisions and Zoning Maps of the Shire’s Town Planning Scheme. The Shire of Exmouth is in the process of reviewing its current Town Planning Scheme No 3 (TPS 3) which was gazetted in 1999 and is therefore in need of review. The Local Planning Strategy report will provide the support for the Structure Plan necessary to guide the review of the Shire of Exmouth TPS 3.

9.1.4 DETAILED DESIGN AND DEVELOPMENT CONTROL

The Structure Plan for the Townsite should guide the Shire of Exmouth in its consideration of development proposals and amendments to the operative town planning scheme and will also guide the Western Australian Planning Commission in its deliberation of applications for subdivision and any future town planning scheme amendments.

9.2 RECOMMENDED ACTIONS

For each broad land use activity, a recommended action statement has been developed. Where possible, the implementation of a specific action will be the responsibility of the agencies nominated, incorporating a collaborative approach where applicable.

Local Planning Strategy – LPS

Objective: Framework for planning at the local level enabling the Shire of Exmouth to plan ahead. The local planning strategy should express the vision of the local community, provide guidelines for local planning decisions, and present the rationale for zoning and other provisions within the Shire’s local planning scheme (due for review).

ACTION	RESPONSIBILITY
<p>1. Prepare a Local Planning Strategy that has regard to the Structure Plan recommendations referred to in this report and expands upon the framework where required to respond to change. The LPS is to provide the basis for the Shire of Exmouth review of Town Planning Scheme No 3 and subsequent town planning scheme amendments.</p> <p>The local planning strategy should provide guidance on:</p> <ul style="list-style-type: none"> • town centre initiatives, • initiatives for the provision of community/cultural/ sporting facilities, • provision of housing considering increased residential density in existing areas and guidelines for lot sizes and development form in new housing areas. • planning for tourism (land requirements, desirable built form outcomes, support facilities and services) as informed by the Shire of Exmouth Local Tourism Planning Strategy (TWA, 2009) currently being undertaken. • provision of industrial land, including assessment of the need for additional land, land requirements and locational preferences. • subdivision and development in the vicinity of floodway and flood fringe areas. • consultation and planning for aboriginal heritage. • Total water cycle management. 	Shire of Exmouth
<p>2. Consultation with the community and relevant government agencies on broader planning issues referred to in this report as they arise, and during the assessment of individual planning and development applications.</p>	Shire of Exmouth

Proposed Exmouth Townsite Structure Plan

3.	Prepare additional Development Initiative Plans on sites nominated by Council as requiring specific guidance in advance of development pressures.	Shire of Exmouth
Environment, Open Space and Recreation <i>Objective: Acknowledge the need to balance townsite growth initiatives with conservation of ecosystem and biodiversity values, and to provide for the recreational aspirations of the community and visitor population.</i>		
ACTION		RESPONSIBILITY
4.	Ongoing protection of underground water supply resources through the review of the Groundwater Allocation Plan (DoW), with consideration to projected population figures and the 'population capacity' statistics of Exmouth Townsite generated by this report.	DoW
5.	Define Exmouth Water Reserve as a Special Control Area within Local Planning Scheme.	Shire of Exmouth, DoW
6.	Prepare District Water Management Strategy during formulation of local planning strategy as a policy requirement.	Shire of Exmouth, DoW, DoP
7.	Identify coastal management precinct areas and prioritise the staged preparation of foreshore management plans for each area that address: <ul style="list-style-type: none"> • land capability and coastal setbacks. • rehabilitation measures where required. • definition of acceptable landuse and activities, including pedestrian access points, boat access, car parks, ablution facilities • other site specific issues. • Management responsibility and funding. 	Shire of Exmouth, DIA, DoP
8.	Structure Planning to address the need for green botanical linkages between new neighbourhoods incorporating flood ways/flood fringe where possible.	Shire of Exmouth
9.	Continue investigation of alternatives for the re-location for go-cart track currently operating from within the marina and boat harbour precinct.	Shire of Exmouth
10.	Investigate business case for establishing indoor recreational/community complex within the recreational precinct east of Murat Road and north of Truscott Crescent on land unconstrained by the flood way.	Shire of Exmouth
11.	Develop local consultation and heritage management processes for aboriginal heritage particularly in coastal trail locations.	Shire of Exmouth, DIA
12.	Monitor impact of the proposed expansion of the boat harbour on public access to 'back beach' immediately abutting the boat harbour	Shire of Exmouth
Movement and Infrastructure <i>Objective: Ensure infrastructure planning and movement system responds to the growth of Exmouth in an orderly and sustainable manner.</i>		
ACTION		RESPONSIBILITY
13.	Progress funding applications to support the ongoing upgrade of Murat Road streetscape (landscaping and lighting)	Shire of Exmouth
14.	Undertake preparation of design guidelines to address land use interface issues along the Murat Road frontage.	Shire of Exmouth
15.	Undertake detailed design assessment of town centre road access initiatives – Learmonth link	Shire of Exmouth
16.	Ensure structure planning makes provision for the planned future neighbourhood connector road linking Murat Road with Kennedy Street.	Shire of Exmouth
17.	Investigate preliminary design of road network and access requirements of Mixed Use precinct – Truscott Crescent following confirmation of land uses and development timing.	Shire of Exmouth



18.	Ensure implementation of visual amenity corridor between Learmonth Airport and Exmouth Townsite 100m either side of the entry roads to Exmouth (Minilya-Exmouth Road and Murat Road) setbacks)	Shire of Exmouth, MRD
19.	Identify funding to assist progressive upgrade of cycle/pedestrian networks within townsite.	Shire of Exmouth
20.	Progress feasibility and site selection processes to support the relocation of waste water treatment plant on Commonwealth Land north of the townsite.	Shire of Exmouth, Water Corp., DoD
21.	Require ongoing consultation in regard to harbour expansion initiatives and the monitoring of impact upon boat users.	Shire of Exmouth, DoP
22.	Ensure heavy haulage access to harbour is addressed to maintain road safety for road users.	DoP, MRD

Economic and Employment

Objective: Ensure land is readily available to support ongoing employment opportunities

