



David Broyd Consulting Services Pty Ltd



ENVIRONMENTAL STUDY

FOR DEFERRED AREAS,
HEARNES LAKE, MOONEE BEACH, EMERALD
BEACH, SAPPHIRE BEACH, SANDY BEACH

COFFS HARBOUR CITY COUNCIL

Environmental Study

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TABLE OF CONTENTS

1.	INTRODUCTION.....	5
1.1	BACKGROUND.....	5
1.2	OBJECTIVES.....	6
1.3	STUDY METHODOLOGY.....	7
1.4	TERMINOLOGY.....	7
1.5	CAVEAT.....	7
2.	THE DEFERRED AREAS.....	9
2.1	PREVIOUS APPLICATIONS.....	9
2.2	LAND AND ENVIRONMENT COURT.....	9
2.3	CURRENT APPLICATIONS.....	9
3.	PLANNING CONSIDERATIONS.....	12
3.1	STATE POLICY CONSIDERATIONS.....	12
3.2	REGIONAL STRATEGIES AND POLICIES.....	16
3.3	LOCAL PLANS AND POLICIES.....	17
4.	ENVIRONMENTAL CONSIDERATIONS.....	30
4.1	SOILS AND GEOLOGY.....	30
4.2	CONTAMINATION.....	30
4.3	ACID SULFATE SOILS.....	35
4.4	GEOTECHNICAL.....	35
4.5	GROUNDWATER.....	37
4.6	TRAFFIC.....	38
4.7	FLOODING.....	40
4.8	STORMWATER AND WATER QUALITY.....	43
4.9	ECOLOGY.....	43
4.10	BUSHFIRE.....	50
4.11	VISUAL.....	53
4.12	DEVELOPMENT APPLICATION ISSUES.....	53
4.13	EUROPEAN HERITAGE.....	53
4.14	ABORIGINAL ARCHAEOLOGY.....	53
5.	CONSULTATIONS.....	56
5.1	DRAFT LEP SUBMISSIONS.....	57
6.	SOCIAL AND ECONOMIC CONSIDERATIONS.....	58
6.1	SOCIAL AND DEMOGRAPHIC CONSIDERATIONS.....	58
6.2	ECONOMIC CONSIDERATIONS.....	60
6.3	POTENTIAL POPULATION GROWTH IN THE STUDY AREA.....	61
7.	INFRASTRUCTURE AND SERVICES.....	62
7.1	ELECTRICITY.....	62
7.2	TELECOMMUNICATIONS.....	62
7.3	WATER AND SEWER.....	62
7.4	ROADS.....	62
7.5	CYCLEWAYS.....	64
7.6	RECREATION AND OPEN SPACE.....	64
8.	CONTRIBUTIONS.....	65
9.	PREVIOUS APPLICATIONS AND STUDIES.....	66
10.	RECOMMENDATIONS.....	81

APPENDIX A	ADDITIONAL MAPS
APPENDIX B	ECOLOGICAL REPORT
APPENDIX C	ABORIGINAL HERITAGE REPORT
APPENDIX D	WATER MANAGEMENT REPORT
APPENDIX E	SERVICING REPORT
APPENDIX F	DETAILED ZONING TABLE

1. INTRODUCTION

Monteath and Powys Pty Ltd (M&P) in conjunction with David Broyd Consulting Services Pty Ltd (DBCS) has prepared this environmental study on behalf of Coffs Harbour City Council (CHCC) in relation to a number areas deferred under Coffs Harbour Local Environmental Plan (2013).

1.1 BACKGROUND

In 2013, a new local environmental plan (LEP) for Coffs Harbour City Council (CHCC) was gazetted (LEP 2013). Some lands within the areas of Hearnese Lake, Sandy Beach, Moonee Beach, Emerald Beach and Sapphire Beach were deferred (i.e. no zoning provisions under the new LEP apply) subject to future investigations. These lands are referred to in this document as 'the deferred areas', and are identified in Figure 1.1. They may also be referred to as the 'subject lands' or the 'study area'.

These lands are zoned under the previous Coffs Harbour LEP 2000. That is, the zoning provisions under Coffs Harbour LEP 2000 continue to apply to the deferred areas.

Development in some areas north of Coffs Harbour was embargoed between 1998 and 2003, which included some of the subject lands. A number of attempts were undertaken after the embargo was lifted to put in place planning provisions for the subject lands (e.g. development control plans) as well as amendments to Coffs Harbour LEP 2000. Following the lifting of the embargo there were also a number of attempts by land owners to undertake development within these deferred areas, including rezonings.

Over this time period a number of State Government initiatives were also introduced including the introduction of Part 3A to the Environmental Planning and Assessment Act 1979 (EP&A Act), and the introduction of the State Government's Standard LEP template. Recently the upgrade of the Pacific Highway between Coffs Harbour and Woolgoolga has added to the broad range of issues that affect land, and planning, for areas in Hearnese Lake, Sandy Beach, Moonee Beach, Emerald Beach and Sapphire Beach.

At the time of writing there are a range of issues at a number of levels which have arisen since 2003 when the embargo was lifted and development, and rezoning, applications began to be lodged. It is considered that this range of issues (including environmental, legislative changes, major road upgrades and strategic planning works) on lands within the Hearnese Lake, Sandy Beach, Moonee Beach, Emerald Beach and Sapphire Beach area have meant that there are some areas within these localities which were deferred (i.e. not allocated zoning provisions under LEP 2013) until further investigations are completed.

Notwithstanding this, it is noted that there has been a wealth of information and studies prepared for the deferred areas which has been utilised in this report. That is, despite the lack of zoning provisions on some sites some development has been approved in the study area, particularly under the previous Part 3A of the EP&A Act. This study has been prepared as a background document to provide input into the zoning outcomes of land currently deferred under Coffs Harbour LEP 2013. In addition, the LEP 2013 was placed on public exhibition in September/October 2012 at which time submissions were made by landowners in the now deferred areas. These submissions have also been considered in this report, as well as discussions with Council and State Government agencies.

1.2 OBJECTIVES

The objective of this report is to provide Council with a review of existing environmental information in the deferred areas along with some ground truthing of ecological matters (where possible) to provide input into a Planning Proposal to provide zoning provisions for these deferred areas under LEP 2013.

FIGURE 1.1: Location of Deferred Areas under LEP 2013 (the subject lands or study area)



1.3 STUDY METHODOLOGY

This report has employed a number of methods in an attempt to review all information relating to the deferred areas. A list of documents reviewed is presented elsewhere in this study. The study has undertaken the following works:

- Review of existing information and documents publicly available (and downloadable) from the NSW Department of Planning and Environment's Major Project Register. Some landowners provided some reports that were not available on the Department's web site, however, not all reports have been made available for all sites;
- Some environmental studies lodged with Coffs Harbour City Council as part of previous development applications (DAs);
- Review of existing publicly available environmental databases (where appropriate);
- Review of relevant Council strategic documents and environmental studies;
- Discussions with Council officers;
- Discussions with key State government agencies;
- Discussions with some landowners/developers;
- Some limited ground truthing of environmental studies in relation to flora and fauna.

1.4 TERMINOLOGY

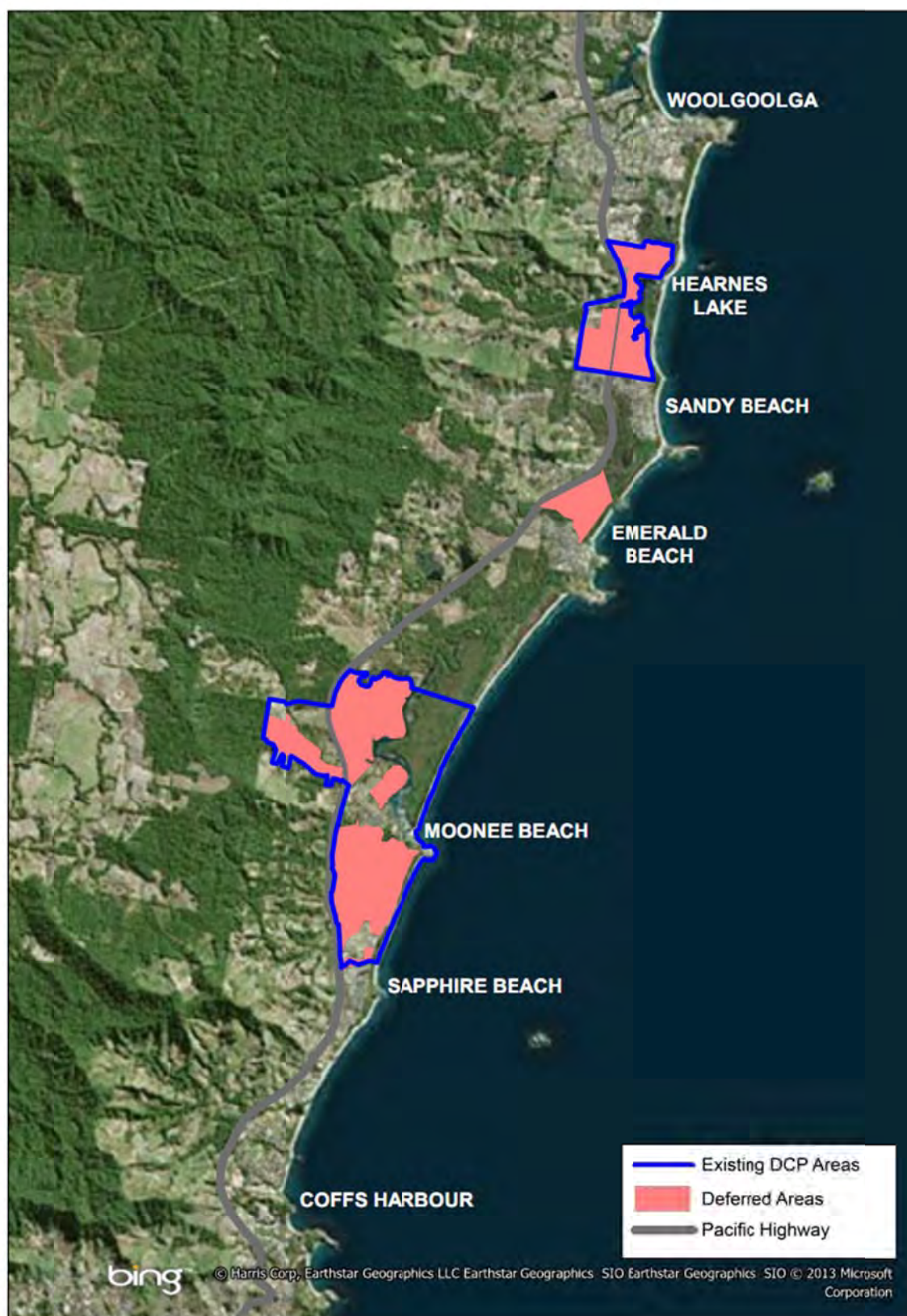
It is noted that throughout this report the 'deferred areas' may also be referred to as the 'subject lands' or the 'subject sites', or the 'study area'. The report has attempted to utilise the term 'deferred areas', however, other terminology as noted above may be used.

Notwithstanding this, there are several parcels of land which are not deferred matters under Coffs Harbour LEP 2013, but which are within the areas defined by development control plans (DCPs) for Moonee Beach and Hearn's Lake/Sandy Beach. These areas have been considered as part of this report. They may be referred to as 'additional DCP lands' or 'other lands within the DCP' or similar. A map of these lands is presented in Figure 1.2.

1.5 CAVEAT

It is important to acknowledge at the outset that this study was primarily based on the examination of existing, and publicly held information, with some ground truthing where possible in relation to ecological issues. This study has involved discussions with a range of stakeholders and considered a number of issues including (but not limited to) environmental, social and economic as well as current approvals on lots in the deferred areas, provisions under the Environmental Planning and Assessment Act 1979 (e.g. Section 117 Directions), current zoning arrangements in and around the study area, and infrastructure provisioning.

Importantly, the results of this study *do not* negate that any future development applications (DA) will still be required to undertake detailed studies (where required) as part of the DA process.

FIGURE 1.2: Lands included within DCPs but not Deferred under Coffs Harbour LEP 2013

2. THE DEFERRED AREAS

The areas deferred under Coffs Harbour LEP 2013 include 130 lots/properties located mainly on the coast between Coffs Harbour and Woolgoolga. Detailed maps are provided in Appendix A.

The deferred areas cover a number of localities in the Coffs Harbour local government area, including:

- Hearnese Lake;
- Sandy Beach;
- Moonee Beach;
- Emerald Beach;
- Sapphire Beach.

The deferred areas have a range of environmental issues, different development histories, and historical strategic and policy considerations that have affected each site in a different manner. For example, a previous site approved for development in Moonee Beach under the former Part 3A of the EP&A Act has since been acquired by the NSW Roads and Maritime Service (RMS) for a biodiversity offset as part of the Pacific Highway upgrade. It has been difficult to untangle the intricate details and history of each site in significant detail, and as such this study has significantly relied on available information and discussions with various stakeholders.

Nonetheless, in providing a background to this report the zoning provisions that apply to site under Coffs Harbour LEP 2000 are presented in Figure 2.1 and 2.2.

2.1 PREVIOUS APPLICATIONS

As noted, there have been significant environmental investigations undertaken in the deferred areas as a result of development applications lodged with Council, or applications lodged with the NSW Department of Planning and Environment (DPE). Table 9.1 below lists the sites identified as having previous applications lodged and the studies made available for this report. It should be noted that the project team have identified that there were some studies lodged for sites within the study area but were not publicly available and as such have not been used in this report.

2.2 LAND AND ENVIRONMENT COURT

It is noted that there have been several matters on sites within the study area which have been heard in the Land and Environment Court.

2.3 CURRENT APPLICATIONS

It is identified that there are current development applications and transitional Part 3A projects still under assessment at the time of writing. Due to this, some consideration has been afforded to the potential development outcomes on the site, if approved. It should be

identified up front that just because a zone is identified on any of the deferred areas that this does not guarantee any development outcome. Any development in NSW still has to go through a rigorous assessment under the EP&A Act, and any development on a site will need to be consistent with current legislation and policy guidelines.

Figure 2.1: Zoning Provisions under Coffs Harbour LEP 2000 (northern areas)

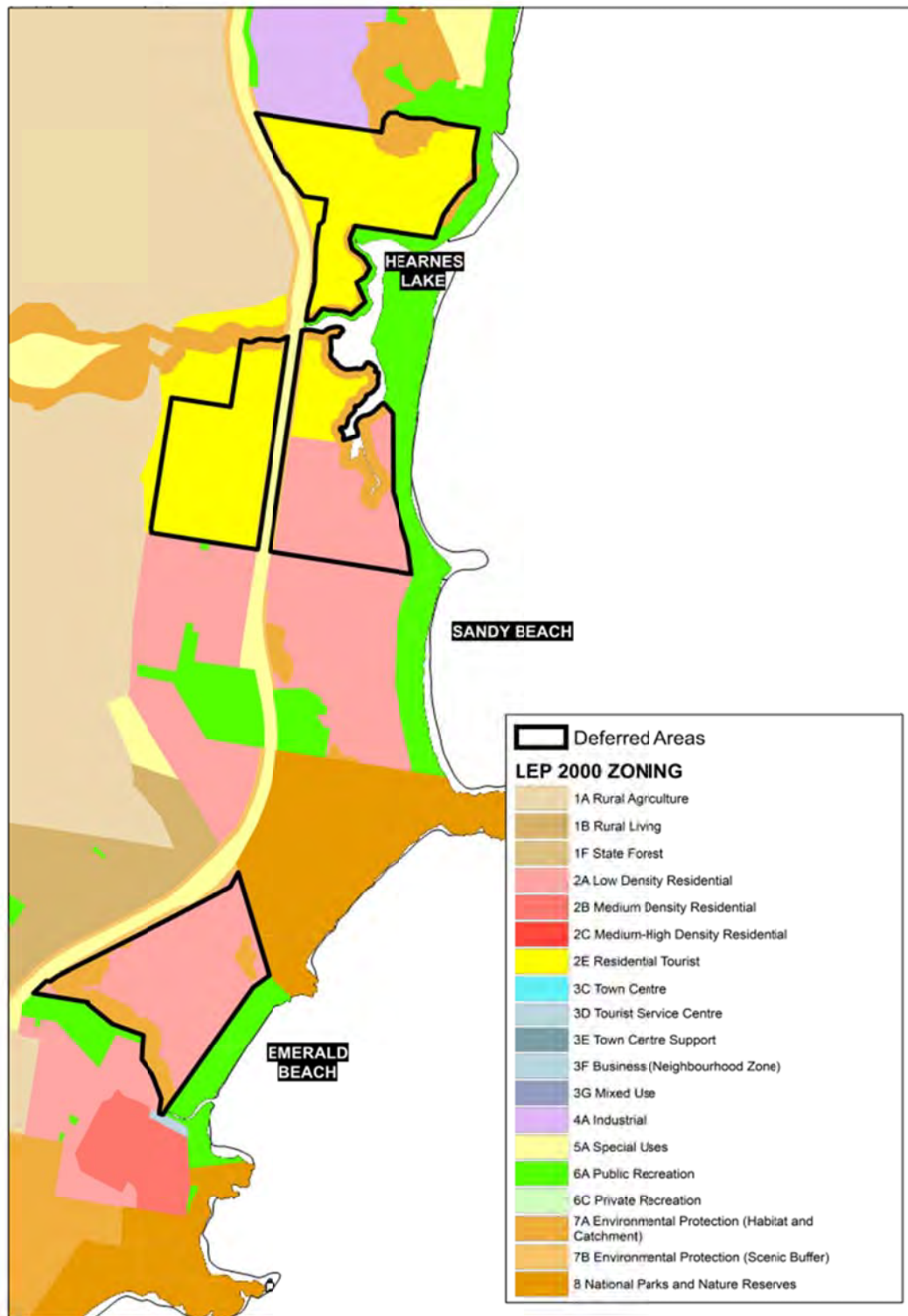
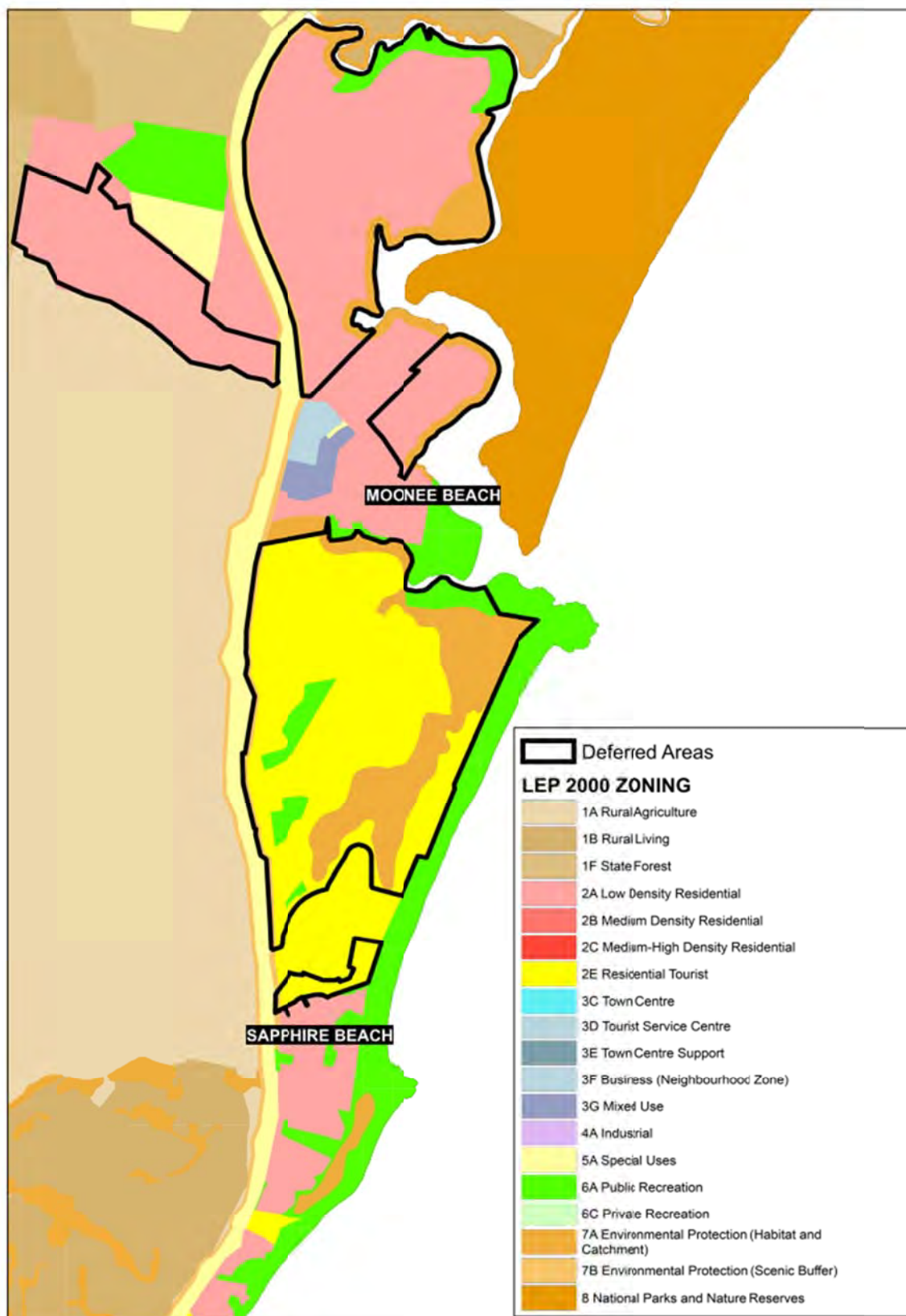


Figure 2.2: Zoning Provisions under Coffs Harbour LEP 2000 (southern areas)



3. PLANNING CONSIDERATIONS

This section identifies the plans and policies that apply to the deferred areas. Additional legislation was considered as part of the environmental analysis presented below.

3.1 STATE POLICY CONSIDERATIONS

3.1.1 State Environmental Planning Policies (SEPP)

There are a number of State Environmental Planning Policies (SEPPs) which apply to the study area. This includes:

- SEPP 14 – Coastal Wetlands
- SEPP 26 – Littoral Rainforests
- SEPP 44 – Koala Habitat Protection
- SEPP 55 – Remediation of Land
- SEPP 71 – Coastal Protection
- SEPP (Rural Lands) 2008

This study has not gone into specific details on these policies as they will apply to different sites within the study area. These SEPPs will need to be addressed as development applications or rezoning requests are lodged with Council or the Department of Planning & Environment.

There may also be other SEPPs that apply to development in the study that would need to be addressed as part of any future development application. The application of these SEPPs would apply depending on the proposed development and location. This includes:

- SEPP (Infrastructure) 2007
- SEPP (Affordable Rental Housing) 2009
- SEPP (Housing for Seniors or People with a Disability) 2004
- SEPP (Building Sustainability Index: BASIX) 2004
- SEPP (Mining, Petroleum and Extractive Industries) 2007
- SEPP (State and Regional Development) 2011
- SEPP 21 – Caravan Parks
- SEPP 33 – Hazardous and Offensive Development
- SEPP 36 – Manufactured Home Estates
- SEPP 62 – Sustainable Aquaculture
- SEPP 64 – Advertising and Signage
- SEPP 65 – Design Quality of Residential Flat Development
- SEPP 26 – Littoral Rainforests
- SEPP 44 – Koala Habitat Protection
- SEPP 71 – Coastal Protection
- SEPP (Rural Lands) 2008

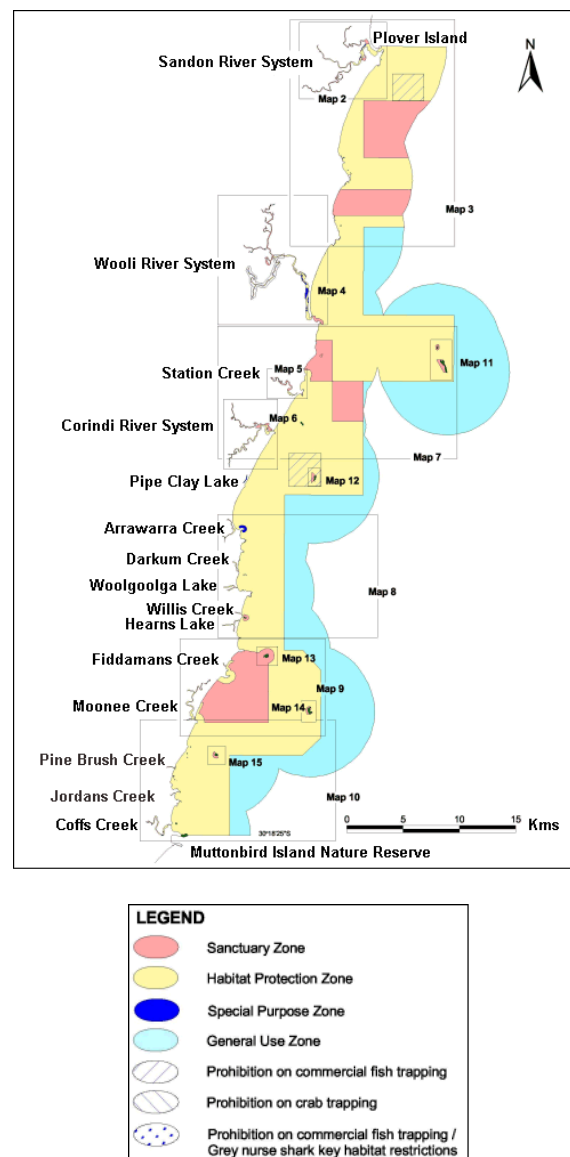
Figure 4.2 identifies areas identified under SEPP 14 and SEPP 26. Additional information regarding SEPP 44 is presented in Appendix B.

3.1.2 Solitary Islands Marine Park

The NSW Government established the Solitary Islands Marine Park (SIMP) on 2 January 1998, incorporating all of the state waters of the Solitary Islands Marine Reserve. The Solitary Islands Marine Park Zoning Plan protects the marine biodiversity of the area while supporting a wide range of recreational and commercial activities.

Many activities undertaken within the Marine Park require a permit from the Marine Parks Authority. The Solitary Islands Marine Park Zoning Plan identifies activities that can occur without specific permission and those that require a permit (e.g. commercial activities). Activities permitted in zones are identified in the *Marine Parks Regulation 1999*. Figure 3.1 below presents the zones of the SIMP. The SIMP is located off the coast of the current study.

Figure 3.1: Solitary Islands Marine Park



3.1.3 Section 117 Directions

The NSW Minister for Planning has issued directions under Section 117 of the Environmental Planning and Assessment Act 1979 (EP&A Act) that need to be addressed as part of any amendment to an LEP. Table 3.1 below identifies the Section 117 Directions that potentially apply to the sites. It is considered that the recommendations of this study will address any concerns under Section 117 of the EP&A Act.

Table 3.1: Section 117 Directions

Direction	Title	Comment
1.1	Business and Industrial Zones	It is not proposed to reduce business or industrial zones.
1.2	Rural Zones	It is anticipated that no rural zoned lands will be affected by the proposal. There are some lots (e.g. west of Moonee Beach) of which part is in the study area and part that is not. Those areas zoned for rural uses are not expected to be affected by this study as they have already been zoned under Coffs Harbour LEP 2013. There is no regionally significant farmland in the study area.
1.3	Mining, Petroleum and Extractive Industries	Does not apply.
1.4	Oyster Aquaculture	It is considered that this direction does not apply, however, water quality has been considered in this proposal. Council currently have a water quality policy which was reviewed and is deemed satisfactory.
1.5	Rural Lands	It is considered that the proposed amendment will not affect any rural zones. The sites are deferred at present. It is considered no rural zones are affected by this study.
2.1	Environment Protection Zones	Applies. Appropriate environmental conservation zones are proposed.
2.2	Coastal Protection	Applies. This study and future development applications will need to consider the NSW Coastal Policy.
2.3	Heritage Conservation	Applies. Appropriate studies have been undertaken to address heritage. Any future development applications will be required to undertake further detailed work.
2.4	Recreation Vehicle Areas	Will not apply.
3.1	Residential Zones	Applies. Appropriate work has been undertaken to ensure areas are zoned for residential development.
3.2	Caravan Parks and Manufactured Home Estates	An existing caravan park in the study area is identified, and is unlikely to be affected by the proposal.
3.3	Home Occupations	The proposal will be consistent with this direction. The current permissible land uses in residential areas under the LEP permit home occupations.
3.4	Integrating Land Use and Transport	Applies. This study has considered access and transport arrangements as well as the hierarchy of business services and centres. The main road that traverses the study area, the Pacific Highway, has just been upgraded which will generally dictate access and egress to the localities in the study area.
3.5	Development Near Licensed Aerodromes	Does not apply. Coffs Airport is some distance from the deferred areas.
3.6	Shooting Ranges	Does not apply.
4.1	Acid Sulfate Soils	Applies. All future development applications will be required to prepare acid sulphate soil assessments under the proposal.
4.2	Mine Subsidence and Unstable Land	At present it is considered that lands in the study area are not subject to mine subsidence or areas of unstable land. Geotechnical reports will be required as part of any future DA as well.

ENVIRONMENTAL STUDY

Direction	Title	Comment
4.3	Flood Prone Land	Applies. Studies have been completed by landowners and Council to ensure any developments meet the provisions of the NSW Floodplain Development Manual. Any future applications where flooding is considered an issue will also have to comply with the Manual. It is noted that some of the deferred areas have approvals for development which is identified as being flood prone under some of Council's flood strategies. In addition, some of the deferred areas that are currently zoned under Coffs Harbour LEP 2000 for residential development are also identified in Council's Flood maps as being flood prone. It is considered that existing approvals on land within the deferred areas have addressed flood planning issues as part of the assessment process. Also, any future DAs will also have to address the Flood Plain Development Manual and provide flood assessments as part of the DA process. Sufficient provisions are already in place to address flood issues. Maps have been provided in this study to ensure landowners have an understanding of where flood liable land occurs and thus needs to be considered in future DAs.
4.4	Planning for Bushfire Protection	Applies. Some of the sites are identified in bushfire prone areas. Appropriate studies managing bushfire risk will need to be submitted with future development applications. Most development in the area is for residential development which is likely to require concurrence from RFS. Bushfire risk will be subject to potential development areas, clearing as well as other studies (e.g. ecological). Sufficient provisions are in place to address bushfire issues.
5.1	Implementation of Regional Strategies	Applies. This study has considered the Mid North Coast Strategy. It is noted that there are other guidelines produced by the Department which have also been considered below.
5.2	Sydney Drinking Water Catchments	Does not apply.
5.3	Farmland of State and Regional Significance on the NSW Far North Coast	Does not apply. The sites are not within the area identified as the Far North Coast under this report.
5.4	Commercial and Retail Development along the Pacific Highway, North Coast	The proposal is consistent with this direction. No retail or commercial centres are proposed outside of existing centres.
5.5	Development in the vicinity of Ellalong, Paxton and Millfield	Revoked.
5.6	Sydney to Canberra Corridor	Revoked.
5.7	Central Coast	Revoked.
5.8	Second Sydney Airport: Badgerys Creek	Does not apply.
5.9	North West Rail Link Corridor Strategy	Does not apply.
6.1	Approval and Referral Requirements	It is considered that the proposal is consistent with this direction.
6.2	Reserving Land for Public Purposes	Applies. No public land is proposed to be reduced as a result of this proposal.
6.3	Site Specific Provisions	The proposal is consistent with this direction.
7.1	Implementation of the Metropolitan Strategy for Sydney 2036	Does not apply.

3.2 REGIONAL STRATEGIES AND POLICIES

3.2.1 Mid North Coast Regional Strategy

The Mid North Coast Regional Strategy is an urban growth strategy prepared by the NSW Department of Planning and Environment. The study area falls within the provisions of the Mid North Coast Regional Strategy. Under the regional strategy Coffs Harbour is identified as a Major Regional Centre, while Woolgoolga is also identified as a Major Town. Under the strategy four Sub-Regions are identified with Coffs Harbour LGA, Bellingen LGA and Nambucca LGA collectively identified as the Coffs Coast Sub-Region. Within this Sub-Region the strategy identifies that some 19,200 dwellings will be required to meet predicted population growth until 2031. The strategy also contains growth maps which identifies growth areas around Sandy Beach, Emerald Beach, Moonee Beach, and Sapphire Beach, which are part of the study area.

3.2.2 Mid North Coast Farmland Mapping Project

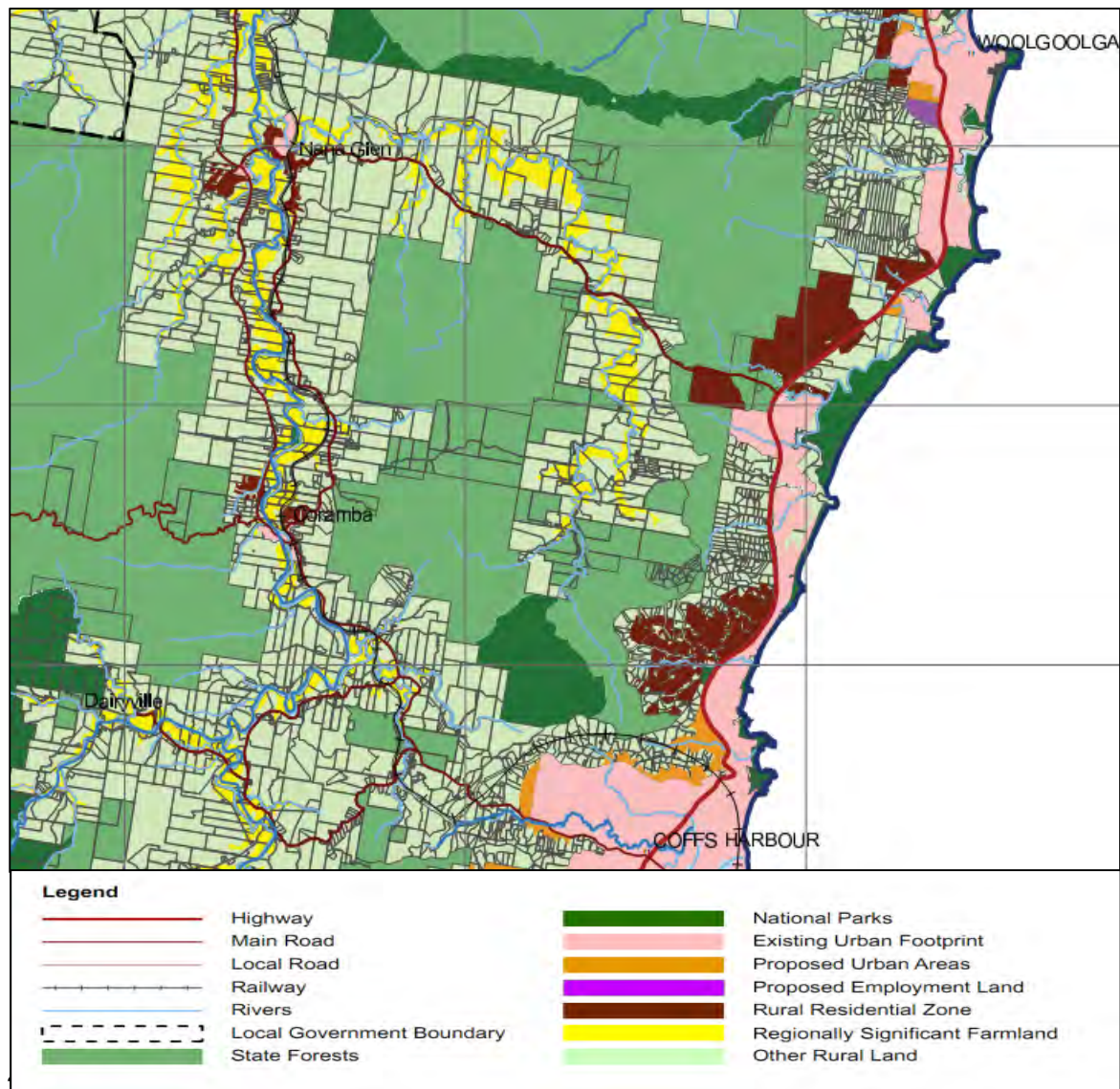
The Mid North Coast Farmland Mapping Project was prepared in 2009 to identify the most important areas of farmland that are to be protected from urban and rural residential development. The project, administered by the NSW Department of Planning and Environment in consultation with farmers and other government agencies, identifies areas of regionally significant farmland in the six local government areas of Port Macquarie-Hastings, Kempsey, Nambucca, Coffs Harbour, Bellingen and Clarence Valley. The mapped farmland covers a range of agricultural areas (e.g. cane land, basaltic country and improved pastures) mostly located on floodplains, upstream river valleys and volcanic country. The project has aimed to identify and protect regionally significant farmland from urban and rural residential encroachment and land use conflict. Additionally, it has aimed to encourage farmland areas to be targeted for land management assistance where suitable through Catchment Management Authority funding. The basic aim of the project was to ensure regionally significant farmland is not identified for future urban development. A review of the mapping identifies that no regionally significant farmland is identified in the study area (Figure 3.2).

3.2.3 North Coast Urban Design Guidelines

The North Coast Urban Design Guidelines were prepared by the NSW Department of Planning and Environment in 2009 to assist in promoting quality urban design outcomes on the North Coast (which includes Coffs Harbour). These Guidelines would be addressed by individual applications for development in the study area.

3.2.4 Settlement Planning Guidelines: Mid and Far North Coast Regional Strategies

The Settlement Planning Guidelines were prepared by the Department of Planning and Environment in 2007 to assist Council's in preparing local growth management strategies in accordance with the Mid and Far North Coast Regional Strategies. These guidelines would have been considered by Coffs Harbour City Council in preparing the Our Living City Settlement Strategy (see below).

Figure 3.2: Map of the Mid North Coast Farmland Mapping Project

3.3.1 Our Living City Settlement Strategy

Our Living City Settlement Strategy is a local urban growth management strategy that was endorsed by Coffs Harbour City Council in 2010, and incorporates the objectives of the regional plans and policies presented above, including the Mid North Coast Regional Strategy.

The citywide Strategy embraces the vision adopted by Council and the community, and aims to direct the community's aspirations into strategic actions for future development and growth to 2031. "Our Living City" is based on the "triple bottom line" objectives of environmental, economic and social sustainability, and connects to the Vision of a Healthy, Smart and Cultural City.