ACTION	RESPONSIBILITY	
23.	Finalise preparation of Local Planning Tourism Strategy – identify suitable locations for tourism sites and associated facilities.	TWA, Shire of Exmouth
24.	Specifically zone land for caravan park and camping areas to ensure these uses are provided for in the future.	Shire of Exmouth
25.	Provide for mixed use interface along Murat Road subject to design guidelines.	Shire of Exmouth
26.	Support the establishment of strategic development within the newly defined mixed use precincts providing employment opportunities	Shire of Exmouth
27.	Support the limited extension of the light industrial area on Welch Street to cater for future industrial activity	Shire of Exmouth
28.	Undertake the preparation of an Industrial Needs Study to determine future strategy for the provision of industrial land within, and to the south, of the Exmouth Townsite.	Shire of Exmouth
29.	Progress planning and environmental investigation of preferred location of strategic Industrial area, west of Murat Road and opposite composite industrial area – Lot 51.	Shire of Exmouth
30.	Investigate alternative industrial related land use options for the special use site currently earmarked as a Development Investigation Area – caravan park, abutting composite industrial area (Lot 51).	Shire of Exmouth
31.	Promote establishment of Ningaloo Research Centre, education and research	Shire of Exmouth
32.	Progress harbour expansion initiatives and ensure ongoing consultation with the community on planning issues as they arise.	DoP, Shire of Exmouth

Housing, Community and Cultural

Objective: Ensure Exmouth Townsite caters for the needs of the community in terms of providing a diversity of living options and adequate social infrastructure.

ACTION	RESPONSIBILITY	
33.	Consolidate Town Centre in present location and foster commerce/education/ community	Shire of Exmouth
34.	Progress business case for the establishment of a multi-purpose Community Centre as an initiative within either the Town Centre of Recreation Precinct.	Shire of Exmouth
35.	Role of Naval Base (establish strategy for re-use in conjunction with Commonwealth)	Shire of Exmouth/DoD
36.	Prepare Housing Strategy to identify housing needs of community.	Shire of Exmouth
37.	Encourage affordable housing initiatives through reviewing residential densities in appropriate areas and encouraging a range of housing types.	Shire of Exmouth

Proposed Exmouth Townsite Structure Plan

38.	Cultural centre initiatives on landmark site with synergies to Visitor Centre - mixed use, office, pending relocation of waste water treatment plant	Shire of Exmouth
39.	Outline Development Planning requirements in designing future urban area – refer opportunities and constraints	Shire of Exmouth
40.	Prepare strategies to promote water sensitive design initiatives – landscaping, recycling, subdivision design, building design guidelines – model for Exmouth: ‘Exmouth House’.	Shire of Exmouth, DoW
41.	Work collaboratively in the definition of community/shire uses on land outside the townsite boundary within the DoP investigation area referenced in the Cape Range National Park Management Plan.	Shire of Exmouth, DoP, DEC
Town Centre		
<i>Objective: Ensure Town Centre is maintained and enhanced as the town’s focal point for core landuses</i>		
ACTION		RESPONSIBILITY
42.	Prepare Town Centre Strategy to enable town centre initiatives to be progressively implemented in an orderly and staged manner.	Shire of Exmouth
43.	Progress feasibility assessments of town centre redevelopment opportunities – Civic Administration Office, Police, Fire Station	Shire of Exmouth
44.	Progress feasibility assessments to establish a multi-purpose Community Centre as a town centre community focal point.	Shire of Exmouth
45.	Undertake detailed design of Learmonth link to improve connectivity	Shire of Exmouth
46.	Progress implementation of signage to strengthen entry statements to townsite and town centre – sense of arrival.	Shire of Exmouth
47.	Assess options for improvements to pedestrian movement, parking configuration and driveway access within the Town Centre.	Shire of Exmouth



10.0 REFERENCES

- Department of Conservation and Land Management (n.d). Camerons Cave Troglobitic Community, Endangered Ecological Communities of Western Australia.
- Department of Conservation and Land Management (2005). Cape Range National Park Draft Management Plan.
- Department for Planning and Infrastructure (1998). Exmouth-Learmonth (North West Cape) Structure Plan.
- Department for Planning and Infrastructure (2008). Exmouth Harbour Development Community Consultation Report.
- Department for Planning and Infrastructure (2008). Exmouth Community Visioning Workshop Outcomes.
- Environmental Protection Authority (1999). Environmental Protection of Cape Range Province Position Statement No. 1.
- Environmental Protection Authority (2005). Separation Distances between Industrial and Sensitive Land Uses No. 3, Guidance for the Assessment of Environmental Factors (in accordance with the Environmental Protection Act 1986)
- Land Assessment Pty Ltd (1997). Exmouth Learmonth Structure Plan Land Capability/Suitability Study.
- Sinclair Knight Merz (2007). Exmouth Floodplain Management Study.
- SVT Engineering Consultants (2003). Environmental Noise Assessment of the Proposed Exmouth Power Station For Burns Rowe Worley.
- Taylor Burrell Barnett (2001). Exmouth Marina Village Outline Development Plan.
- Water and Rivers Commission (2000). Exmouth Water Reserve: Water Source Protection Plan, Water Resource Protection Series.
- Water and Rivers Commission (1999). Exmouth Ground Water Allocation Plan, Water Resource Allocation and Planning Series.
- Western Australian Planning Commission (1997). State Planning Policy No 4.1- State Industrial Buffer Policy.
- Western Australian Planning Commission (2004). Final Ningaloo coast regional strategy: Carnarvon to Exmouth.
- Western Australian Planning Commission (2006). State Planning Policy 2.9 Water Resources.
- Western Australian Planning Commission (2006). State Planning Policy 3 -Urban Growth and Settlement.
- Western Australian Planning Commission (2007). Draft Vlamingh Head Masterplan- Shire of Exmouth.



APPENDIX A
VISIONING WORKSHOP OUTCOMES
(Extract from Exmouth Community Visioning
Workshop Outcomes [DPI/TBB September 2008])

Section 2

Session A Outcomes

Individual Values and Vision

The purpose of this session was to give participants the opportunity to record their individual values, issues and vision, then work in table groups and as a large group to prioritise these. Questions asked of participants were:

Individual Values

- Q1 *What do I like / what do I value about living here?*
- Q2 *What do I like / what do I value about working here?*
- Q3 *What do I like / what do I value about my community?*

Individual Issues

- Q4 *If I could change or improve one thing in Exmouth it would be*

Individual Vision

- Q5 *My vision for Exmouth in 15 years time is*

The first three questions aimed to get respondents thinking about the basic values they hold about living in the town.

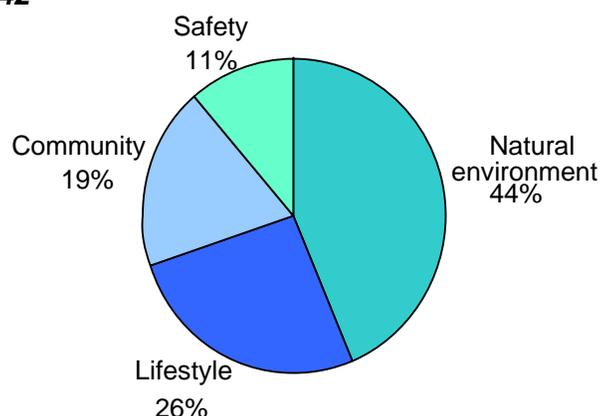
Question 4 was aimed for respondents, as individuals, to provide a 'wish list' of things they wanted to have fixed, changed or improved. Question 5 provided the opportunity for participants to formulate a vision for the town. They were asked to make specific statements, that could be translated into actions or physical forms.

These questions were answered individually with no group discussion.

After the workshop the facilitator documented all the responses verbatim, categorised them and recorded them as raw data, summary schedules and graphically as pie charts.

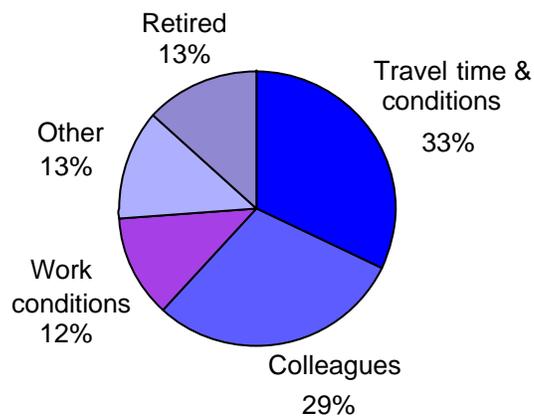
This section documents the statements made by the participant. There is no interpretation of these statements but, for clarity, statements have been arranged into broad categories or by subject and are illustrated by a pie chart and listed in a summary table with percentages of the total. All raw data for Questions 1-5 is recorded in Section 4 Attachment 6

Question 1: What do I like / what do I value about living here?
Total responses 142



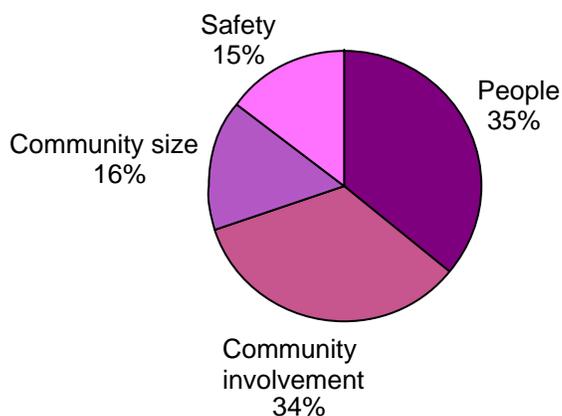
	Responses
Natural Environment	
Natural, pristine, unspoiled environment	11
Climate, weather, mild winter weather	8
Fishing, camping, swimming, outdoor lifestyle	10
Ocean, water, coastal location	6
Beaches, remote beaches, empty beaches	6
Wilderness, remoteness, vast open spaces	5
Scenery, unique landscapes	3
Ningaloo Marine Park	3
Cape Range National Park	3
Clean air, no city pollution	3
Others	4
Total	62 (44%)
Lifestyle	
Lifestyle, quality and pace of life	15
Isolation	4
Peace and tranquility	3
Short walking distances to venues & events	3
Good place to raise children	2
Creates opportunities for all	2
Other	7
Total	37 (26%)
Community	
Friendly people, friendship, caring & support	10
Part of a small community, not too big	12
Other	5
Total <i>(In addition to responses made to Q 3)</i>	27 (19%)
Safety and Security	
Lack of major crime	7
Sense of safety	6
Others	3
Total	16 (11%)
<u>Total all responses</u>	<u>142 (100%)</u>

Question 2: What do I like / what do I value about working here?
Total responses 68



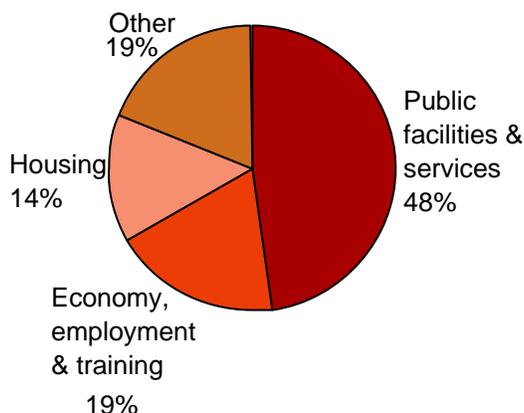
	Responses
Travel times and travel conditions	
Close to home/close to work	7
Easy to get to work - no traffic, congestion	6
Other travel conditions	9
Total	22 (32%)
Workplace community	
Work community knows and cares about each other	7
Meeting interesting people	3
Other values of workplace	10
Total	20 (29%)
Work conditions/hours	
Flexibility of working hours	4
Other work conditions	4
Total	8 (12%)
Other	
Other work related values total	9 (13%)
Retired	
Total retirees	9 (13%)
<u>Total all responses</u>	<u>68 (100%)</u>

Question 3: What do I like / what do I value about my community?
Total responses 89