The Strategy identifies future urban growth in the study areas as identified in Table 3.2 below:

Table 3.2: Key Strategies Identified for Localities with Deferred Areas

Area	Estimated 2004 Population	Estimated 2031 Population	Key Strategies
Sandy Beach/ Hearnes Lake	1,890	3,470	Develop as a Coastal Village
			Some development in Hearnes Lake
			Enhance riparian corridors
			Review requirements for a village core
			Recognise holiday, tourism and recreation potential
			Recognise the importance of the ICOLL
			Ensure development addresses Pacific Highway
			Prepare place management plan
Emerald Beach	1,920	2,200	Develop as a Coastal Village
			Prepare place management plan
			Undertake environmental studies to determine appropriate zonings
			Recognise holiday, tourism and recreation potential
			Maintain green space around village
Moonee Beach	610	5,700	Allow for expansion west to the Pacific Highway
			Develop as a Coastal Town
			Undertake environmental studies to determine appropriate zonings
			Allow urban development in accordance with the DCP
			Reinforce the commercial, retail and service role of the town centre
			Enhance riparian corridors between the coast and hinterland
			Reinforce the relationship of urban form and the natural environment
			Recognise holiday, tourism and recreation potential
			Ensure development addresses Pacific Highway
			Prepare place management plan
Sapphire Beach	1,670	1,800	Investigate long term options and zoning for lands to the west of the Highway at Moonee.
			Develop as a Coastal Village
			Recognise holiday, tourism and recreation potential
			Reinforce the relationship of urban form and the natural environment
			Ensure development addresses Pacific Highway
TOTAL	6,090	13,170	Prepare place management plan

3.3.2 Coffs Harbour Local Environmental Plan 2013

The Coffs Harbour local environmental plan (LEP) 2013 was gazetted on 27 September 2013. All of the sites identified as 'deferred areas' do not have a specific zoning under LEP 2013. Their previous zoning under Coffs Harbour LEP 2000 continues to apply.

Other areas which have not been deferred but are within the areas covered by the DCP have been converted to similar zones in under the standard LEP template (i.e. the LEP 2013 was identified as a conversion LEP, where appropriate). Maps of the current zones are presented in Figure 3.3.

3.3.3 Development Control Plan (DCP)

The Coffs Harbour Development Control Plan (DCP) applies to land within the Coffs Harbour local government area (LGA). The current DCP – DCP 2013 – does not have a specific area plan that applies to the study area, as a new DCP area plan will be prepared in accordance with the recommendations of this study. It is noted though that the DCP has specific chapters relating to issues such as flooding, contaminated land, waste management etc that will apply to any future development applications.

3.3.4 Industrial Lands Strategy

An Industrial Lands Strategy was prepared in 2009 for Council. The Coffs Harbour City Industrial Lands Strategy provides a strategic planning framework to guide the future development of industrial lands within the Coffs Harbour Local Government Area. The Strategy forms the Industrial Component of the Coffs Harbour City Local Growth Management Strategy. The main objectives of the Strategy are to:

- Assist Council in preparing its new Local Environmental Plan (LEP) in accordance with the Standard Instrument (Local Environmental Plans) Order 2006 and the Standard Instrument—Principal Local Environmental Plan;
- Establish the existing supply of, and future demand for industrial lands;
- Provide a strategic framework for the provision of future industrial lands;
- Provide a recommended zoning scheme for existing and future industrial lands; and
- Assess the current and future employment opportunities and economic impacts of industrial lands within the LGA.

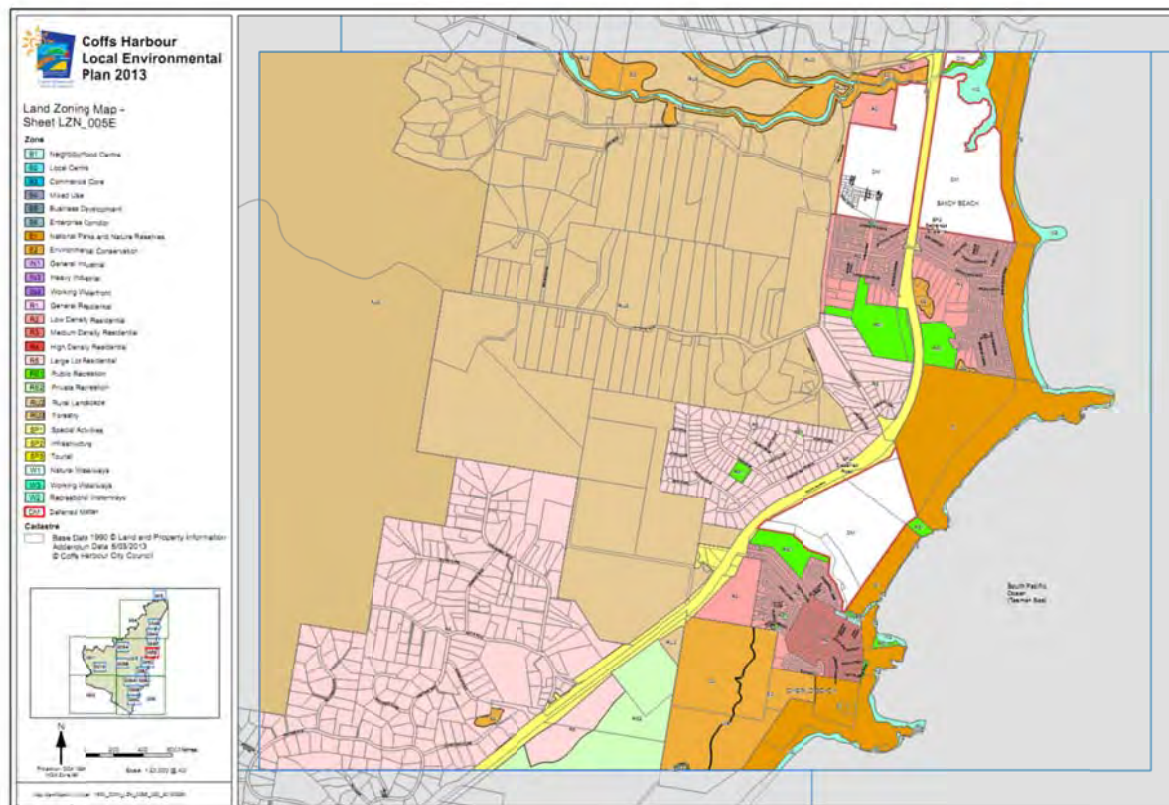
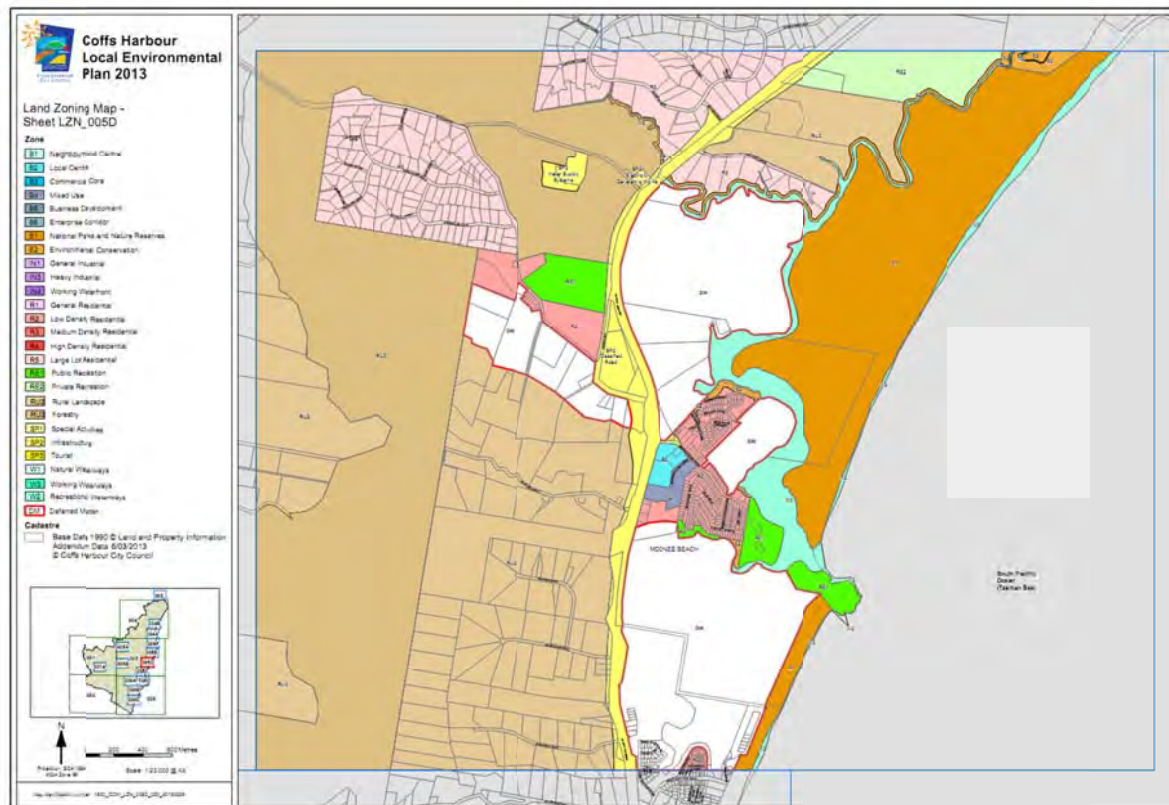
The strategy contains a number of recommendations that will guide the future development of industrial lands within the LGA. No major industrial areas were identified in the study area. The recommendations include:

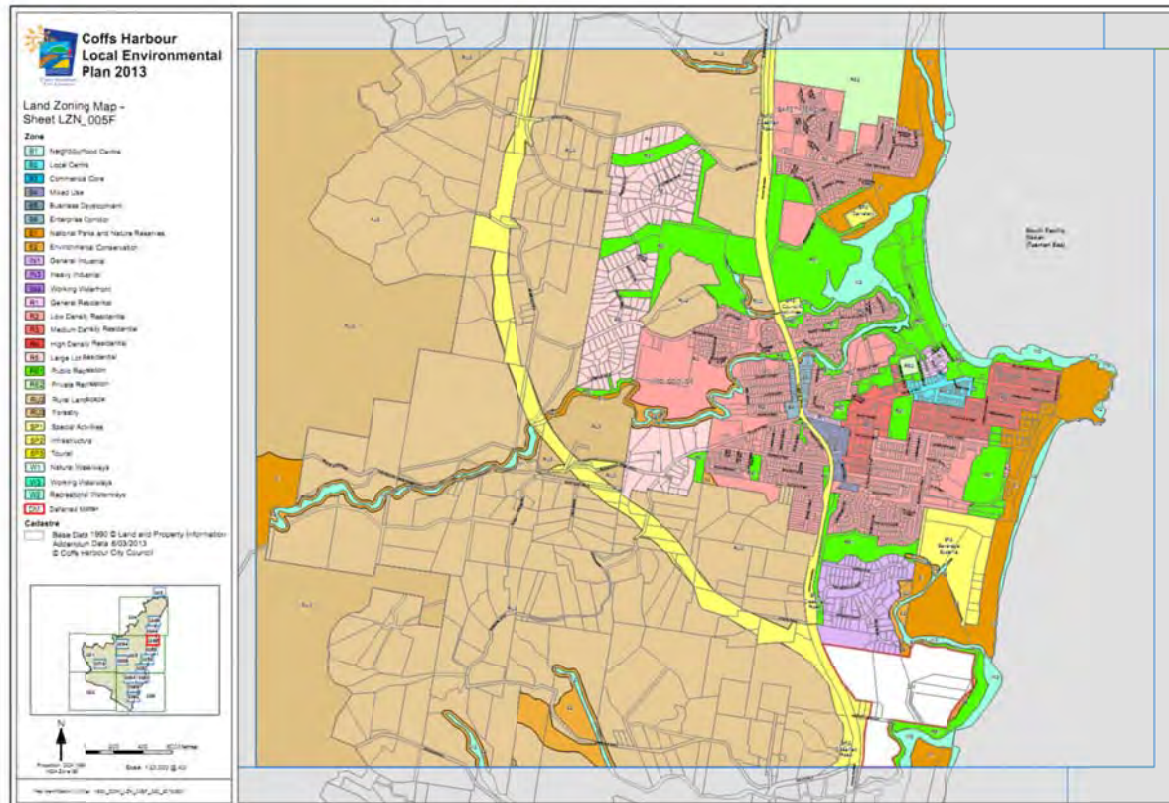
- Provision of an additional 50 ha of industrial land for the Coffs Harbour LGA by 2031;
- Identification of appropriate zones under the Standard Instrument – Principal Local Environmental Plan for each of the existing industrial areas;
- Review of the current role and function of each of the estates and an assessment of the desired future function of each of the estates;
- The need to increase the number of zones under the new LEP in order to better regulate inappropriate land uses within industrial areas;
- Identification of investigation areas for future industrial land including North Boambee Valley, South Woolgoolga and South Bonville;
- Preparation of a clearly defined industrial lands hierarchical structure to ensure that each industrial zone provides for land uses that are consistent with the role and function of identified industrial areas or precincts. This hierarchical structure needs to ensure that each industrial zone provides for land uses that are consistent with the role and function of identified industrial areas or precincts and should limit commercial and retail uses such as bulky goods to specific areas;

- Encouraging further intensification and development of existing industrial areas through development of existing vacant land or redevelopment into more intensive industrial uses that have potential to provide more employment for the local government area;
- Review and implementation of the findings of the Coffs Harbour Economic Development Plan 2005;
- Consolidation of existing industrial lands and identifying new locations for industrial land that are adjacent to existing industrial areas;
- Preparation and submission of a Development Application for the proposed future development of the Coffs Regional Airport Lands;
- Identification and target for relocation the following industry targets for the LGA:
 - distribution operations;
 - light and higher technology or 'advanced' manufacturing;
 - value-adding services on agri-businesses;
 - State and Federal Government departments; and
 - service-orientated industries;
- Preparation of a Development Control Plan for industrial development to assist in the implementation of the recommendations of the Strategy; and
- Adoption of a five yearly review period for the Strategy.

ENVIRONMENTAL STUDY

Figure 3.3: Current Zoning Provisions Under LEP 2013





3.3.5 Business Lands Strategy

A Business Lands Strategy was prepared by Council in 2010. The main objectives of the Strategy are:

- Provide a current situational analysis and overview of employment land stock in Coffs Harbour City LGA;
- Provide an understanding of key issues for employment land in Coffs Harbour City through consultation with key stakeholders;
- Identify the critical land characteristics required by various industry sectors;
- Outline demand forecasts for employment land in Coffs Harbour City LGA;
- Provide recommendations for short-term zoning and spatial prioritisation of land to accommodate future employment lands; and
- Develop strategies and actions to ensure a range of developable employment land is available to meet projected demand.

The Business Lands Strategy identifies a hierarchical model for business centres as identified in the table below.

Table 3.3: Hierarchy of Business Centres, Coffs Harbour LGA

Precinct	Future Role	Zoning
Bakers Road Business Precinct	Should continue as a small neighbourhood centre. No adjustments to the controls to respond to the supply-demand gap are recommended.	B1 Neighbourhood Centre
Boambee East (Ringtail Close) Business Precinct	Should continue as a small neighbourhood centre	B1 Neighbourhood Centre
Bray Street Business Precinct	Should continue as a small neighbourhood centre	B6 Enterprise Corridor
Coffs Harbour North Business Precinct	The precinct has a mix of retail and service businesses, good accessibility and proximity to residential areas position. These factors position the precinct to function as a local centre providing retail and service functions. The Precinct has ample capacity to meet forecast demand to 2031	B2 Local Centre B5 Business Development
Coffs Harbour CBD Business Precinct	The future role of the CBD has been recognised through its designation under the MNCRS as a Major Regional Centre. The CBD should continue to function as the principal office location in the LGA and development controls should facilitate this. Some higher density residential development may be appropriate subject to the findings of a residential study, but these should not 'sterilise' the CBD for further retail or commercial development. The proposed by-pass route will likely to have short term effect on the level of passing trade but this can be minimised with appropriate highway signage. In the longer term this would likely be more than offset by natural growth and the positive impact on the amenity of the CBD. Gaps between supply and demand emerge over the forecast period, large driven by a shift in shares for commercial sector to the CBD in scenario 3 and assumptions about FSRs based on the current controls.	B3 Commercial Core, B2, Local Centre B4 Mixed Use
Coramba Business Precinct	Should continue as a small neighbourhood centre. No adjustments to the controls to respond to the supply-demand gap are recommended.	B1 Neighbourhood Centre

Precinct	Future Role	Zoning
Corindi Beach Business Precinct	Should continue as a small neighbourhood centre.	B1 Neighbourhood Centre
Emerald Beach	Should continue as a small neighbourhood centre. No adjustments to the controls to respond to the supply-demand gap are recommended.	B1 Neighbourhood Centre
Jetty Business Precinct	The Jetty has an important future role to play as a mixed use precinct. The considerable amenity of the precinct may provide potential for the area to accommodate some higher density residential development. Industrial activities associated with the Marina should be preserved and conflict with other uses minimised.	B4 Mixed Use IN4 Working Waterfront
Korora Bay Business Precinct	Should continue as a small neighbourhood centre	B1 Neighbourhood Centre
Moonee Beach Business Precinct	The precinct should continue as a small local centre serving the local community. The precinct should not grow to become a major employment destination in its own right.	B2 Local Centre
Nana Glen Business Precinct	Should continue as a small neighbourhood centre. No adjustments to the controls to respond to the supply-demand gap are recommended.	B1 Neighbourhood Centre
Safety Beach Business Precinct	Should continue as a small neighbourhood centre.	B1 Neighbourhood Centre
Sawtell	The precinct should be preserved and enhanced as a coastal village. The centre should not expand to become a major employment destination.	B4 Mixed Use
Toormina Business Precinct	The precinct should continue as a small local centre serving the local community. The precinct should not grow to become a major employment destination in its own right.	B2 Local Centre
West Woolgoolga Business Precinct	The precinct's local service functions should be preserved.	B4 Mixed Use (Raj Mahal and River Street) B6 Enterprise Corridor
Woolgoolga (Beach Street) Business Precinct	The precinct should continue as a small local centre serving the local community. The precinct has the opportunity to expand its function to serve the needs of the surrounding population and would be the most appropriate site for future retail development.	B4 Mixed Use

3.3.6 Developer Contributions Plan

Coffs Harbour City Council endorsed a developer contributions plan in December 2014 which covers the study area. Further detail on this is provided in Section 8.

3.3.7 Other Local Planning Policies

Other local policy documents that were considered in this study include:

- Coffs Harbour City Rural Residential Strategy 2009;
- Review of Coffs Harbour Business Centres Hierarchy 2011;
- Employment Lands Strategy 2009.

3.3.8 Hearnes Lake Estuary Management Study and Plan

The Hearnes Lake Estuary Management Study and Plan was adopted by Council in 2009. Hearnes Lake is one of about 70 intermittently closed and open lake lagoons (ICOLLS) in NSW. The Plan aims to balance the pressures and demands placed on Hearnes Lake, both from a human perspective and from an environmental perspective. The Plan comprises a suite of long and short term strategies, which address the needs for future sustainable management of Hearnes Lake. The strategies include a range of on-ground works, planning and development controls, education programs, and monitoring. It is noted that State government agencies and other stakeholders also have responsibilities and authorities which can impact on the Lake.

The principles of the Hearnes Lake Estuary Management Study and Plan include:

1. Hearnes Lake shall contain healthy, diverse and viable ecosystems;
2. The social amenity and natural setting of Hearnes Lake shall be preserved for the enjoyment by existing and future generation;
3. Future development around Hearnes Lake and its catchment will comply with the principles of Ecologically Sustainable Development (ESD), and will not degrade the existing environmental and social values of the lake.