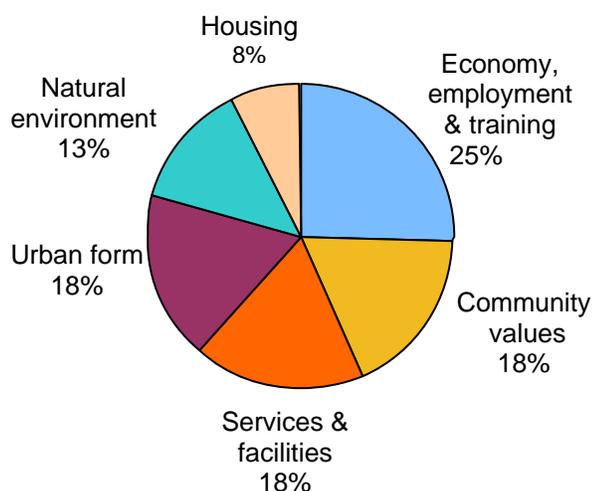
	Responses
People	
Friendly / sociable	14
Sense of belonging to a community	9
Other	9
Total	32 (36%)
Contribution to community life	
Community's ability to get things done	6
Running sporting groups and events	5
Running community groups and events	5
Everyone participates/good support	3
Organising social events	3
Plenty of groups to get involved	3
Other	5
Total	30 (33%)
Size of community	
Small town lifestyle	4
Small town - people know each other	4
Other	6
Total	14 (16%)
Safety	
Low crime rate	7
Safe for families and kids	4
Other	2
Total	13 (15%)
<u>Total all responses</u>	<u>89 (100%)</u>

Question 4: If I could change or improve one thing in Exmouth it would be
Total responses 90



	Responses
Public facilities and services	
Improved health facilities and care - hospital, clinics, respite	13
Provide community centre, cultural centre	9
Improve education facilities	4
Provide entertainment facilities for young	3
Improved aged care` facilities	3
Better infrastructure for water	4
Better airline services	3
Other services and infrastructure	4
Total	43 (48%)
Economy, employment & training	
Education and jobs for youth	7
Cost of living, affordability	5
Greater job opportunities and diversity	2
Other	3
Total	17 (19%)
Housing	
More affordable housing	5
More affordable land for housing	4
Shortage of accommodation	3
Reduce rental prices	1
Total	13 (14%)
Other	
Protection of natural environment	6
Communications - community/Shire	4
Community participation	2
Other	5
Total	17 (19%)
<u>Total all responses</u>	<u>90 (100%)</u>

Question 5: My vision for Exmouth in 15 years time is
Total responses 106



	Responses
Economy, employment and training Variety, more opportunities, higher education, controlled tourism	27 (25%)
Community values Retain lifestyle, community spirit, safety	19 (18%)
Services and facilities Improved community centre, health facilities, transport facilities	19 (18%)
Urban form and population size Sustainable development, retain country town, ensure land supply, protect unique character	19 (18%)
Natural environment Sustainable development, retain pristine environment, World Heritage listing (pros & cons)	14 (13%)
Housing Affordable housing, aged persons housing, resident's housing, tourist accommodation	8 (8%)
<u>Total all responses</u>	<u>106 (100%)</u>

Group values and vision

The purpose of this part of the workshop was to provide a number of visionary statements covering those areas most important to the participants as a group.

The questions posed were:

- Q6 *What do we as a group most value about our community?*
- Q7 *What are the three main issues facing our community today*
- Q8 *What is our group vision for our community?*

These questions provided the opportunity for discussion at each table on how individual values differed or were shared, and what had to be done by way of change, improvement or provision of new or additional resources to retain these values in the future.

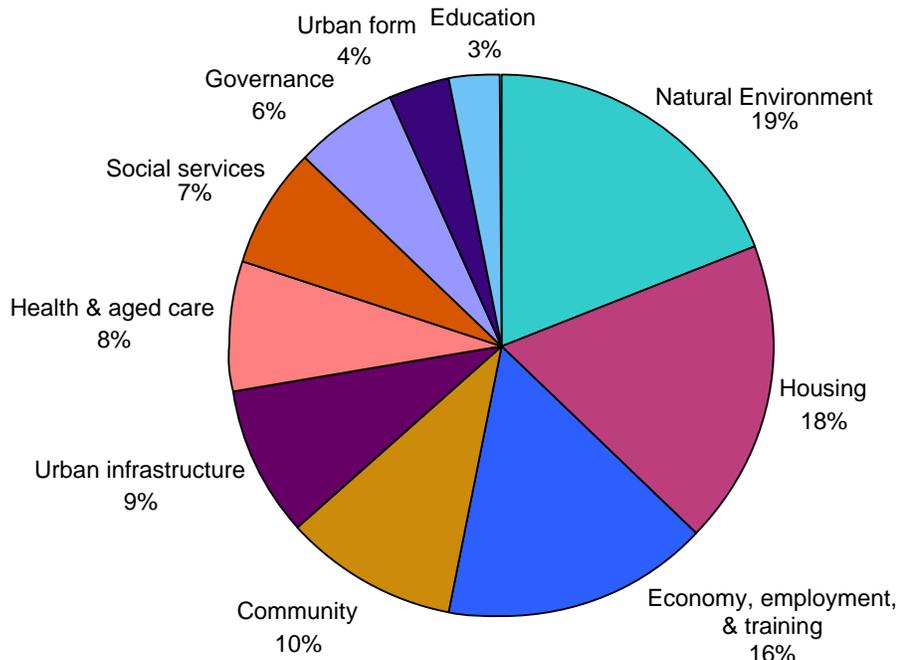
All the issues from each table were recorded on large sheets and the individual participants were given the opportunity to prioritise them, by selecting three and placing coloured dots in order of importance 1-3 with number 1 ranked highest. This provided a weighting for all the issues recorded.

Attachment 7 documents the results of this work. In summary, the highest weighting issues, in no particular order, are:

- ✚ To maintain and celebrate the unique lifestyle and remote beauty of Exmouth
- ✚ Maintain our safe and relaxed lifestyle
- ✚ Sustainability – Keeping a healthy natural environment
- ✚ Protect our unique environment and promote this
- ✚ Medical (specifically birthing and dental)
- ✚ Educational shortcomings (specifically Year 11 and 12)
- ✚ Prioritising aged care provision – Consider full range of service including lifestyle village.
- ✚ “Whole of Life Care” – Need for support services “Aging in Place”
- ✚ Nurture the youth (education, jobs, networks)
- ✚ Access to employment opportunities
- ✚ Provide community centre as a core focus
- ✚ Need for cultural /arts facilities for all ages
- ✚ Retain current community values.
- ✚ Address accommodation shortages.
- ✚ Consider limiting population ‘threshold’ to maintain what we most value about the community
- ✚ Strategically defined, well planned policy which takes into consideration the strategic, sensitive development and prioritisation of the natural environment retaining the lifestyle and values of the community and the environment.

Priority Areas

The session concluded with individual participants listing three matters they considered high priority to be addressed. Responses included matters already documented previously for Question 5 as well as new issues identified as a result of the workshop session. These priority areas are detailed in Attachment 8 and summarised in the following pie chart and schedule.



Priority Areas	Responses
Natural Environment: protection, sustainable development, water supply	32 19%
Housing: affordability, accommodation range, land availability	30 18%
Economic, employment and training: diversity, youth, manage growth	26 16%
Community: lifestyle quality, retain character, strengthen community	17 10%
Urban infrastructure: provide roads, water supply, power, sewage treatment	15 9%
Health & aged care: facilities and services	13 8%
Social & community services: cultural centre, community centre	12 7%
Governance: public education, open communication	10 6%
Urban form: land availability, controlled expansion	6 4%
Education: facilities maintained & improved	5 3%
Total	166 100%

Attachment 6
Session A Responses
Q1- Q5 Individual Values

Individual Responses (Questions 1-5)

Question 1

What do I like / what do I value about living here?

Total responses 142

Natural Environment (62)

- Natural environment (x9)
 - Climate, weather, mild winter weather (x8)
 - Ocean, water, coastal location /by the sea (x6)
 - Beaches, remote beaches, empty beaches (x6)
 - Feeling of wilderness /remoteness /vast open spaces (x5)
 - Scenery / unique landscape (x3)
 - Country atmosphere
 - Pristine, unspoiled environment, natural beauty (x2)
 - Clean air (x2)
 - Away from pollution of city life - no dirty industry
 - Outdoor activities /outdoor lifestyle (x3)
 - Camping (x3)
 - Fishing (x3)
 - Fishing swimming & camping
 - Beautiful footpaths
 - Ningaloo Marine Park (x3)
 - Cape Range National Park (x2)
 - Flora & fauna
 - Moonrise over Exmouth Gulf
-
- **Lifestyle (37)**
 - Lifestyle & pace of life (x9)
 - Quality of life (x6)
 - Peace and tranquillity (x3)
 - Walking distance to most venues & events (x3)
 - Balanced lifestyle - work & social
 - Grassroots simple lifestyle conducive to wholesome values & family life
 - Great place to raise children (x2)
 - Isolation (x4)
 - Remoteness, sleepy town
 - Lifestyle not to a continuous time table
 - Freedom of stress
 - Potential to improve work/housing
 - Create opportunities for all (x2)
 - Character
 - Uniqueness

- **Community (27)**
 - Part of a small community/sense of community (x7)
 - Friendly people (x5)
 - Caring community (x2)
 - Friendship & support (x2)
 - No 'big city' mentality or values
 - Community support
 - Laid back, easy going community
 - Village atmosphere
 - Ability to participate and have my say
 - Not too big, small town, country town (x4)
 - Lots of community groups
 - Meeting new people in the winter months
 - (Question 3 also covers values about community)

 - **Safety and security (16)**
 - Sense of safety/safe community (x6)
 - Lack of major crime, low crime rate (x6)
 - Peaceful & safe lifestyle
 - Lack of crime
 - Security of trusting community
 - Lack of compliance (no controls - traffic, parking)
-

Question 2

What do I like / what do I value about working here?

Total responses 68

- **Travel time and travel conditions (22)**
- Close to home/close to work (x7)
- Easy to get to work - no traffic /no traffic problems/no congestion (x6)
- Short travel time means more time with the family
- Close to home - no time wasted in travelling
- Five minutes from work
- Five minute drive to work
- To be able to ride and walk just about anywhere
- Walk to work
- No commuting
- Not crowded travel
- Driving to work past unique flora & fauna in proximity to ranges & ocean

- **Value of Colleagues (20)**
 - Community knows each other /caring about each other/community connectivity (x 7)
 - Working in a small community enables the community to value your worth
 - Opportunity to work with others towards a common goal to preserve what we've got.

- Knowing my customers by name and seeing them in the community
 - Ability of the community to work together
 - Caring for the people I am involved with
 - Friendly workmates and customers
 - Customers know we are far away from everywhere so are understanding that it takes time to get things. They are not as demanding as customers in the city.
 - Enjoyed social contact with fellow workers
 - Meeting interesting people from around the world / Visitor interaction (x3)
 - Diverse range of people
 - People's honesty
- **Work Conditions (8)**
 - Flexibility with work hours to work in with family, personal life (x4)
 - Freedom to work the hours I want
 - Good hours
 - Relaxed timetable
 - Less stressful, relaxed pace
- **Other work values (9)**
 - Self employed comfortable with business and constant income
 - Adequate income
 - Opportunity to make things happen
 - Knowing the direction you need to go in to support towns needs for individual business owner
 - Contributing to growth and development
 - Staff /hard working staff (x2)
 - Can provide support for P&YC and youth activities
 - Creating an awareness to others of the area's natural wonders
- **Retired /semi retired (9)**
 - Retired (x6)
 - Freedom to work the hours I want
 - Retired - worked as teacher and enjoyed it
 - Retired but work as volunteer with government - appreciate willingness of most people to support each other
-

Question 3

What do I like / what do I value about my community?

Total responses 89

People in town (32)

- Diversity in types of people, interests and expertise
- Able to interact with people from all walks of life
- Friendly people and atmosphere
- One of the youngest towns in Oz - culturally one of the oldest places in the world.