This Plan is to be read in conjunction with the Northern Rivers Catchment Action Plan, Plan of Management for the Coffs Coast Regional Park, the Solitary Islands Marine Park Management Plan, and the Hearnes Lake / Sandy Beach Development Control Plan (DCP).

A series of 29 prioritised strategies have been developed to help to achieve stated objectives for Hearnes Lake. These strategies comprise a range of mechanisms including:

- Planning, Management and Conservation;
- Future Development Controls, Administration and Enforcement;
- Education, On-ground works and rehabilitation; and
- Monitoring.

In relation to this project consideration was afforded to the objectives of this Plan. It is noted that the Hearnese Lake catchment goes well beyond the boundaries of the current study area, in particular to the west of the Pacific Highway which is dominated by rural lands.

The Plan specifically identifies that agricultural development, urban development and climate change are important factors potentially impacting on the Lake. It is identified that urban areas within close proximity of the lake, generally, have reticulated water and sewage services, and any future development will be required to meet current standards. It is also noted that plans exist to convert all urban areas in the vicinity of Hearnese Lake (refer to Appendix E) to reticulated water and sewer in the immediate future.

The Plan notes that the current DCP for Hearnese Lake attempts to manage the impacts of development on the lake. For example, a 50 m buffer from the RL 3.5m contour is identified in the DCP between the lake and any development, however, other factors (e.g. flooding, Aboriginal archaeology, threatened species) will also need to be considered in any development proposal. The 50m buffer was identified from the Hearnese Lake Estuary Process Study (2006). In addition, there is a plethora of other environmental planning instruments (e.g. SEPP 71) that also manage the impacts of development on the lake, as well as existing legislation (e.g. Threatened Species Conservation Act). Notwithstanding, it is also important to consider that a draft LEP amendment to Coffs Harbour LEP 2000 (amendment no. 29) was prepared for the Hearnese Lake area, but was never gazetted. The proposed amendment is identified in Figure 3.4.

3.3.9 Coffs Harbour Coastal Processes and Hazards Definition Study

The Coffs Harbour Coastal Processes and Hazards Definition Study (2011) investigated the coastal processes occurring on the Coffs Harbour Local Government Area (LGA) coastline (the Coffs coastline) and the extent of the coastal hazards arising from these processes. Volume 1 of the report documents a summary of coastal processes, methodology used to assess the coastal hazards, approach to hazards definition mapping, and a detailed beach by beach summary of analyses and outcomes. This study examines the potential impacts of sea level rise, and coastal processes on the foreshore areas of Coffs Harbour. Specific data collated for this study would need to be considered in studies prepared as part of any rezoning or development application for certain sites within the study area.

Figure 3.4: Draft LEP 2000 Amendment 29, Coffs Harbour

3.3.11 Hearnese Lake Estuary Processes Study

The Hearnese Lake Estuary Processes Study was prepared in 2006. This study has been superseded by the Hearnese Lake Estuary Management Study and Plan and Coastal processes and Hazards Definition Study. Nonetheless, the study provides valuable information for consideration in this study. The main tributary of Hearnese Lake is Double Crossing Creek. Development within the catchment is currently predominantly rural land uses although this may change into the future. The waterway of Hearnese Lake forms part of the Solitary Islands Marine Park (SIMP).

According to this study agricultural land represents the most significant proportion of area discharging into Coffs Harbour's natural waterways, including Hearnese Lake. Agricultural practices include livestock, plant nurseries, vegetable growing, fruit and stone fruit growing (bananas, blueberries, avocados, mangoes, kiwi and other tropical fruits). Banana plantations in particular cause severe erosion and sedimentation. Agricultural runoff is typically high in nutrients and may also contain pesticides and other chemicals. This runoff may place significant pressure on the quality of aquatic ecosystems such as Hearnese Lake.

Based on an inspection of aerial photography, the area to the north of Hearnese Lake was cleared between 1969 and 1972. Similarly, the Caravan Park was cleared between 1969 and 1972 but was not developed until between 1976 and 1980.

Mapping indicates that heavy mineral mining of barrier sand dunes was carried out along the coastline from Woolgoolga to Sandy Beach, between Hearnese Lake entrance and Sandy Beach. The Study identifies that the sand mining on the northern end of Hearnese Lake beach occurred during the 1960s and 1970s.

Maps of potentially contaminated sites in the vicinity of the lake are also presented in Figure 4.1. Some indicative water quality testing in 2005 was undertaken as an effluent re-use scheme from Woolgoolga Sewage Treatment Plant was initiated. Results indicate above guideline levels for nitrogen and some metals although further testing was required. It is noted that most of the urban areas in the vicinity now have reticulated sewer, or are about to be connected to reticulated sewer. In 2004, Council ranked the lake 13th out of 19 waterways in Coffs Harbour in terms of water quality, identifying the waterway as marginal and requiring water quality to be considered with future development applications.

Overall, this report identifies that other potential impacts on the Lake come from continued groundwater extraction, agricultural impacts and potential urban development impacts if not appropriately managed as well as potential impacts from coastal processes and sea level rise.

3.3.12 Moonee Creek Estuary Management Study and Plan

The Moonee Creek Estuary Management Study and Plan was prepared in 2008 for Council. Moonee Creek is adjacent to the township of Moonee Beach. The Plan notes that at 2008, the Moonee Creek estuary is in a relatively healthy condition, which is the result of good tidal flushing afforded by its permanently open entrance. Nonetheless, urban development around Moonee Creek will increase as outlined in the Moonee DCP (adopted in December 2004), with an estimated 4,500 additional people to reside near the Moonee Creek estuary over the next 20-30 years.

Based on a detailed understanding of the environmental processes and community consultations, a list of long-term management objectives were developed relating to water

quality, erosion / sedimentation, ecology, catchment development, waterway usage, heritage, and future management mechanisms. Specific strategies were developed to address each of the future management objectives.

Moonee Creek has a catchment area of 42 square kilometres with the study area only a small portion of the catchment, although important into the future. Urban development of the Moonee Creek catchment has been minimal to date, with only 12% of the catchment being occupied by residential dwellings. There has been agricultural development within much of its upper catchment and a small area of urban development near the entrance, retention of large areas of natural vegetation around the estuary foreshores has kept the system in a relatively healthy condition. There are three main tributaries of Moonee Creek: Sugar Mill Creek, Cunninghams Creek and Skinners Creek. In addition, Moonee Creek below mean high water mark is included within the Solitary Islands Marine Park.

The Plan notes that into the future urban development will need to be appropriately managed. This will include ensuring future development has addressed water quality, water sensitive urban design (WSUD), sediment and erosion control and appropriate buffers. Council and existing legislation provides sufficient controls, including the DCP, in relation to these issues, which should continue into the future.

It is noted that a previous LEP amendment (No 24) prepared under Coffs Harbour LEP 2000 proposed to rezone parts of the study area, which is presented in Figure 3.5. This amendment was never made.

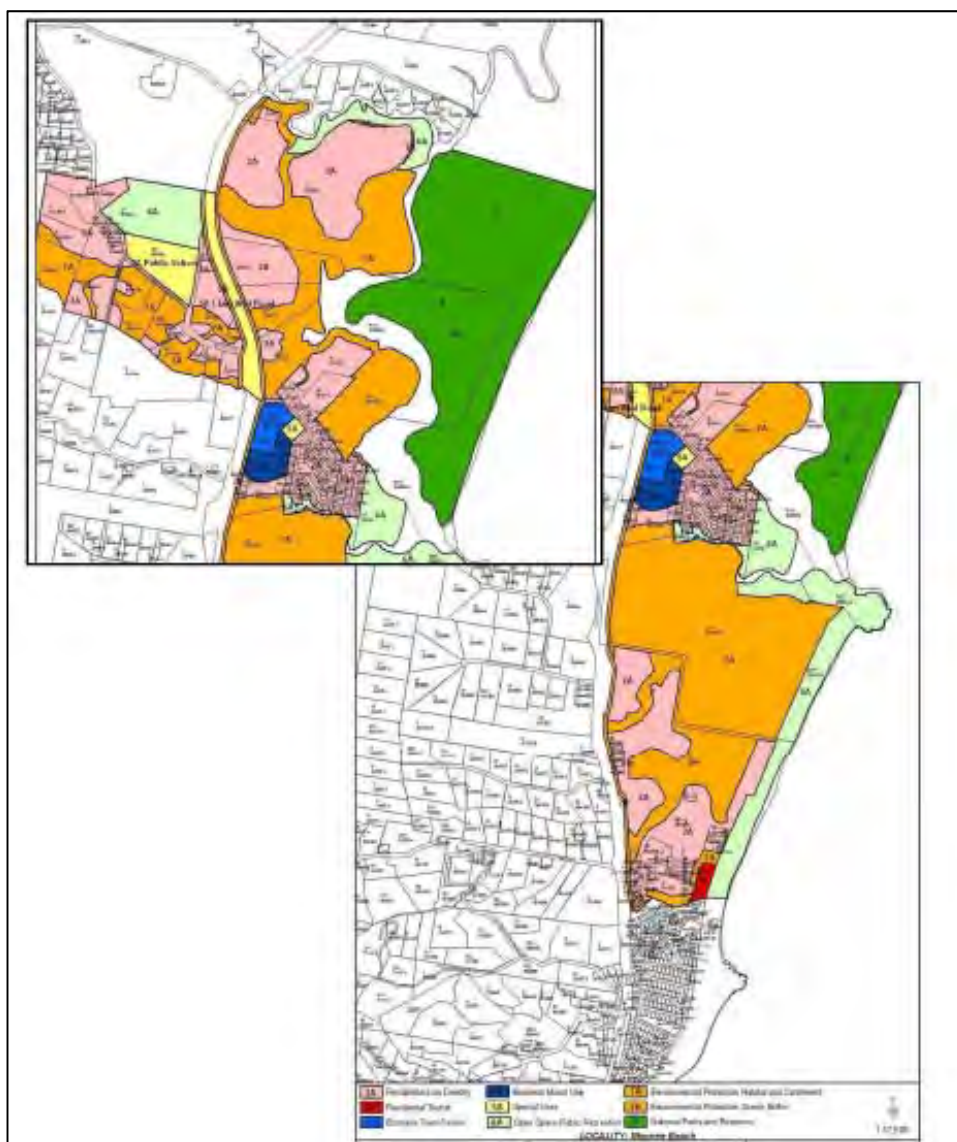
3.3.13 Other Reports

There are a number of other reports which have been considered in this report but not specifically identified above. This includes:

- Moonee Beach Nature Reserve Plan of Management 2012;
- Coffs Harbour Coastal Reserves Plan of Management 2000;
- NSW Healthy Rivers Commission Independent Inquiry into the North Coast Rivers 2003;
- Integrated Catchment Management Plan for the Upper Catchment Coast of NSW 2003;
- Coffs Harbour City Council Open Space Strategy 2010.

It is noted that some other reports (e.g. Koala Plan of Management) are addressed elsewhere in this report.

Figure 3.5: Draft LEP amendment 24, Coffs Harbour LEP 2000



4. ENVIRONMENTAL CONSIDERATIONS

4.1 SOILS AND GEOLOGY

The subject area is generally located on a low lying coastal plain bounded by low foothills to the west. Sediments in the area range from Quaternary alluvial sands, silts and clays along the plain to Palaeozoic Coramba Beds in the foothills. Soil landscapes range through beaches (Coffs Harbour soil landscape), estuaries (Toormina soil landscape), swampland (Newport's Creek soil landscape) and erosional zones (Megan, Ulong and Look-at-me-Now soil landscapes). Maps of the soil landscapes, and geology is presented in Appendix A.

4.2 CONTAMINATION

A search of the records maintained under the provisions of the Environmentally Hazardous Chemicals Act 1985 and Contaminated Land Management Act 1997 identified 4 sites within the Coffs Harbour area. None are within the study as presented in Table 4.1.

Table 4.1: Review of Records under the Contaminated Land Management Act and Environmentally Hazardous Chemicals Act

Suburb	Address	Site Name	Notices
Coffs Harbour	136 Pacific Highway	BP Service Station	3 current
Coffs Harbour	Near General Aviation Drive	Mobil Fuel Depot (Airport)	1 former
Coffs Harbour	312-316 Harbour Drive	Mobil Service Station and adjoining land	2 current and 3 former
Coramba	5 Martin Street and foreshore land	Orara River, Coramba	5 current

(source: OEH/EPA)

A search of the registered maintained under the Protection of the Environmental Operations Act 1997 (POEO Act) identified a series of records associated with Council's waste treatment facilities. Other than these licencing requirements no other records were identified under the POEO Act.

A review of Council's online mapping was also undertaken for potentially contaminated sites. The review identified that there were several potentially contaminated sites, which have, or would require further assessment as development applications are lodged (Figure 4.1). This includes land between Graham Drive and the Pacific Highway at Sandy Beach, the service station site on the Pacific Highway at Emerald Beach, land off Old Bucca Road at Moonee and some lands within the existing township of Sapphire Beach. A significant amount of potentially contaminated land was mapped to the west of the Pacific Highway.

Some contaminated studies have already been prepared as part of development applications lodged or Part 3A project applications. This is addressed in Section 9.

Figure 4.1: Potentially Contaminated Land
(source: Coffs Harbour City Council)

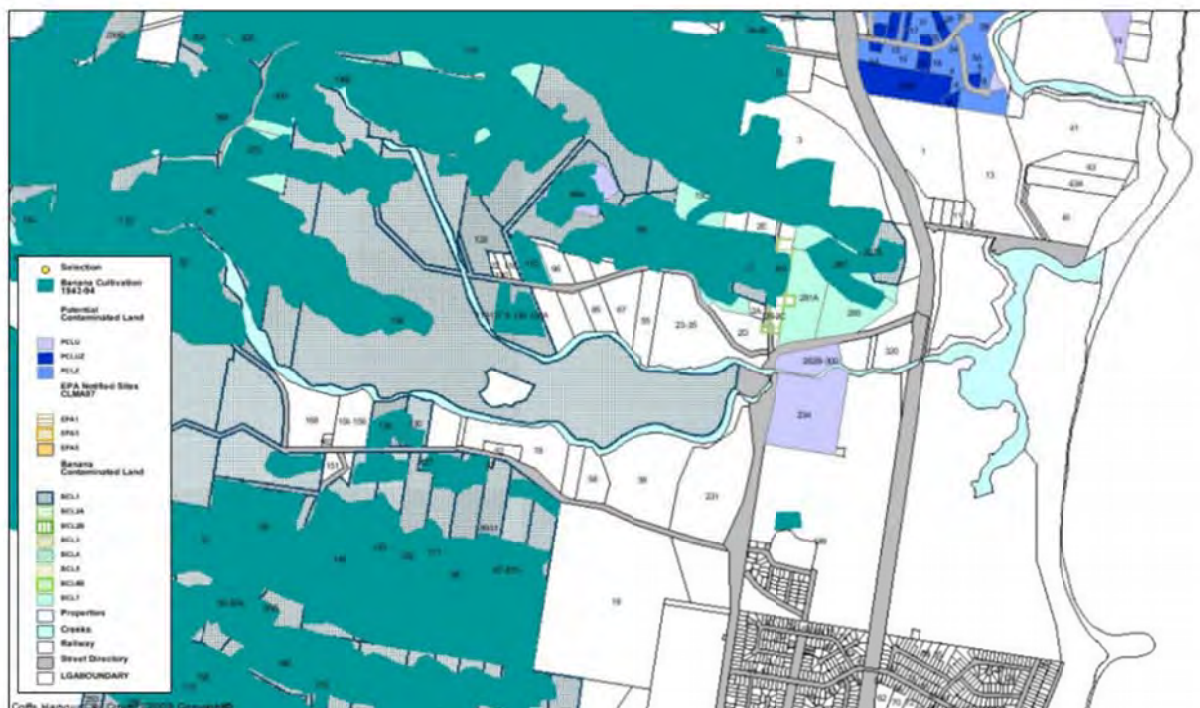


Figure 4.1: Potentially Contaminated Land (Cont'd)

(source: Coffs Harbour City Council)

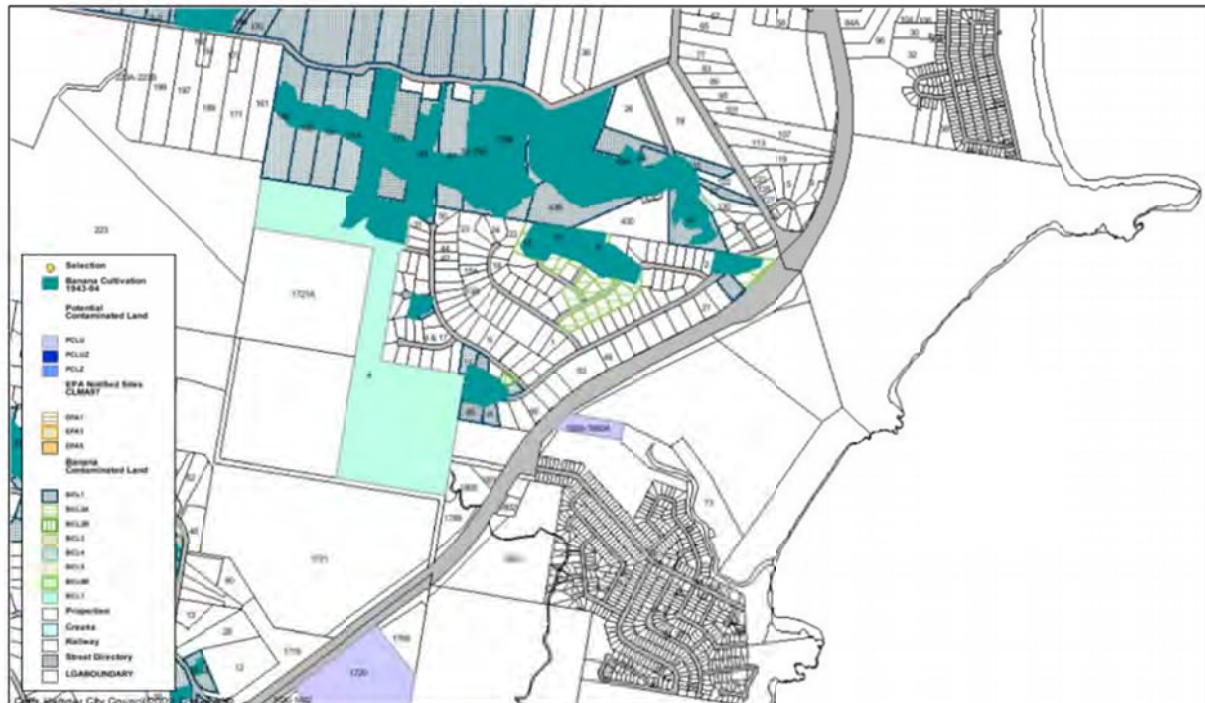


Figure 4.1: Potentially Contaminated Land (cont'd)

(source: Coffs Harbour City Council)



Figure 4.1: Potentially Contaminated Land (cont'd)

(source: Coffs Harbour City Council)



4.3 ACID SULFATE SOILS

As with other coastal areas in NSW there are potentially acid sulphate soils within the study areas. A review of the acid sulphate soil planning maps and Council's draft LEP was conducted. The following table identifies the potential acid sulphate soils and their planning class that applies to the areas considered in this study.