- Complete acceptance
- Good neighbours
- Friendly down to earth people
- Majority are great residents
- Part time visitors with good community values
- Good lot of young people growing up in town
- Pioneer outlook by many in the community
- Great support for families with children
- Close and friendly
- Happiness
- Listening skills
- Honesty of the people who are willing to say how they feel
- Great community spirit
- Friendliness
- Helpful / helpful attitude (x2)
- Knowing community
- Sense of belonging
- Value people place on the standard of living
- Close knit community
- Friendly and sociable (x4)
- Being part of an inviting bunch of people rather than a suburb, class or 'box'
- Friendships and relationships contributing to community
- Support given by locals
- Family and friends

Contribution to community life (30)

- Community's ability to work together to get things done (x5)
- Community's get up and go attitude
- Everyone participates/good support (x3)
- Volunteers work really hard
- Great community spirit
- Community spirit and willingness to help others
- Working together with mutual love of the environment
- Great support for families with children
- Plenty of community groups in which to be involved (x3)
- Running sporting groups and events (x5)
- Running community clubs and groups (x5)
- Organising social events (x3)

Size of community (14)

- Small town lifestyle (x4)
- Small community where people know each other especially friends & neighbours (x4)
- The community is not too large yet
- Small population - mainly friendly
- Its size - makes cohesive community
- In smaller communities people seem to care more
- No big busy shopping centres
- Personal appreciation of a small town

Safety (13)

- Low crime rate, reasonably crime free (x6)
 - Safe for kids and families (x4)
 - Safety, a safe community, safe environment for everyone 24 hours - less crime
 - Low alcohol abuse
 - Low social disturbance
-

Question 4

If I could change or improve one thing in Exmouth it would be

Total responses 90

Public facilities and services (43)

Health (16)

- Improve public service infrastructure e.g. hospital facilities & equipment (x4)
- Improve aged care facilities (x3)
- Health facilities
- Access to better health facilities
- Improve health facilities
- Better health service
- Increase buildings for community health - hostel, respite and nursing home centre
- Hospital special care
- Open hospital for minor surgery and births
- Doctors and dentists retained in area - not just locums
- Minimise alcohol and drug culture - especially for youth

Community services (9)

- Community meeting place and cultural centre
- Cultural development
- Improve facilities for community groups & organisations
- Outdoor cinema
- More entertainment ie cinemas
- Rebuild, enlarge & renovate public buildings
- More community infrastructure
- Cultural development for community
- More access to arts - theatre, music, fine arts

Children and Youth (7)

- Improve education facilities and services (x3)
- More opportunities for kids - sports, work
- Schooling - retention of students
- Entertainment for youth

- More for 12-16yr olds to do - bike tracks and skate park

Other services (10)

- Airline services (x3)
- Better infrastructure - water (x4)
- Better infrastructure - roads
- Better boating facilities
- Improve sense of road safety and security

Economy, employment and training (17)

- Employment: greater opportunities and diversity (x2)
- Job opportunities for school leavers (x3)
- Education and training opportunities for older age school children - retain in area (x3)
- Expand employment opportunities for youth so they stay in their safe community
- Better choice of shopping
- Upgrade shopping mall and focus on CBD
- Shopping prices
- Cost of living (x2)
- Food/fresh produce availability at low cost
- Shortage of affordable accommodation for local workers
- Cost of living high in area

Housing (13)

- More affordable housing (x 5)
- Affordable land for housing (x4)
- Shortage of accommodation /more homes needed (x3)
- Reduction of rental prices for housing

Environmental (6)

- Greater protection of the natural environment (x3)
- Interference - spoiling of area by developers and bureaucrats
- Overall appearance - improve first impression (dry and dusty to colourful and green)
- Guided walks for tourists

Communications(4)

- Communication between Shire and Community
- Better communications
- Positive communication
- Lateral thinking and open minds

Other (6)

- Get as many people as possible involved in the community (2)
- More local events/better community participation
- Get rid of native title issues - place land in power of Shire
- Get Shire to operate as a business and be more profitable
- Bring more families to town
- Increase population

Question 5

My vision for Exmouth in 15 years time is

Total responses 106

Economy, employment and training (27)

- Variety of industries (x2)
- More work opportunities (x2)
- Strong employment base
- Well balanced, affordable and accessible community with a diverse employment base.
- Better job opportunities - year round employment (x3)
- Year round industry and employment - tourist based and permanent stable businesses for more local employment
- Improved employment opportunities whilst maintaining unique environment
- Steady growth providing it does not spoil the environment
- Regulated commercial industry run by Exmouth not big companies.
- Town that progresses forward at a reasonable and manageable pace, sufficient to ensure economic viability.
- Viable business venture not dependent on tourism
- Growing tourist destination
- Tourism catering from campers to high end spenders.
- Growing tourist destination
- Fewer tourists
- Appreciate tourists
- Quality education and trade (training) options
- Better schooling and education facilities for Yr10-Yr12 2
- Higher education opportunities
- Jobs for school leavers and students (x3)

Community values (19)

- Present life style retained
- Revitalised community
- Connected community
- Retain community spirit
- Clean, growing and friendly community
- Retain balance between lifestyle and work
- To remain a group centred town
- A place of security and safety
- Keep community spirit - don't sell out to companies
- Retain the importance of individuals and families
- Allow visitors and locals to continue to enjoy the environment without being over controlled.
- Not to become a commercialised or money hungry community
- Inclusive and accessible to all.
- Make it different from other communities by retaining the unique character whilst having appropriately managed growth.
- Vibrant and not focussed on greed and development at the cost of the environment and the place I have chosen to make my home.
- Encourage people to stay longer

- A place of security and safety
- Develop the interest in local history

Services, facilities (19)

- Community centre incorporating pool, theatre, arts, sports etc
- Bigger & better recreation facilities
- Arts centre
- More dual use buildings - community centre
- Community building for activities - embroidery, Tai Chi
- Large community centre building for all members of the community - babies to seniors
- More activities for seniors
- More aged care facilities - nursing home, hostel, respite centres
- Decent health service
- Better range of health facilities
- Community with greater variety of shops and more competitive prices
- Good schools & hospitals
- Shipping service
- State rail connection
- New commercial marina 10km south
- Variety of industries
- Improved golf course - grass fairways
- Strong infrastructure
- Easier to access important facilities

General urban form and development (12)

- Development balance
- Life style villages
- Sustainable development
- Sustainable living all year
- Eco-friendly housing and developments
- Remain a country town
- Improved supply of land for housing
- Fewer holiday homes
- Keep the peace and tranquillity of the area but grow on a gradual basis and not become another Broome or Busselton.
- Iconic visionary place, nationally acclaimed for progressive, sustainable development that is compatible with and nurtures the natural environment
- Make it different from other communities in retention of unique character with appropriately managed growth.
- Better transport corridors

Population size (7)

- Larger population
- Permanent population to not exceed 10,000 people
- Larger vibrant community
- Becoming "Big" is subject to available dollars
- More families coming to town
- Remain a country town
- Not to have grown too much

Natural Environment (14)

- Sustainable development so natural environment hasn't deteriorated
- Sustainable development to protect natural environment
- Living in harmony with our environment - minimal carbon footprint
- Retain pristine environment (x3)
- World renowned location retained
- Unchanged naturally
- Natural environment same as now or better
- Natural wonders and attractions to remain as they are (protected)
- Steady growth providing it does not spoil the environment
- Allowing visitors and locals to continue to enjoy the environment without being over controlled.
- Don't want World/National Heritage listing
- World Heritage protection

Housing (8)

- More affordable housing (x3)
 - Better housing (x2)
 - Housing for elderly
 - Better access to cheaper housing ie units/flats
 - Majority of houses for residents - not for holiday homes
-

Attachment 7
Session A Responses
Q6 - Q8 Group Issues and Values

Group Values and Vision

The purpose of this part of the workshop was to provide a number of visionary statements covering those areas most important to the participants as a group.

The questions posed were:

Q6 What do we as a group most value about our community?

Q7 What are the three main issues facing our community today?

Q8 What is our group vision for our community?

These questions provided the opportunity for discussion at each table on how individual values differed or were shared, and what had to be done by way of change, improvement or provision of new or additional resources to retain these values in the future.

All the issues from each table were recorded on large sheets and the individual participants were given the opportunity to prioritise them, by selecting three and placing coloured dots in order of importance 1-3 with number 1 ranked highest. This provided a weighting for all the issues recorded by category in Table 1 and ranked by weighting in Table 2.

Table 1: Issues by Category	Weighting
Lifestyle	
To maintain and celebrate the unique lifestyle and remote beauty of Exmouth	17
Maintain our safe and relaxed lifestyle	19
Safe Town and Streets – 24 hr life.	8
Governance	
Increase community awareness and education regarding world heritage listing	0
Communication – engage with community – link agencies together	4
Where to go for HELP??? - guidance.	2
More Shire funded community initiatives. Community needs to be listened to.	0
Natural Environment	
Increase community awareness and education regarding world heritage listing	0
Consider impact of World Heritage – give priority to caring for environment	8
Development to be restricted to East side of Cape to protect unique Ningaloo Environment	
Sustainability – Keeping a healthy natural environment	14
Plan for climate change	8
Protect our unique environment and promote this	19
Care for the environment – retain current unspoilt natural environment	8
Natural attractions being accessible for all.	3
Services and Facilities	
Medical and educational shortcomings (specifically birthing, dental and Yrs 11 &12)	16
Prioritising Aged Care provision – Consider full range of service - lifestyle village.	11

“Whole of Life Care” – Need for support services “Aging in Place”	16
The growth of Exmouth requires ‘good’ planning. A new hospital will be needed to meet health issues for the growing community. Council needs to lobby State Government for funding NOW to be available 5, 10 , 15 years into the future.	2
Employment	
Expand Job Opportunities whilst maintaining our Exmouth identity.	5
Nurture the youth (Education, Jobs, Networks)	11
Access to employment opportunities	22
Community	
Value Community	4
Provide Community Centre as a Core Focus	11
Need for cultural /arts facilities for all ages	15
Provision of a Museum to restore the History of Exmouth and NOW	9
A safe, cohesive and inclusive community	8
Create and maintain a safe community for extended families	8
Retain current community values.	13
Land to be allocated for future expansion of social, cultural facilities - not just a community centre.	2
Establish a strong link between school and community to facilitate better education opportunities eg career paths in town.	0
Tourism (Note: Several other categories and priorities can be considered under tourism)	
Limiting Short Term Rentals	5
Housing	
Affordable and available to all	8
Address Accommodation shortages.	16
Cultural Heritage	0
Other	
Consider limiting population ‘threshold’ to maintain what we most value about the community	15
Restrict Development to east side of Cape.	8
Minimise heavy industrial development	4
Future industrial development to contribute to our community needs and put in place under our conditions.	8
Strategically defined, well planned policy which takes into consideration the strategic, sensitive development and prioritisation of the natural environment retaining the lifestyle and values of the community and the environment.	20
Investigate other sources of power supply (reducing use of fossil fuels – consider solar.)	0
Industry is needed.	0

Table 2: Issues by Weighting	Weighting
Strategically defined, well planned policy which takes into consideration the strategic, sensitive development and prioritisation of the natural environment retaining the lifestyle and values of the community and the environment.	20
Access to employment opportunities	22
Maintain our safe and relaxed lifestyle	19
Protect our unique environment and promote this	19
To maintain and celebrate the unique lifestyle and remote beauty of Exmouth	17
Medical and educational shortcomings (specifically birthing, dental and Yrs 11 &12)	16
“Whole of Life Care” – Need for support services “Aging in Place”	16
Address Housing/ Accommodation shortages.	16
Need for cultural /arts facilities for all ages	15
Consider limiting population ‘threshold’ to maintain what we most value about the community	15
Sustainability – Keeping a healthy natural environment	14
Retain current community values.	13
Prioritising Aged Care provision – Consider full range of service - lifestyle village.	11
Provide Community Centre as a Core Focus	11
Nurture the youth (Education, Jobs, Networks)	11
Provision of a Museum to restore the History of Exmouth and NOW	9
Safe Town and Streets – 24 hr life.	8
Consider impact of World Heritage – give priority to caring for environment	8
Plan for climate change	8
Care for the environment – retain current unspoilt natural environment	8
A safe, cohesive and inclusive community	8
Create and maintain a safe community for extended families	8
Affordable housing and available to all	8
Development restricted to East side of Cape to protect unique Ningaloo environment	8
Future industrial development to contribute to our community needs and put in place under our conditions.	8
Expand Job Opportunities whilst maintaining our Exmouth identity.	5
Limiting short term rentals (for tourists)	5
Value Community	4
Communication – engage with community – link agencies together	4
Minimise heavy industrial development	4
Natural attractions being accessible for all.	3
The growth of Exmouth requires ‘good’ planning. A new hospital will be needed to meet health issues for the growing community. Council needs to lobby State Government for funding NOW to be available 5, 10 , 15 years into the future.	2