Table 4.2: Acid Sulfate Soils Planning Maps Classification

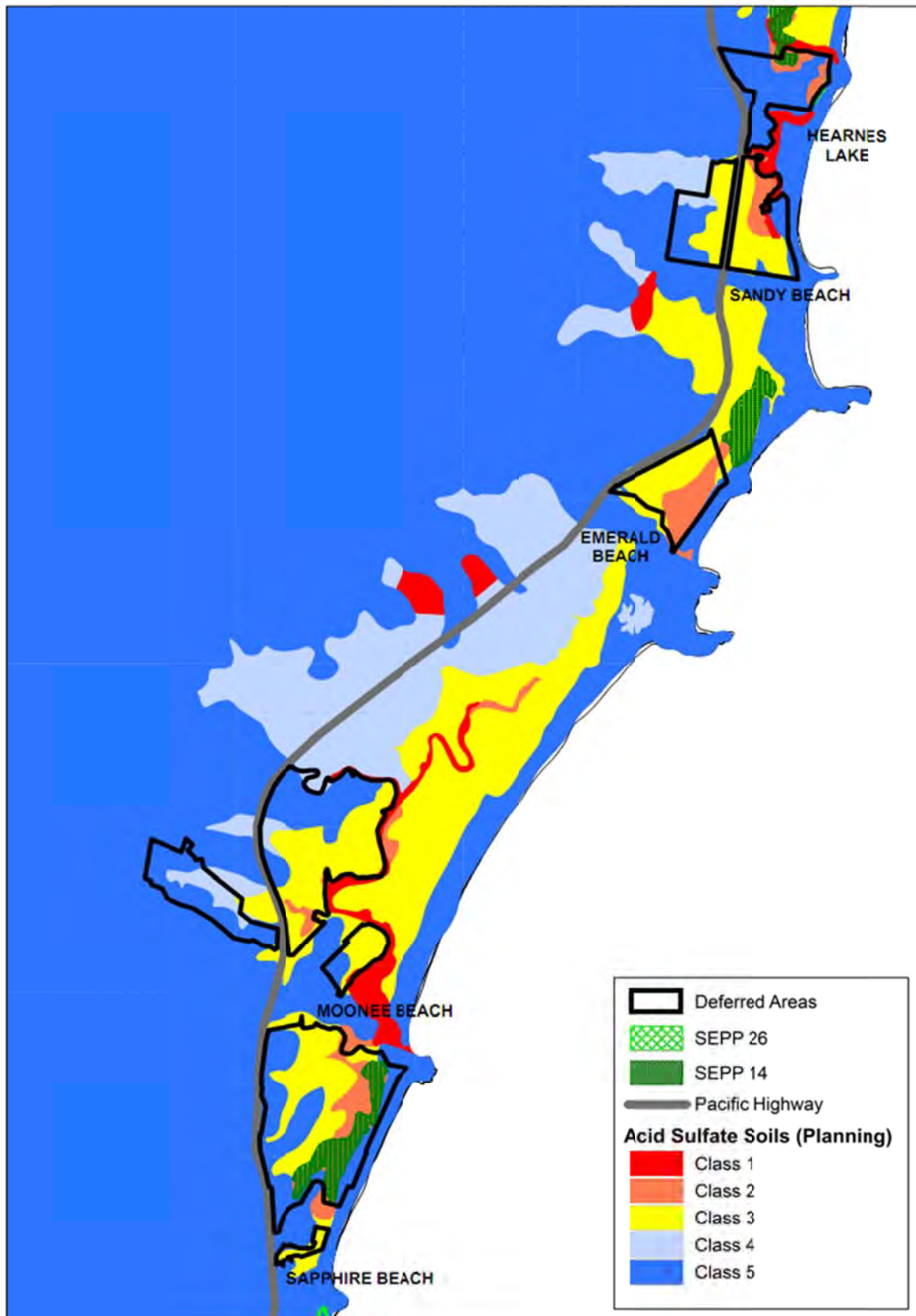
Area	Acid Sulfate Soil Planning Map Classification
Hearnes Lake	Partly Class 2 in eastern portion of lands to north of Hearnes Lake Road
Sandy Beach	Classes 1 to 4 for land on both sides of the Highway. Lower classes near Hearnes Lake (i.e. Classes 1 and 2).
Emerald Beach	Partly Class 3 and partly Class 2.
Moonee Beach	Classes 1 to 4 throughout the study area in Moonee.
Sapphire Beach	Partly Class 3 and partly Class 2.

It is noted that any areas that are identified as potentially having acid sulphate soils would fall within the provisions of Clause 7.1 of LEP 2013 and an assessment would be required as part of any rezoning or future development application. The maps in Coffs Harbour LEP 2013 relating to acid sulphate soils will require updating in accordance with the NSW Acid Sulfate Soil Planning Maps.

Figure 4.2 below also provides an analysis of acid sulphate soil planning maps from the Natural Resource Atlas.

4.4 GEOTECHNICAL

There have been a number of geotechnical reports which have been prepared as part of previous development applications and Part 3A project applications. Further detail is provided in Section 9. These reports have been prepared for a number of reasons including cut and fill analysis as well as an analysis of residential slabs and footings requirements, stability and movement, and geology. The recommendations also involve future earthworks and construction measures. It is noted that there are a number of Australian Standards already in place (e.g. for residential footings and slabs), and generic DCP requirements for minor earthworks and erosion and sediment control. A review by Monteath and Powys in conjunction with Forum Engineering considers that there is sufficient existing information in the deferred areas at this strategic level regarding contamination and geotechnical issues, and that there is sufficient guidelines and policies in place to address geotechnical issues when future DAs or rezonings are lodged.

Figure 4.2: Coastal Planning Map

4.5 GROUNDWATER

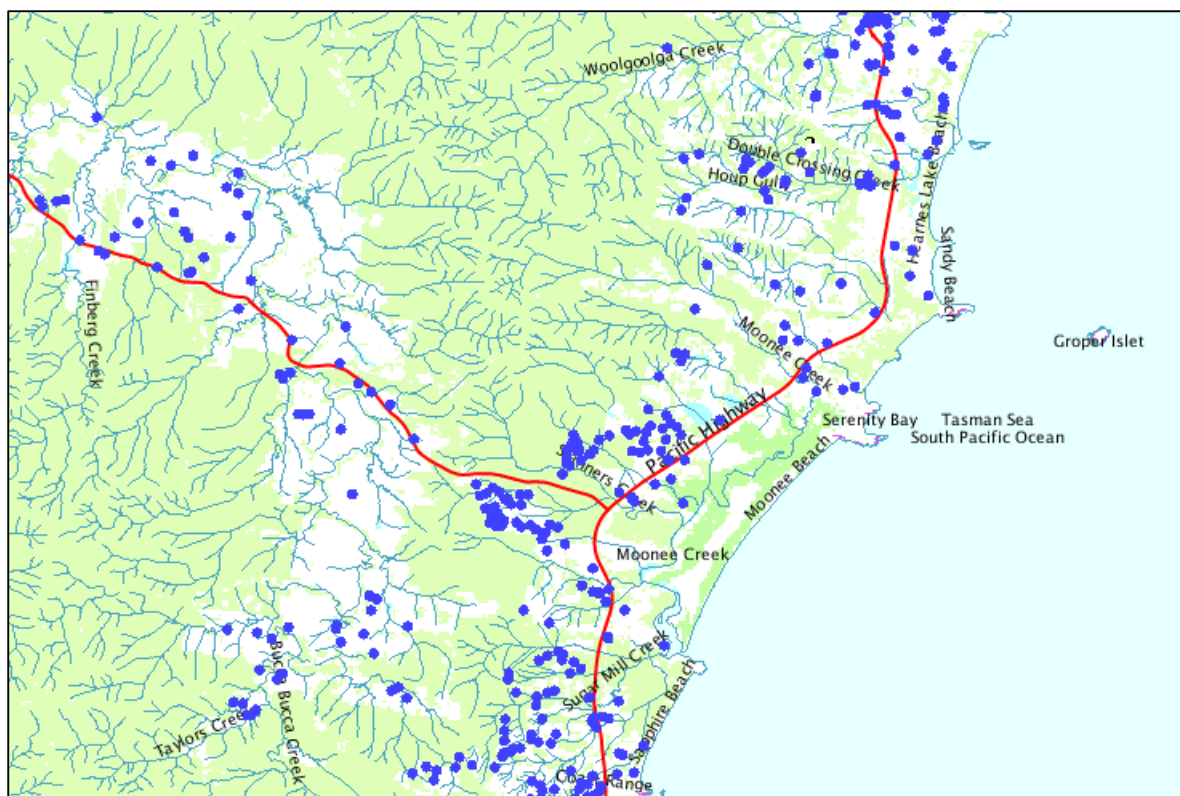
4.5.1 Registered Groundwater Bores

A review of the Natural Resource Atlas identified that there are a sufficient number of registered groundwater bores in the study area which will provide background information for any future development application (Figure 4.3). A review of water quality in the study area (see below) was also undertaken to ensure appropriate policies are in place relating to water quality management for development.

4.5.2 Existing Studies

A number of existing studies have examined groundwater levels on site. All studies have made recommendations regarding potential management and ongoing licence requirements regarding groundwater. It is noted that some existing studies (including geotechnical) have identified sub-surface water levels on sites in the study area. There has been a review of water quality which is also identified in Section 9 and Appendix D.

Figure 4.3: Registered Groundwater Bores
(source: NRAtlas)



4.6 TRAFFIC

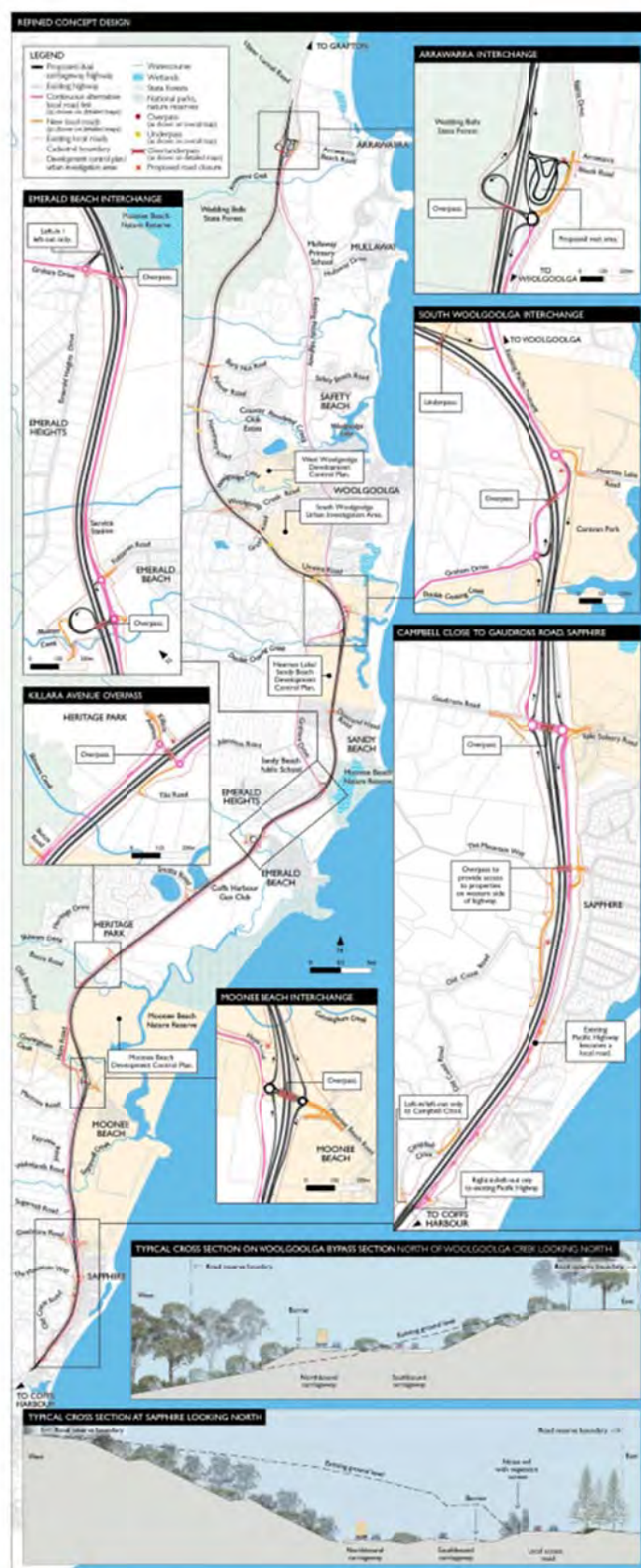
As development applications and rezoning applications have been lodged with Council or the DP&I, traffic studies have been lodged to ensure that any necessary road upgrades are undertaken and the road network has the capacity to handle the proposed development.

The main road that traverses the study area is the Pacific Highway. The Pacific Highway between Coffs Harbour (Sapphire) and Woolgoolga is being upgraded to a dual lane carriageway (in each direction). As part of the upgrade, exits and entry points to the proposed Highway are being constructed by the RMS, and as such will dictate egress and access to the localities in this study. A map of the proposed Pacific Highway upgrade is presented in Figure 4.4.

Notwithstanding, throughout the consultations undertaken as part of this study the issue of interconnectivity between the townships within the study area has been discussed. It is noted that as part of the Highway upgrades there is provision for some 'local' road construction to ensure townships have links to the Highway. This includes 'local' roads that run adjacent to the Highway between Graham Drive at Sandy Beach and Sapphire. For example, there will be a 'local' road adjacent to the Pacific Highway (on the eastern side of the Highway) that will link Fiddaman Road at Emerald Beach to Graham Drive at Sandy Beach. The only 'local' link road that is not on the eastern side of the Highway will be between Moonee Beach Road at Moonee Beach and Split Solitary Road in Sapphire, where the link road will be on the western side of the Highway, but will be able to be accessed from Moonee Beach and Sapphire Beach by overpasses. The outcome of this is then whether any access (pedestrian or vehicle) is required to link northern Sapphire Beach to Moonee Beach on the eastern side of the Highway. At present there will be vehicle access through development at north Sapphire, however, Lot 66 DP 551005 in southern Moonee Beach has been acquired by the RMS as a biodiversity offset. As will be discussed later in this study it is considered that a local road linking north Sapphire to Moonee Beach is a possibility, however, the practicalities and costs of constructing this road may make it unfeasible.

ENVIRONMENTAL STUDY

Figure 4.4: Proposed Pacific Highway Upgrade Works, Sapphire to Woolgoolga
(source: RMS)



Traffic Noise

It is noted that some of the deferred areas are adjacent to the Pacific Highway. Some traffic noise studies have been prepared as part of previous applications, and the mitigation of traffic noise impacts has generally been addressed. There are requirements in the current DCP that applies to some of the deferred areas that any proposed development within 300 metres of the Pacific Highway requires a traffic noise impact assessment. This is considered sufficient for the study area.

4.7 FLOODING

Some of the deferred areas are located within flood prone areas as identified in Figures 4.5 and 4.6. Any proposed developments will need to consider appropriate guidelines including the NSW Floodplain Development Manual. It is noted that Hearn's Lake is an ICOLL and as such this will need to be considered in any proposed developments in this area. Council are continually updating flood models in accordance with new modelling techniques and software. As such, any future developments should consider the most up to date flood modelling and/or flood studies.

In discussion with key stakeholders the issue of whether land identified as 'flood prone' under Council's flood strategies should be considered for development. This report has presented flooding, as identified by Council, as a constraint. However, any future development on a site which may be impacted by flooding will need to be supported by appropriate flood studies to assess any upstream and downstream impacts. In addition, there are currently sufficient provisions in legislation and guidelines in place to address the impacts of flooding on development. This includes the Flood Plain Development Manual and Clause 7.3 of Council's LEP.

Sea Level Rise

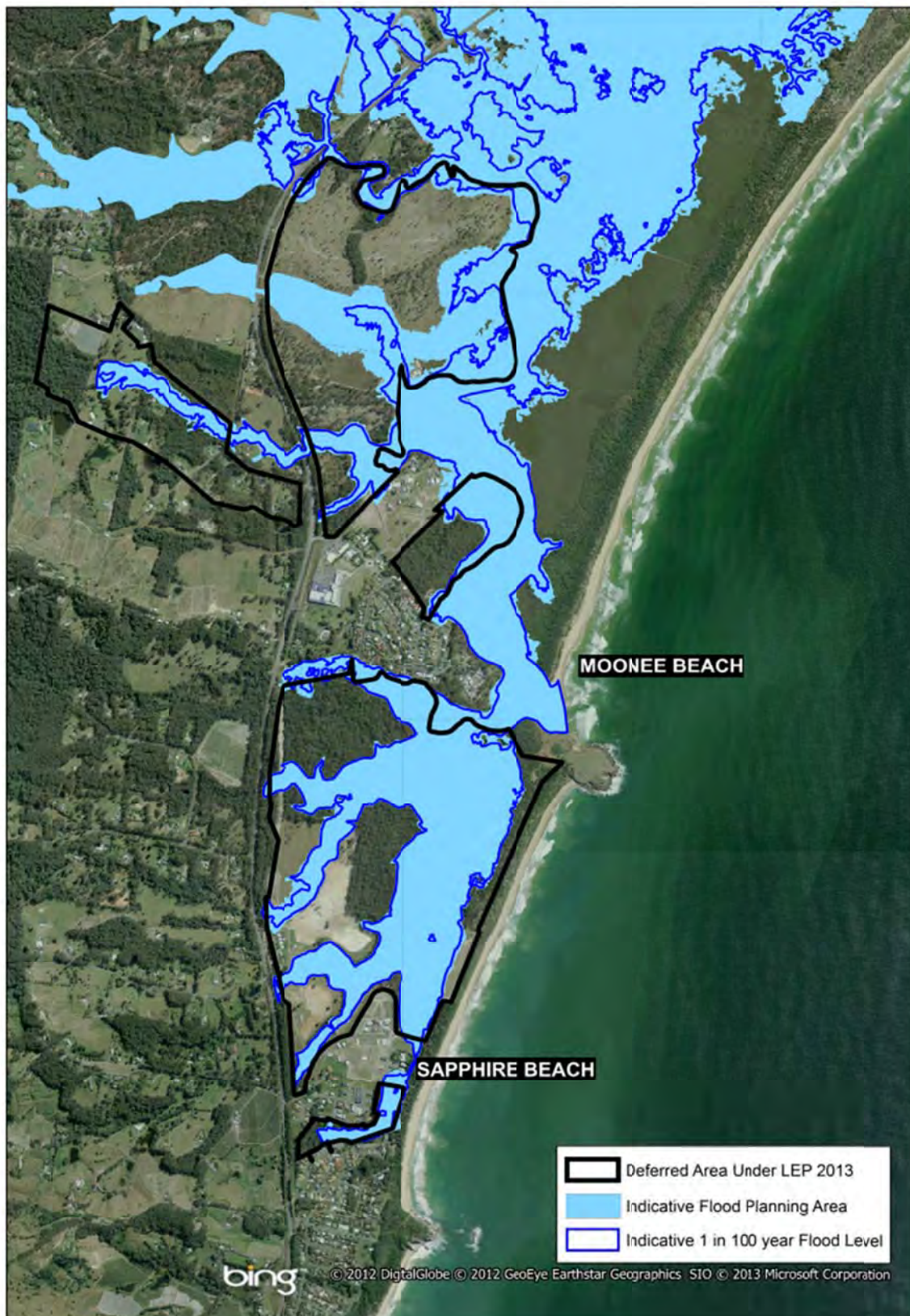
Council have an endorsed climate change policy which adopts a sea level rise benchmark for the Coffs Harbour local government area of a 91cm increase by 2100 (above 1990 mean sea levels). Council are currently undertaking a review of coastal planning provisions in the LGA. Until such time that this is completed, this policy will need to be considered in any future development applications.