Where to go for HELP??? - guidance.	2
Land to be allocated for future expansion of social, cultural facilities - not just a community centre.	2
Establish a strong link between school and community to facilitate better education opportunities eg career paths in town.	0
Cultural Heritage	0
More Shire funded community initiatives. Community needs to be listened to.	0
Increase community awareness and education regarding world heritage listing	0
Increase community awareness and education regarding world heritage listing	0
Investigate other sources of power supply (reducing use of fossil fuels – consider solar.)	0
Industry is needed.	0

Attachment 8
Session A
Priority Areas

Individual Priority Areas

Total responses 166

Natural environment (32)

- Preservation & protection of natural environment
- Retain the bushland
- Maintain accessibility of beach (gulf) to town people. Develop only west of Murat Road
- Maintain lifestyle and environmental significance of natural facilities
- Do not sacrifice natural environment for development
- Environment accessibility
- Natural attractions - accessibility to all without too many restrictions
- Environment issues - world heritage
- Care for the natural environment
- Protection for our pristine environment
- World Heritage listing
- Heritage listings
- Sustainability
- Sustainability: of increased visitation
- Environment
- Need to protect the natural environment in all areas
- No development on the shores along the Ningaloo Reef
- Keep the natural environment
- Support and encourage sustainable sources of energy - rainwater tanks, grey water
- Consider the natural environment in all we do
- Protection of the country - land sea and under water systems.
- Retain our environmental values and pristine areas for future generations.
- Opportunities for nature based recreation
- Maintain the pristine natural environment and not allow development to spoil it (eg as in Karratha)
- The NW Cape has limited water.
- Do we have enough water to cater for a huge influx of permanent population - also electricity and sewerage treatment
- Develop environmentally friendly industries
- Maintain environment
- Well planned controlled development
- Reckless development a major concern
- Sustainable development
- Industry working with environmental issues

Housing (30)

- Control high cost of housing and land costs (x3)
- Affordable community housing for long term residents (x8)
- Availability of affordable housing (x5)
- Housing required to suit range of needs - individuals, families (x6)
- Lack of housing for rental (x 4)
- Address accommodation shortages and variety through innovative principles
- Accommodation - short and long term availability and affordability
- Adequate land development services to provide affordable housing
- More availability of residential land (Exmouth Heights)

Economy, employment and training (26)

- Industrial development regulated to ensure community needs are maintained and no negative impacts (eg social problems) (x2)
- Employment and job sustainability year round
- Impact of short term labour on community resources and infrastructure and social problems
- Limit population and development - no further heavy industry or mining, no 'Gold Coast' urbanisation, no big name franchises such as Coles or MacDonalds
- Services and facilities to provide for economic expansion
- Work possibilities - future employment for school leavers and new residents
- Apprenticeship - there is a lack of educational opportunity for young adults
- Employment opportunities
- Need industry for "off" season
- Management of tourism
- Employment diversity - stop 'youth leakage'
- Actual real benefits of oil and gas - straits salt
- Heavy industry
- Build more stable work infrastructure for employment
- Retaining and employing the youth and seniors of Exmouth
- More job opportunities and housing
- Controlled industry must be considered.
- Keep industry out (not another Karratha)
- Future employment
- Provide jobs and recreation for youth to stay in Exmouth
- Develop environmentally friendly industries
- More job opportunities
- Industry working with environmental issues
- Affordability for Exmouth to allow quality of life
- Affordability of the town - housing and general everyday living

Community (17)

- Maintain quality of life
- Retain Exmouth's unique quality of life
- Youngest town - oldest culture
- Retention of character
- Retain values of small village type lifestyle - don't make too big
- Safeguard our lifestyle that we have at present
- Holding our identity
- Expand and maintain Exmouth's identity and lifestyle
- Protect Exmouth and its family values
- Maintaining Exmouth identity in all this growth
- Retain current community spirit
- Create community
- Maintain and enhance strong sense of community
- Community development
- To be a safe community for the aged and families
- Create and maintain a safe community for extended families
- Maintenance of safe grass-roots style environment

Services and facilities (43)

Health (10)

- Provide maternity facilities
- Planning needed for new district hospital
- Health facilities maintained and improved
- Hospital facilities upgrade
- Improved infrastructure - health
- Adequate community services for health care
- Decent medical facilities - if at all possible
- Improve medical facilities so people don't have to travel
- Provide health, dental needs from cradle to grave
- Community services to provide health and safety to all ages

Aged care (3)

- Aged care services (x2)
- Aged care facility

Education (6)

- Education facilities maintained and improved
- Schools improved
- Improved infrastructure - schools
- Adequate community services for education
- Education services to meet all needs

Social and cultural services and facilities (12)

- Community /cultural/ arts centre
- Cultural centre that allows for cultural, historic and artistic endeavour
- Need community centre for culture, arts, social, medical for all ages
- Youth centre
- Multi-purpose community centre
- Sports facilities
- Community centre to be available for community use.
- Youth club & youth involvement in Shire
- More opportunities for youth at a centre
- Real partnerships between school and community groups
- Community infrastructure including opportunity to have international communications via international airport.
- Retaining youth

Other services and facilities (15)

- Water supply and quality(x4)
- More frequent and timely airline services
- Cemetery location
- Future location of power station
- Future location of commercial marina
- Relocation of sewage farm
- Improved infrastructure - Roads
- Marina Precinct needs to be connected to town
- Support and encourage sustainable sources of energy - rainwater tanks, grey water
- Opportunity to have international communications via international airport
- Enough water to cater for a huge influx of permanent population - also electricity and sewerage treatment

Governance (10)

- More public education on issues that may change the face & direction of the town ie world heritage
- Consider community sentiment when identifying future development areas
- Community trust and support - continue values (low crime rates)
- Communication networks to enable groups and services to work together
- Communication for community information
- More positive community support
- Need feedback from the Shire for community
- Community consultation with regard to expansion
- Reckless development a major concern
- Public planning

Urban Form and expansion (6)

- Room to expand Exmouth
 - Room for the community to grow and meet various needs ie schooling, health, community, business, industry
 - Ensure land availability
 - Limit expansion and contain reckless development to reduce costs
 - Manage industrial & other developments so that facilities keep up with population changes (eg increased medical, educational, policing, social welfare, housing, accommodation)
 - That the permanent population of Exmouth never exceeds 10,000
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