It is also noted that the Office of Environment and Heritage (OEH) have undertaken significant works in the area of climate change and the NSW Adaption Research Hub will also be undertaking significant works in the near future on sea level rise, which can be considered in future DA works.

Figure 4.5: Indicative Flood Prone Areas and Flood Planning Areas (northern areas)



Figure 4.6: Indicative Flood Prone Areas and Flood Planning Areas (southern areas)



4.8 STORMWATER AND WATER QUALITY

As part of any future development applications stormwater will need to be addressed. This includes an analysis of the pre and post development scenarios. Council currently have sections in their DCP to address this issues as well as policies regarding water sensitive urban design.

Northrop Engineers reviewed a number of studies and Council's policies in relation to stormwater, in particular water quality. This was important given the number of watercourses and sensitive riparian corridors in the study area. The review by Northrop Engineers is presented in Appendix D.

In relation to water quality the review considers that Council's current policy on water quality is satisfactory in ensuring water quality is meet from proposed developments in the study area. It is noted that the study areas are a small proportion of the catchments in this part of Coffs Harbour and agricultural uses outside of the study area also need to be managed to ensure appropriate water quality targets are met.

4.9 ECOLOGY

As part of this study an ecological assessment was prepared by Niche Environment and Heritage (Niche) which is presented in Appendix B. The ecological investigations included:

- A detailed literature review of management plans, previous flora and fauna surveys, consultant reports and existing mapping;
- A two day field survey to validate existing mapping, habitat assessments, spotlighting and anabat recording;
- Constraints mapping and recommendations.

Based on the investigations a constraints index was developed. The level of constraint is considered higher with a higher index score. It is noted that the constraint index mapping should be used as a guide and considered in any future planning for the study areas. The constraints mapping is presented in Figures 4.7 through to 4.10. The scope of the ecology works was predominantly based on a review of the existing studies available in the study area. There were a significant number of studies already undertaken in the area. The fieldwork was to validate any concerns with the documentation and other publicly available information. While the ecological study was predominantly 'desktop' based it was not meant to supplement more detailed on-ground flora and fauna assessments lodged with development applications.

Overall, the lands with the greatest constraints generally comprised threatened ecological communities, followed by vegetation types known to contain a high representation of 'ecosystem predicted threatened species'. Areas of least constraint were those that had already been cleared or substantially modified.

4.9.1 Moonee Quassia

Part of the ecological works was to investigate Moonee Quassia (*Quassia sp. Mooney Creek*). The survey identified Moonee Quassia near Moonee Creek in Foothills to Escarpment Brush Box – Tallowwood – Blackbutt Wet Forest. Based on prior records this

species predominantly occurs along streams, gullies and drainage lines in wet sclerophyll forest. Moonee Quassia habitat maps are presented in Figures 4.11 and 4.12.

Figure 4.7: Ecological Constraints Mapping, Sandy Beach and Hearn's Lake



Biodiversity constraints (areas A, B and C)

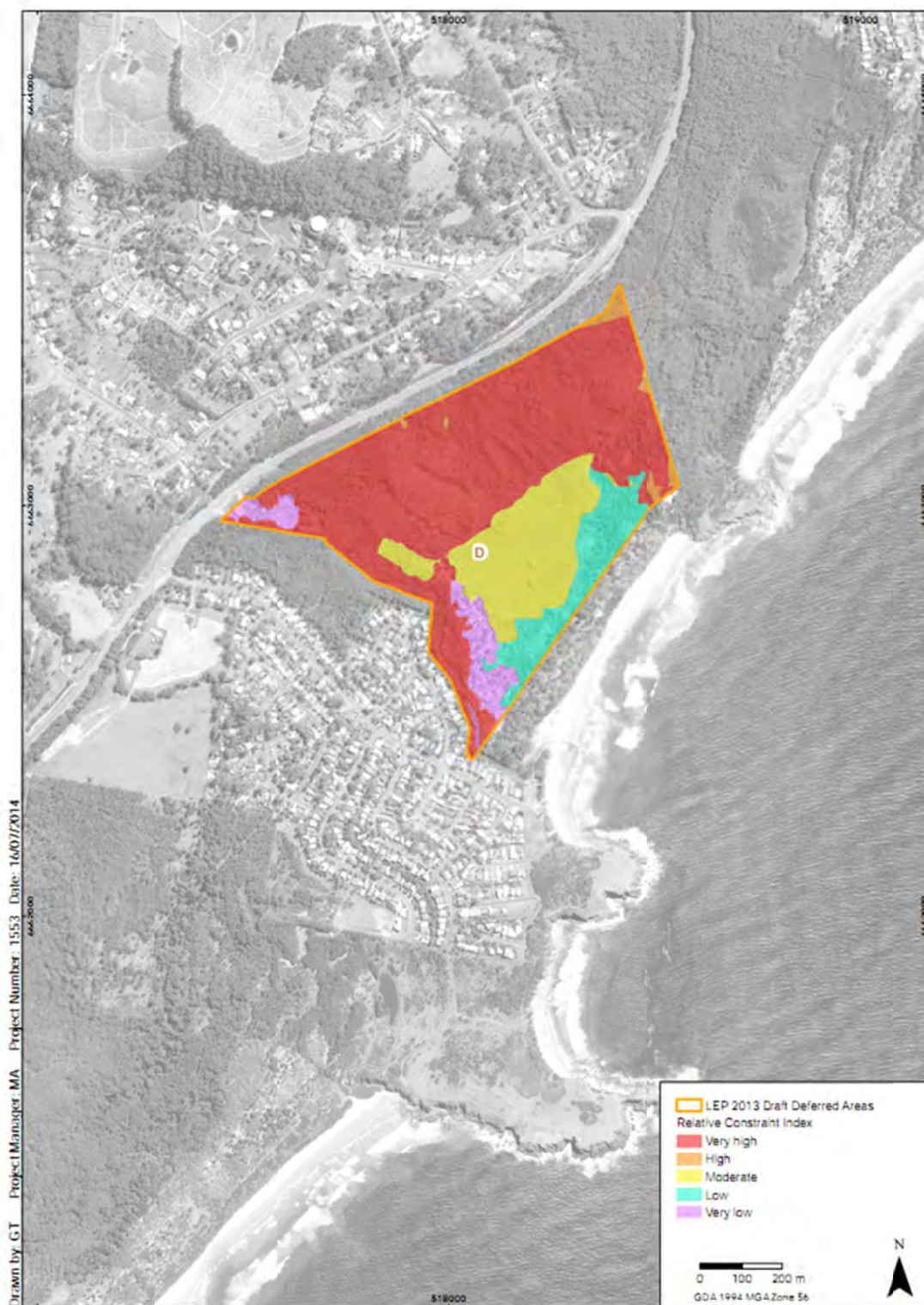
Coffs Harbour LEP Deferred Areas Local Environmental Study

niche
Environment and Heritage

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FIGURE 27

imagery: (c) CCC 2009

Figure 4.8: Ecological Constraints Mapping, Emerald Beach

Biodiversity constraints (area D)

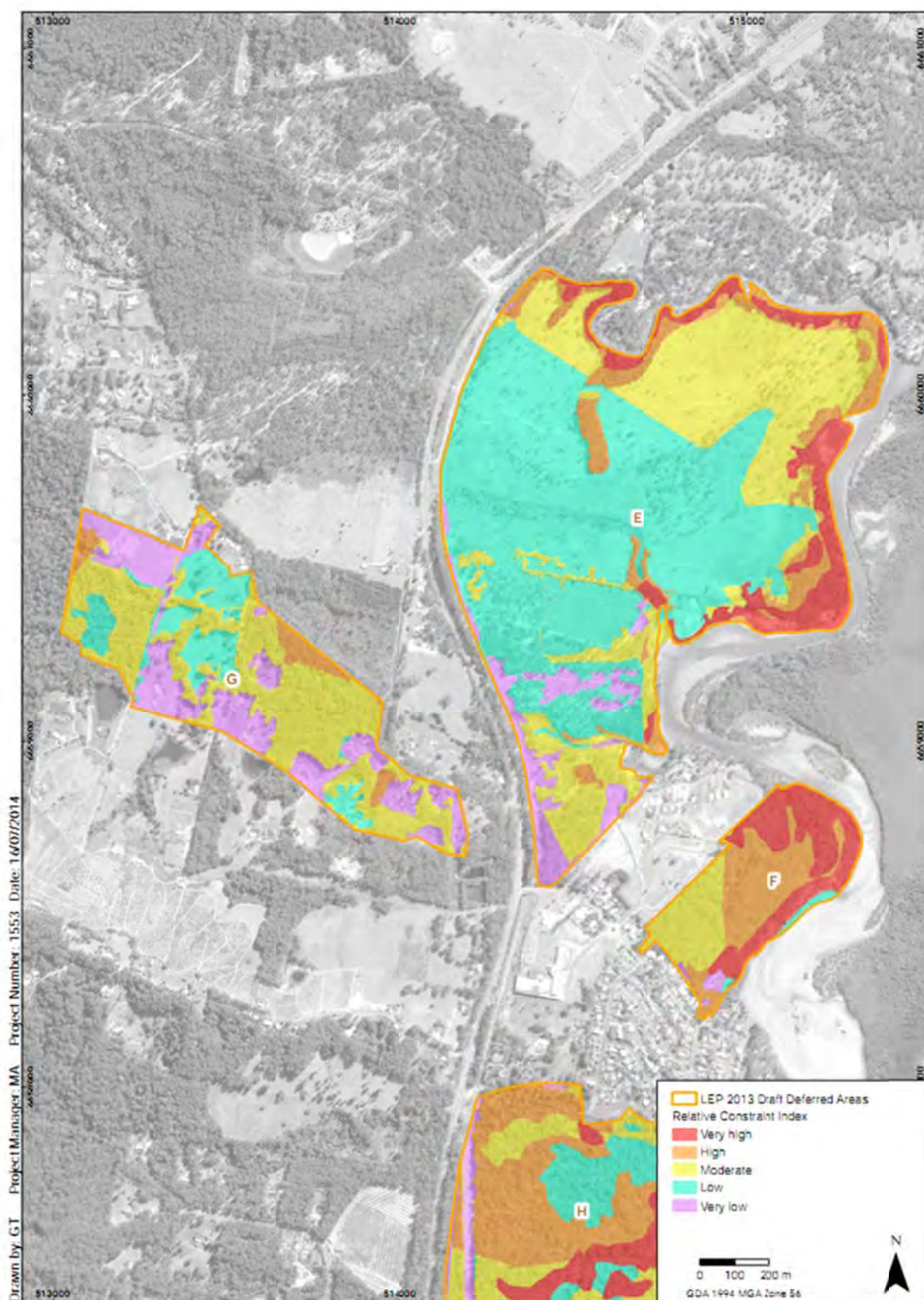
Coffs Harbour LEP Deferred Areas Local Environmental Study



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FIGURE 28

Imagery: (c) CCC 2009

Figure 4.9: Ecological Constraints Mapping, Moonee Beach

Biodiversity constraints (areas E, F and G)

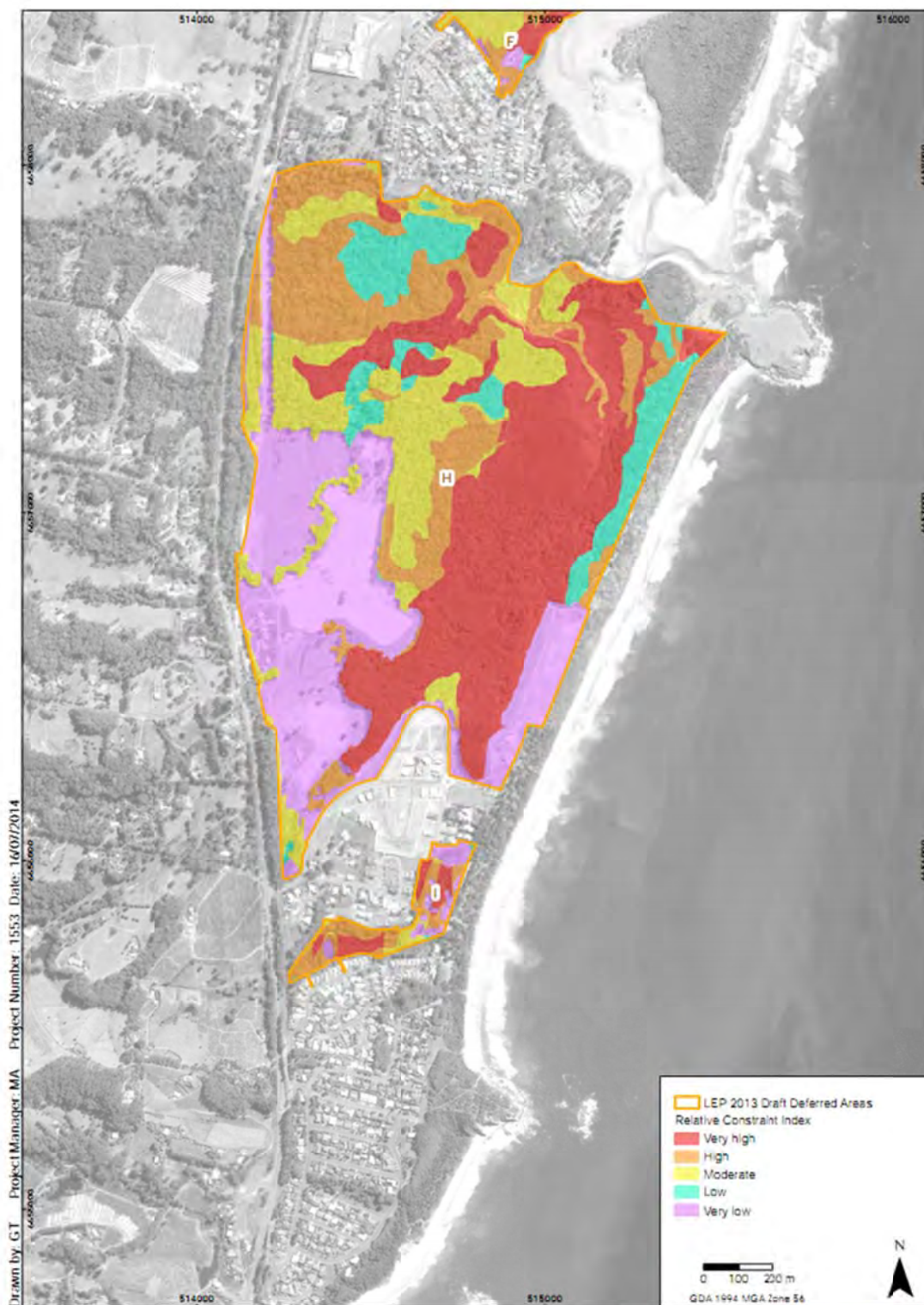
Coffs Harbour LEP Deferred Areas Local Environmental Study



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FIGURE 29

Imagery: (c) CCC 2009

Figure 4.10: Ecological Constraints Mapping, Sapphire Beach

Biodiversity constraints (areas H and I)

Coffs Harbour LEP Deferred Areas Local Environmental Study

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Environment and Heritage

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FIGURE 30

Imagery: (c) CCC 2009

Figure 4.11: Moonee Quassia Habitat Mapping, Northern Areas



Moonee Creek Quassia records (study area north)
Coffs Harbour LEP Deferred Areas Local Environmental Study

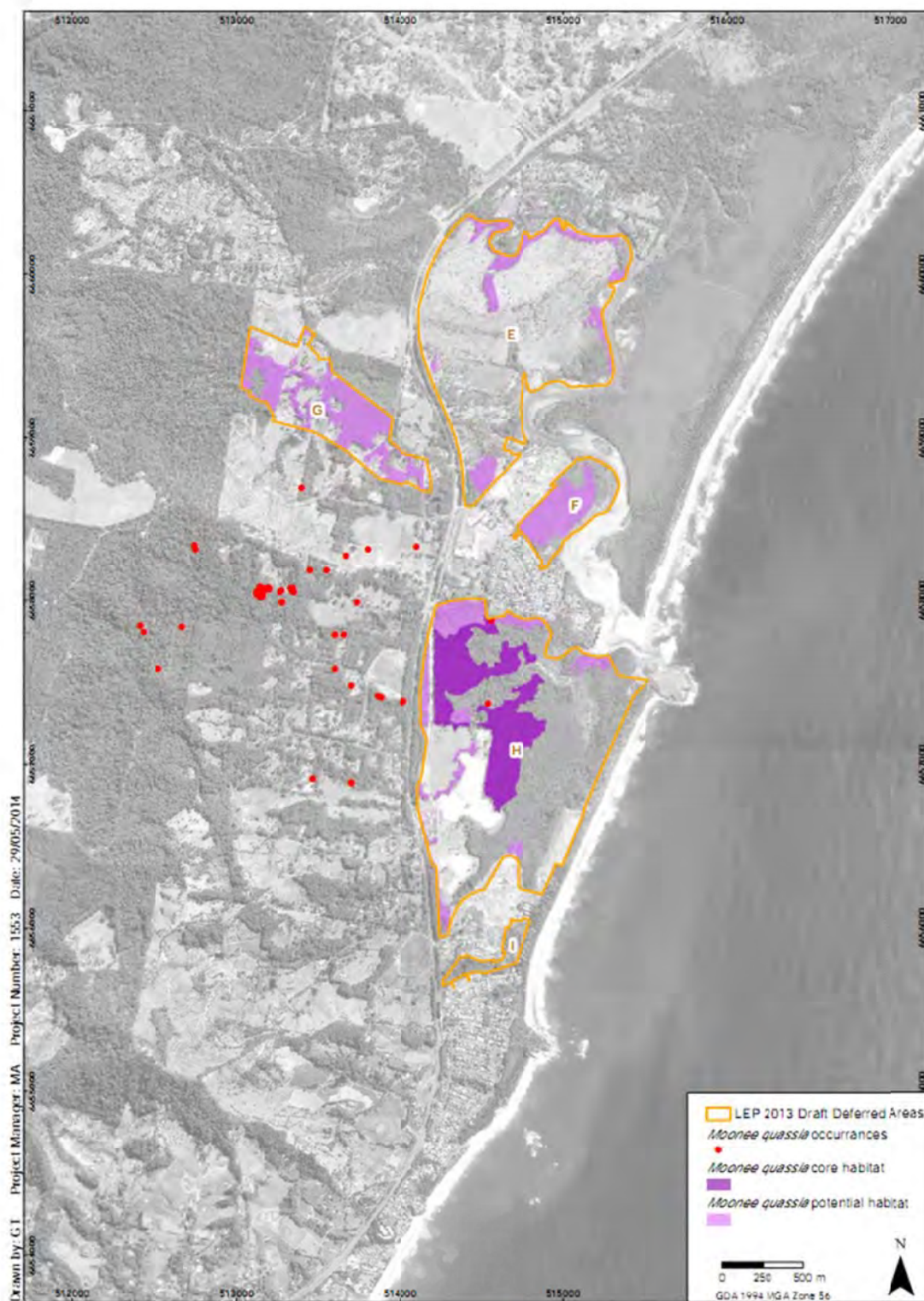
FIGURE 22

Imagery: (c) CCC 2009

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Figure 4.12: Moonee Quassia Habitat Mapping, Southern Areas



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Environment and Heritage

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FIGURE 23

Imagery: (c) CCC 2009

4.9.2 Koala Habitat

The ecological investigations carried out for this study examined koala habitat as well as a review of State Environmental Planning Policy (SEPP) No 44 (Koala Protection). Koala habitat maps are presented in the flora and fauna study. The study area is predominantly secondary and tertiary koala habitat. It was noted that a Comprehensive Koala Plan of Management (CKPOM) has been adopted for the Coffs Harbour LGA under the auspices of SEPP 44.

4.9.3 Note on Terrestrial Biodiversity Maps

It is noted that some of the deferred areas and additional DCP lands are mapped under Coffs Harbour LEP 2013 as having 'terrestrial biodiversity' value. This clause within the LEP only enacts a number of principles which Council must consider when determining a development application. It is considered that there is no need to adjust these maps and that there is sufficient legislation (e.g. Threatened Species Act) and policies in place to address biodiversity as development applications are lodged. These maps are only used as a guide for proposed developments, who need to consider the principles identified in the LEP when preparing environmental studies.

4.10 BUSHFIRE

The deferred areas are within bushfire prone areas as identified in Figures 4.13 and 4.14. This report set out to address bushfire in the deferred areas in relation to asset protection zones (APZs) and potential construction issues. On further investigations into the issue of bushfire it has become difficult to address such matters. There are sufficient, existing, legislative provisions in place for managing bushfire in the deferred areas including the EP&A Act and the Rural Fires Act 1997, as well as Australian Standards for construction in bushfire prone areas. The RFS also have the guideline *Planning for Bushfire Protection* which will need to be addressed for any development applications lodged with Council (and the Department of Planning and Environment). Importantly, the APZs and construction levels on a site may also be dependent on a negotiated outcome between OEH and the landowner if biodiversity offsets are required on a site, or negotiated outcomes on development between Council and the landowner. This may also include a voluntary Planning Agreement. As such, it is difficult to map APZs on sites at present, or advise on bushfire attack levels (BALs) for construction.

Nonetheless, bushfire management has been considered within the deferred areas and included within the DCP prepared for the subject areas.

It is noted in the Coffs Harbour LEP 2013 that there are several occurrences where an E2 Environmental Conservation zone is adjacent to a residential zone. Given the 'closed' nature of the E2 zone consideration will need to be afforded as to whether bushfire APZs and other infrastructure (e.g. wastewater pump stations etc, playground facilities) are warranted adjacent to residential areas, and thus how the E2 zoning may allow such items, or whether residential zones may need to be modified to allow such provisions.

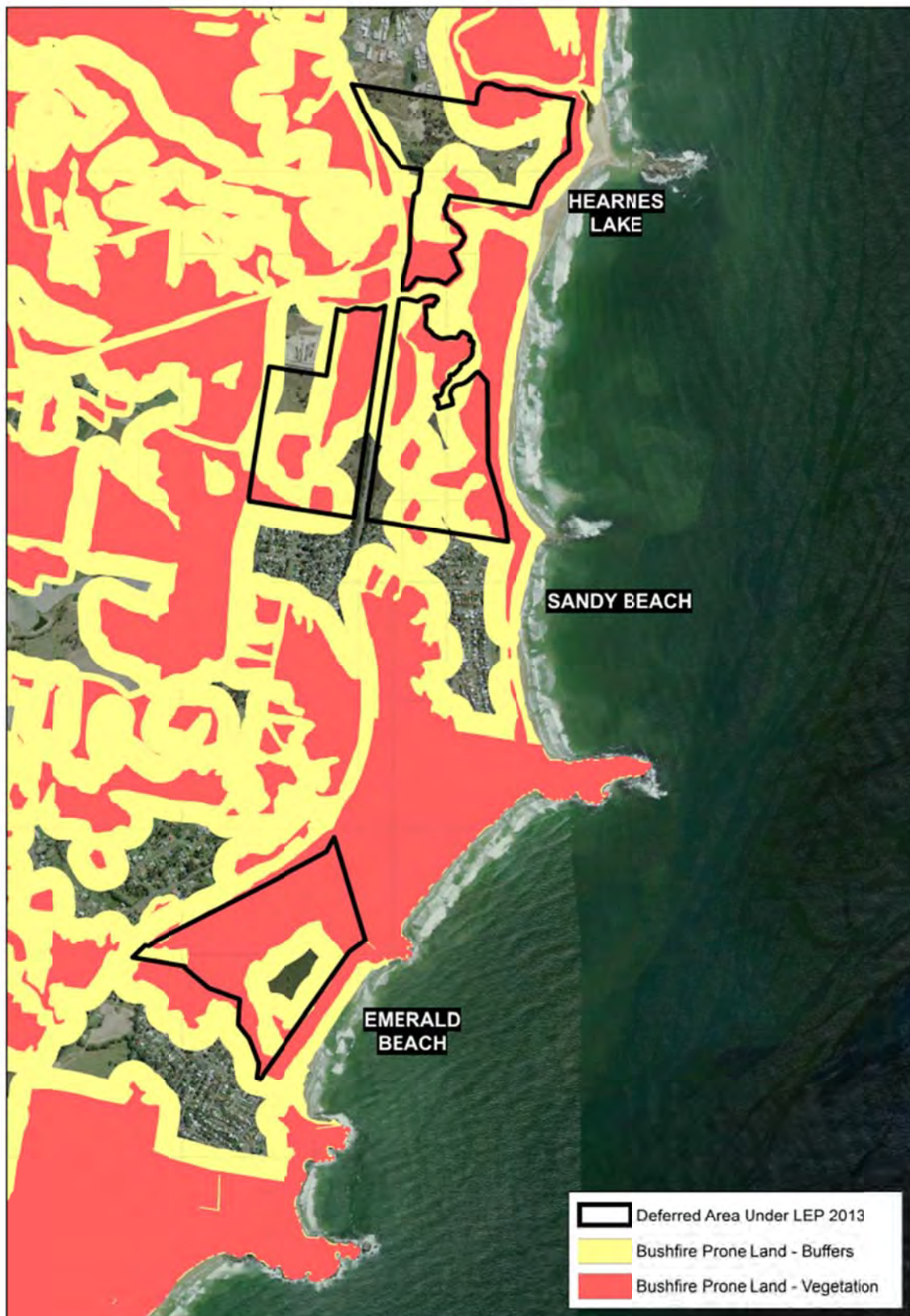
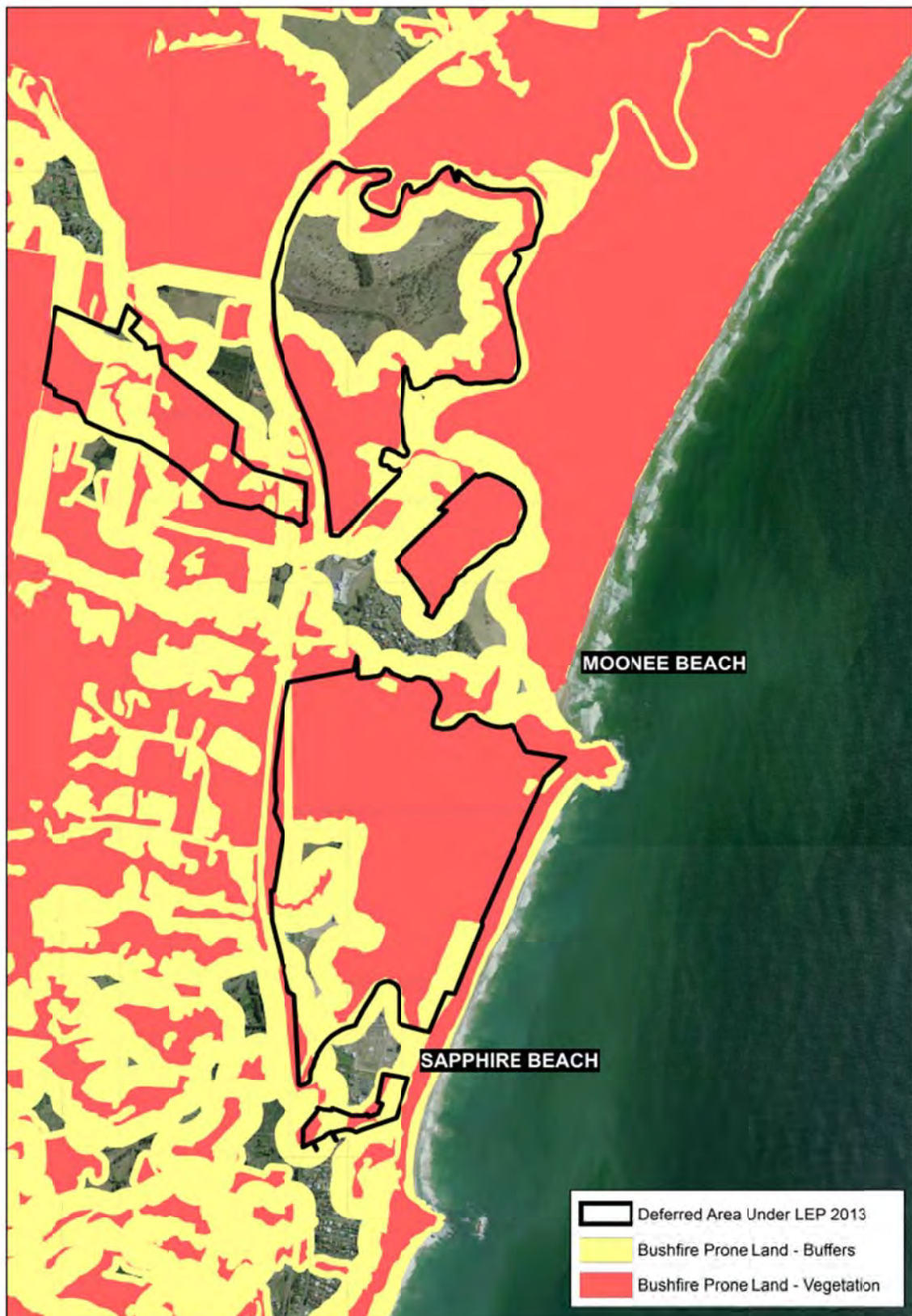
Figure 4.13: Bushfire Prone Areas (northern areas)

Figure 4.14: Bushfire Prone Areas (southern areas)

4.11 VISUAL

The study area is within close proximity to the Pacific Highway and the NSW Coastline. Some previous applications lodged have addressed this issue. It is considered that there are state level guidelines in place (i.e. NSW Coastal Policy) for the coastline, however, in relation to visual impacts of the Pacific Highway this may need to be reflected in the DCP.

4.12 DEVELOPMENT APPLICATION ISSUES

There are a number of issues which have not been detailed in this report but will need to be addressed for any future development in the study area in accordance with relevant policies and guidelines, including:

- Landscaping;
- Dust/Air Quality;
- Waste;
- Construction Noise.

4.13 EUROPEAN HERITAGE

A review of Coffs Harbour LEP 2013 identifies that there are no European Heritage items within the deferred areas. Within the additional DCP areas there is only one heritage item that being 18 Split Solitary Road which is located within the existing township of Sapphire Beach. This is unlikely to be affected by any development in the deferred areas.

A search of the NSW Heritage Database revealed a similar outcome, with 18 Split Solitary Road the only item within the study area. It was noted that Moonee Nature Reserve was identified in the NSW Heritage database but is not within the study area.

4.14 ABORIGINAL ARCHAEOLOGY

A review of Aboriginal archaeology was undertaken by Niche Environment and Heritage as part of this project. A copy of the report is presented in Appendix C. The report included a review of previous reports and studies, a search of the Aboriginal Heritage Information Management System (AHIMS) maintained by the office of Environment and Heritage (OEH), and consideration of landscape context, land use history and potential sensitive landforms. The outcome of the report was an identification of sites which were deemed to be of an archaeological sensitive nature. Some sites were identified as having no or meeting only one criteria to be considered sensitive, while others were identified as obtaining multiple criteria for archaeological sensitive sites/items. The results of the study are presented in Figures 4.15 and 4.16 below. It is noted that individual sites are required to submit further detailed work and possibly further consultation as part of any future development applications.

Figure 4.15: Aboriginal Archaeological Sensitivity Mapping (northern areas)



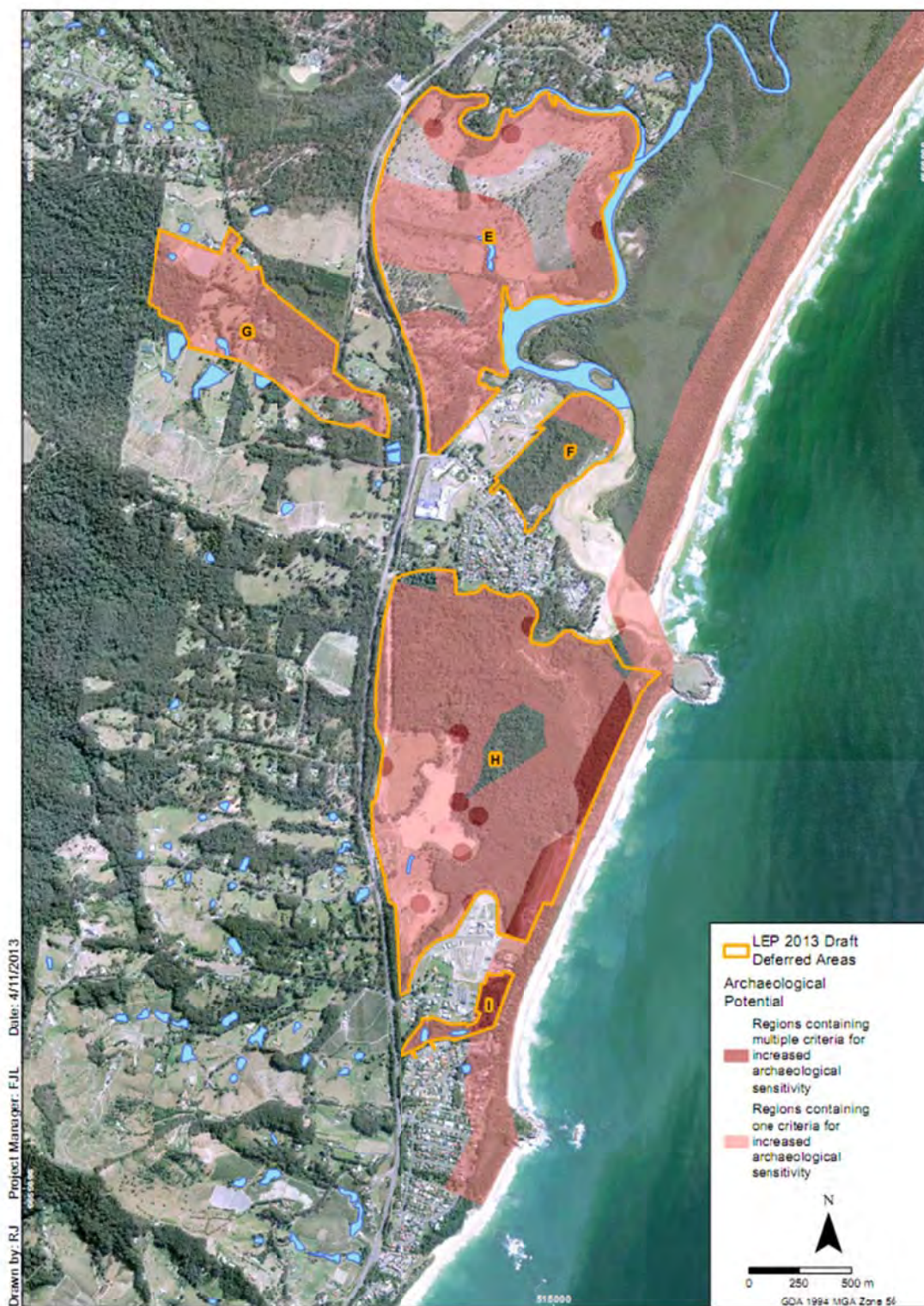
Archaeological Potential - North

Coffs Harbour – Desktop Aboriginal Heritage Assessment

niche
Environment and Heritage

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Figure 4.16: Aboriginal Archaeological Sensitivity Mapping (southern areas)



Archaeological Potential - South

Coffs Harbour – Desktop Aboriginal Heritage Assessment

niche
Environment and Heritage

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5. CONSULTATIONS

As part of this project a number of consultations with key stakeholders and government agencies were conducted. The consultations included:

- Council Officers (August 2013, October 2013, February 2014, April 2014);
- State Government Agencies (February 2014, April 2014);
- Key Stakeholders (i.e. landholders and/or their consultants who have land identified as deferred areas) (February 2014).
- Two landholders made separate submissions that were unable to attend meetings in February 2014.

It is identified that this study will also be placed on exhibition, providing further opportunity for the community and government agencies to provide comment.

Workshops and meetings were held with Council staff across a number of sections within Council including (but not limited to) engineering (including water and sewer), environment, planning, and section 94.

Letters were sent to all land holders with land identified as deferred under Coffs Harbour LEP 2013 inviting them (and their representatives) to a meeting in early February 2014. In total, nine landholders attended a meeting with the project team. Two others made submissions.

State government agencies including:

- NSW Office of Environment and Heritage (OEH);
- NSW Office of Water (NOW);
- Marine Parks Authority (MPA); and
- Department of Primary Industries (Agriculture);

attended a workshop in February 2014 to discuss the project. At this meeting the project was discussed and agencies were invited to identify issues in the area that the project team should consider in preparing this study. It is noted that Coffs Harbour Local Aboriginal Land Council (LALC) also attended this workshop.

A separate teleconference was held in March 2014 with the Department of Primary Industries (Fisheries) about the project.

Separate meetings were held with officers from the Department of Planning and Environment in April 2014.

Roads and Maritime Services (RMS) provided a written response in relation to the deferred areas.

Issues raised during the consultation process were considered as part of this report.

5.1 DRAFT LEP SUBMISSIONS

As part of the preparation of Council's LEP 2013 the LEP was placed on public exhibition between 13 September and 26 October 2012. Although the subject areas are deferred under LEP 2013, when the draft was exhibited proposed zones were identified in the deferred areas. Some responses were submitted in regards to the proposed zones within the deferred areas. Issues that were raised included:

- Changing non-environmental zones under LEP 2000 to environmental zones in the draft LEP 2013 requires justification;
- A 50 metre setback is sufficient to environmentally sensitive areas and watercourses;
- Environmental land that is dedicated should provide compensation to the developer;
- Positioning of collector roads needs to be addressed;
- Locations of zonings are not consistent with vegetated areas;
- Extensions of environmental zonings are not justified;
- Locations of zones does not reflect approved developments;
- Consistency is required between DP&I approvals, Council's LEP, and previous advice from Council;
- Buffer areas to conservation lands needs to consider zonings that allow infrastructure provisions;
- Section 94 fees should reflect the cost of undertaking works;
- There is no consistency between zonings in the LEP 2000 and draft LEP 2013 given it was a 'roll over' LEP.

6. SOCIAL AND ECONOMIC CONSIDERATIONS

6.1 SOCIAL AND DEMOGRAPHIC CONSIDERATIONS

6.1.1 Population Growth – Published Information

The NSW Department of Planning and Environment (2013) identifies that the Coffs Harbour LGA is anticipated to reach 80,500 people in 2031, an approximate 13% growth between 2011 and 2031. The Department estimate that this will be an additional 9,500 persons between 2011 and 2031.

In 2006 the then NSW Department of Planning identified that between 2006 and 2013 the Coffs Coast (Coffs Harbour, Bellingen and Nambucca) was to plan for an additional 19,200 dwellings to cater for future population growth.

Council's Our Living City Settlement Strategy identified that by 2031 Coffs Harbour would need an additional 15,499 dwellings consisting of:

- 3,726 in new residential zones;
- 2,707 dwellings infilled into existing residential zones;
- 639 additional rural residential dwellings;
- 1,509 vacant lots;
- 6,336 dwellings in existing zoned but unsubdivided land;
- 382 dwellings in existing zoned but unsubdivided rural residential land;
- 200 dwellings in Bonville.

It is noted that this was based on an anticipated 99,000 persons in 2031. The current DP&I figures are based on a different analyses.

The Australian Bureau of Statistics (ABS) notes that between 2001 and 2011 the population of Coffs Harbour LGA increased by 6,801 persons to 70,014, an increase of nearly 11% over the ten year period. Between the last two censuses the population of Coffs Harbour increase by 3,404 persons, or 5.1%. Thus, in general, over the last ten years the population of Coffs Harbour has increased by approximately 1% per annum.

In projecting forward this trend, the population of Coffs Harbour between 2011 and 2031 would be higher than that modelled by DP&I in 2013. However, feeding into any prediction about population growth will be the ageing of the population in Coffs Harbour. At the 2011 Census the median age in Coffs Harbour LGA was 42, and the DP&I (2013) identify a 73% increase in persons aged over 65 years up until 2031 (Table 6.1).

Table 6.1: Projected Population Growth, Coffs Harbour LGA

(source: DP&I, 2013)

Age	Number of people			Age distribution (% of total population)			Growth 2011-31	
	2011	2021	2031	2011	2021	2031	No.	%
<15	13,500	14,450	14,300	19.0	18.8	17.8	850	6.1
15-64	44,900	45,300	44,400	63.3	58.9	55.2	-500	-1.1
65+	12,550	17,100	21,750	17.7	22.3	27.0	9,200	73.2
All ages	70,950	76,850	80,450	100.0	100.0	100.0	9,550	13.4

The Our Living City Settlement Strategy anticipates an increase of 7080 persons in the localities identified in this study (i.e. Hearn's Lake, Sandy Beach, Moonee Beach, Emerald Beach, and Sapphire Beach), with more targeted growth around Moonee Beach. Even assuming no decrease in household size this still represents approximately 2,500 dwellings. Even if the latest DP&I figures which appear on the more conservative side are utilised then the population growth may still represent at least 4,000 dwellings, assuming little change in household size. As such the northern beaches area of Coffs Harbour will come under increasing pressure for development, also considering the lack of greenfield sites in Coffs Harbour itself.

Coffs Harbour City Council's own population forecasts estimate a population of just under 95,000 at 2031 (Table 6.2). The subject areas are identified for potential growth.

Table 6.2: Population Forecasts, Coffs Harbour LGA

(source: Coffs Harbour City Council)

Area	2011	2021	2031	Total change	Avg. annual % change
Coffs Harbour City	70,931	80,959	94,894	+23,963	1.5
Boambee East	5,588	5,616	5,732	+144	0.1
Bonville - Bundagen - Boambee	4,143	5,693	7,112	+2,969	2.7
Coffs Harbour (Central North)	6,250	6,265	6,459	+209	0.2
Coffs Harbour (Central)	6,179	6,484	7,037	+858	0.7
Coffs Harbour (North East)	5,138	5,751	6,592	+1,454	1.3
Coffs Harbour (South East)	2,463	3,821	5,892	+3,429	4.5
Coffs Harbour (West)	5,472	6,395	8,292	+2,820	2.1
Korora - Sapphire Beach	4,121	5,064	5,665	+1,544	1.6
Moonee Beach	1,611	2,619	4,222	+2,611	4.9
North Boambee Valley	1,656	2,661	4,019	+2,363	4.5
Northern Beaches	4,179	4,851	5,660	+1,481	1.5
Rural West	4,573	4,794	5,099	+526	0.5
Sandy Beach - Emerald Beach	4,415	4,752	5,453	+1,038	1.1
Sawtell	3,612	3,805	4,038	+426	0.6
Toormina	6,294	6,530	6,786	+492	0.4
Woolgoolga	5,237	5,858	6,836	+1,599	1.3

Overall, it is considered that there will be growth in Coffs Harbour LGA into the future, given its increasing status as a major regional centre on the north coast of NSW. Council's population growth projections and land supply is currently being reviewed, however, it is considered that areas to the north of Coffs Harbour are increasingly likely to be targeted for future growth given the areas location to Coffs Harbour and Woolgoolga, the NSW coast and the linkages with the new Pacific Highway. Even if the more conservative population forecasts are used, the study area is likely to come under increasing pressure for future growth.

6.2 ECONOMIC CONSIDERATIONS

As noted previously, Coffs Harbour has been identified in the Mid North Coast Regional Strategy as a major regional centre. It is estimated that the GRP (Gross Regional Product) is approximately \$2.7 billion which represents about 0.6% of the GSP (Gross State Product).

The LGA has a significant number of employment generating industries in Coffs Harbour including medical services, tertiary education, tourism and retail, and the airport. The main employment generating industries in the area are Retail Trade, Accommodation and Food Services, Health Care and Social Assistance, Construction, and Education and Training. These five industry sectors contribute to approximately 57% of the workforce in Coffs Harbour. With an ageing population it is expected as in other LGAs that Health Care and Social Assistance jobs will increase as a proportion of the workforce.

Council's economic and business strategies identify the major regional centres near the study area as Coffs Harbour and Woolgoolga with subject townships providing more localised services and facilities. The northern end of the study area is likely to rely more on Woolgoolga for services and facilities, while the southern areas will rely more on Coffs Harbour. It is noted that all areas will generally utilise Coffs Harbour for more regional services (e.g. medical services).

Overall, Coffs Harbour is identified as a major regional centre and it is likely that this function will continue, with the study areas providing local services for the day-to-day needs of residents.

6.2.1 Building Approvals

A review of building approvals data from the ABS identifies that in the period 2006-07 and 2012-13, between 160 to 394 approvals per annum were undertaken in Coffs Harbour LGA (Table 6.3). Given the potential population projections for Coffs Harbour (at the higher end of the projection scale) it is considered that approvals may need to increase slightly. For example, Council's own population forecast is for an additional 23,963 persons over a twenty year period. This equates to 428 households per annum (assuming a household size of 2.8 persons) or 461 (at 2.6 persons per household). This does not include a reduction in household size. Notwithstanding this, Council are currently reviewing their land use strategy and undertaking a land capacity assessment. It is expected that these projects will address this issue. This project has considered this outcome in this study.

Table 6.3: Building Approvals Data, Coffs Harbour
(source: ABS)

	New houses	New other residential building	Total dwellings
2012-2013	208	44	252
2011-2012	123	37	160
2010-2011	175	27	202
2009-2010	197	92	289
2008-2009	158	190	348
2007-2008	185	194	379
2006-2007	173	221	394

6.3 POTENTIAL POPULATION GROWTH IN THE STUDY AREA

An assessment was undertaken of potential population growth in the deferred areas. This assessment was based on approved developments both under Part 3A and those assessed by Council, as well as estimates of other potential growth in the study based on a per hectare calculation of developable area. Consideration was also afforded to the current Section 94 Plans and the DCP that applies to the study area. Consultations were also undertaken with Council in regards to this matter. It is estimated that approximately 670 lots/dwellings are *approved or anticipated to be constructed* in the Hearnes Lake/Sandy Beach area up until 2031, and approximately 1,500 lots/dwellings in Emerald Beach, Moonee Beach and Sapphire Beach. Across the deferred areas this equates to 2,170 lots/dwellings or approximately 5,642 persons (at 2.6 persons per household or 6,076 persons at 2.8 persons per household). It is noted that some other forms of development may occur (e.g. aged care facilities) but for current planning purposes the above numbers will be utilised.

7. INFRASTRUCTURE AND SERVICES

As part of this project discussions were held with organisations regarding the availability of services to the study area and potential issues with future development in the area. A report outlining the discussions is presented in Appendix E.

7.1 ELECTRICITY

It is understood that the townships located within the study areas can access electricity. Some augmentation may be required but this will be addressed for each development.

7.2 TELECOMMUNICATIONS

It is understood that telecommunication services are available to the study areas. Some augmentation may be required as development is progressed, although no major issues were identified.

7.3 WATER AND SEWER

It is understood that the majority of the study area is currently serviced by reticulated water and sewer, or plans are in place to provide the entire study area with reticulated water and sewer. Council have a water and sewer development servicing plan. Some augmentation of existing water and sewer services may be required as development progresses, although no major impediments were identified.

7.4 ROADS

As previously noted the Pacific Highway is the main thoroughfare linking the study area with Coffs Harbour in the south and Woolgoolga in the north. Access and egress to the townships identified in this study is mainly via the Pacific Highway. Any future development will need to consider the Pacific Highway (including its final access and egress arrangements) and how and proposed development addresses the main access and egress points.

In regards to other roads in the locality these are addressed below.

7.4.1 Link Road from Northern Sapphire Beach to Moonee Beach

Previous plans prepared by Council have identified a link road between the approved development at North Sapphire Beach linking with Moonee Beach Road in the north. The Pacific Highway upgrade proposes a local road on the western side of the Highway to pick up rural residential properties to the west of the Highway. Existing properties will have access to the Highway via Sapphire Beach and Moonee Beach. However, it has been proposed to link North Sapphire Beach to Moonee Beach via a local road/collector road. In 2012 the NSW Roads and Maritime Services (RMS) purchased a parcel of land (Lot 66 DP 551005) as a biodiversity offset which was identified as containing part of the collector road.

Further investigations have revealed that there is no easement on the lot purchased by the RMS for access in favour of Council. An easement for water and sewer (5 metres) wide runs alongside the Pacific Highway which is unlikely to handle any access roads. Also, an

easement exists on the site (15 m wide) in favour of Country Energy (now Essential Energy). Given the topography of the land which this collector needs to traverse through the RMS site as well as the lack of an existing easement and environmental issues the cost of building the road may be cost prohibitive.

Consideration was afforded to whether this road could attract developer contributions. The potential traffic that would utilise this local road is likely to be minimal. A significant portion of traffic north of Moonee town centre is unlikely to utilise this road going south and residents in Sapphire heading towards Coffs are unlikely to go north to then head south. This report was not required to assess the potential traffic utilisation of a potential road linking North Sapphire to Moonee Beach. This is not to say that a road cannot be built in this area, however, the final decision on this road is a Council matter. In deciding whether to progress it would be worth considering the practicalities of constructing a road (in an electricity easement, with environmental issues and within an area identified for a biodiversity offset) as well as preparing a cost benefit analysis. Some discussion was also held with key stakeholders about whether a shared pathway is a potential option. Consultations with key stakeholders and consideration of the issues identified above identified that a shared path is a preferred option rather than the link road.

7.4.2 Linkages North of Hearnese Lake Road

The Pacific Highway upgrades as identified in Figure 4.4 will provide access and egress arrangements to the north of Hearnese Lake Road via a new round-a-bout just to the north of Hearnese Lake Road, linking the area to the new Highway via Graham Drive. It is considered that this round-a-bout should be utilised for access to areas north of Hearnese Lake Road. It is noted that Hearnese Lake Road is adjacent to Hearnese Lake, and is also a Crown Road, however, additional access to the old Pacific Highway and Woolgoolga is more appropriate now that the final design of the Pacific Highway upgrade has been finalised. If this approach is considered the current contributions plan will need to be revisited.

7.4.3 Graham Drive

It is identified that with the new Pacific Highway route that there will be an increase in traffic utilising Graham Drive, if any development occurs at Sandy Beach on the eastern side of the Highway. Given there is a nexus between new development on the eastern side of the Highway at Sandy Beach and Graham Drive, there is an argument for this potential development to contribute to works on Graham Drive. Any changes to developer contributions in this area to contribute to Graham Drive works will need a traffic study to identify what proportion of the works any development in the eastern Sandy Beach area should contribute, which was not part of this study.

7.4.4 Access Arrangements Emerald Beach North

It is noted that development has been proposed on Lot 62 DP 1143405 at Emerald Beach. Access has been proposed, or discussed, both through the caravan park to the south and potentially to the old Pacific Highway to the west. Access to this site will need to be clarified.

7.4.5 Land Utilised for the Highway Upgrade

Discussions with landholders in the study area have identified that there are several land parcels adjacent to the Pacific Highway (e.g. near Old Bucca Road), which were utilised as

part of the works undertaken on the Pacific Highway. Some of these land parcels are zoned SP2 under the current LEP. It is understood that the RMS no longer requires these sites. These sites are outside of the study area, however, Council may wish to consider these in a further amendment to the LEP if RMS no longer requires the use of these lands. They are likely to be rezoned for residential development.

7.5 CYCLEWAYS

Council has a number of existing and proposed cycleways. These are also identified in the current contributions plans. It is anticipated that cycleways or shared pathways will link important areas such as recreational reserves.

7.6 RECREATION AND OPEN SPACE

It is noted that Council have prepared the Coffs Harbour City Council Open Space Strategy (2010). This strategy aims to achieve and promote a range of appropriate open space areas and recreation facilities. The LGA has a large amount of open space. It is identified that an aim of the Plan is to provide larger social spaces of a wider appeal, and cease developing pocket parks. This is a common occurrence in a large number of Council areas in NSW, that is, larger district or sub-district facilities that cater for a wider group of people. There will always be items such as boat ramps, nature trails etc that cannot be incorporated into such facilities. Nonetheless, it is considered that the aim of providing one social family space within 500 metres of the majority of households may conflict with the approach of providing larger and modern facilities in sub-district/district facilities. In the study areas, there are provisions for such facilities, although Hearn's Lake and Sandy Beach are relative close to Woolgoolga and Sapphire Beach to Coffs City Centre. Appropriate contributions are being collected for such works.

In addition, it is identified that the NSW Coastal Policy and SEPP 71 aims to protect access to foreshore areas in NSW. Any future development near the coast will need to ensure consistency with the NSW Coastal Policy.

8. CONTRIBUTIONS

Coffs Harbour City Council has a Section 94 developer contributions plan that applies to the study area. At the time of writing the following per lot contributions apply (subject to CPI):

- Hearnese Lake/Sandy Beach
 - Northern Precinct (\$7,812.06)
 - Western Precinct (\$9,095.49)
 - Eastern Precinct (\$3,925.44)
- Moonee Beach and Sapphire Beach
 - General (\$4,930.48)
 - Moonee Precinct (\$11,343.48)

On top of this there are water and sewer charges which are provided in accordance with Council's development servicing plans (DSPs).

Under Section 94E of the EP&A Act the Minister has instigated a maximum contribution of \$20,000 per lot for developer contributions and in some cases higher amounts. It is noted that sections of the Coffs Harbour LGA are exempt from this provision including some areas in the study area.

It was noted that as part of this project some minor modifications may need to be made to existing contribution plans particularly given the recent upgrades to the Pacific Highway, and works already undertaken by developers in the area. In addition, contributions plans will need to reflect potential population growth in these areas.

It is noted that current contributions plans across the LGA consider affordable housing provision.

Discussions with Council have also identified a strategy to incorporate sporting facilities in sub-regional or regional complexes (as noted above), which will impact on Section 94 plans.

The other main issues that arose during discussions with key stakeholders was the collector road between North Sapphire and Moonee Beach and the collector road between Moonee Beach northwards through proposed new residential release areas. These issues will need to be addressed in the Section 94 plan. Some infrastructure identified in the current Section 94 plans has been constructed and will need to be removed from the Section 94 Plan.

9. PREVIOUS APPLICATIONS AND STUDIES

It has been identified throughout this report that there have been a number of development applications lodged with Coffs Harbour City Council in the deferred areas, or Part 3A applications lodged with DP&I. A review of studies was undertaken on these sites. It is noted that the studies reviewed were on the DP&I's major project register or provided by Council. One landholder provided some ecological work for a site. An overview of the sites identified with applications, their status (at the time of writing) and consideration of environmental issues is presented in Table 9.1 below.

In addition, there were reports provided in the study area by the Department of Planning and Environment including:

- Sainty and Associates (2006) Environmental Constraint Analysis 45 Hearnese Lake Road, Woolgoolga;
- Sainty and Associates (2006) Environmental Constraint Analysis Lot 22 DP 1070182 Pacific Highway, Sandy Beach North;
- Sainty and Associates (2006) Environmental Constraint Analysis, Lot 66 DP 551005, Pacific Highway, Moonee Beach.

Table 9.1: Review of Available Information on Applications within the Study Area

Site	Lot and DPs	Number of Houses/Lots	Status	Application Number	Documents Sited	Issues Noted in Studies (in relation to proposed development)
45 Hearnese Lake Road	Lot 21 DP 714858	38	Project Approval	MP 07_0075	Environmental Assessment (Mersonn Pty Ltd) Apr 2009	No noise, European heritage, flooding. Visual assessment undertaken with low-moderate impact. Services available. Proposed connection to Council sewer. Coastal hazard assessment prepared. Low contamination risk. Acid sulfate soils outside developable area. Bushfire APZs to be put in place. Geotechnical issues can be managed. Stormwater and WSUD addressed. SEPP 26 buffer. Aboriginal heritage issues addressed. Some ecological issues, predominantly in area not to be developed.
					Stormwater Management Strategy (BMT WBM) Jul 2008	
					Coastal Hazard Definition & Lake Entrance Processes (Patterson Britton) Oct 2004 and updated Jul 2008	
					Flood Assessment (DeGroot and Benson) Apr 2009	
					Sandy Beach North Flood Assessment (Worley Parsons) Feb 2009	
					Water & Sewer (DeGroot and Benson) Oct 2007	
					Flora and Fauna (ELA) Jul 2007	
					Traffic Study (RoadNet) Dec 2007	
					Aboriginal Heritage Assessment (Jacqueline Collins) Dec 2007	
					Bushfire Protection Assessment (ABPP) Oct 2007	
					Review of Environmental Constraints Analysis (ELA) Mar 2007	
					Road Traffic Noise Assessment (Heggies) Jun 2008	
					Geotechnical Assessment (Holmes and Holmes) Aug 2003	
					Landscape Plan and Visual Assessment (Anne Harrison) Sep 2007	
					Department of Planning Report Dec 2009	
					Preferred Planning Report (Mersonn) Sep 2009	

ENVIRONMENTAL STUDY

Site	Lot and DPs	Number of Houses/Lots	Status	Application Number	Documents Sited	Issues Noted in Studies (in relation to proposed development)
Woodhouse Road, Moonee Beach	Lot 211 DP 1044292 Lot 1 DP 262300	31	Project Approval Modification (no 1) approved	MP 08_0003	Environmental Assessment (Geoff Smyth) Jul 2009	Flora and Fauna: Threatened Moonee Quassia and Rusty Plum is located on the site.
					Phase 1 Contamination Assessment (GHD) Jan 2009	Noise: attenuation for some dwellings required.
					Traffic Impact Assessment (GHD) Dec 2008	Bushfire: 30m APZ.
					Archaeological Assessment (BCA) Jun 2009	GHD recommended Detailed Site investigations in relation to contamination.
					Bushfire Assessment (Bushfire Safe Australia) Mar 2007	Monee Beach Road and Woodhouse Road and associated intersections have capacity for increased traffic from the full development. Recommend traffic management measure for possible safety issues associated with restricted width of Woodhouse Rd at narrow median section.
					Geotechnical Assessment (DeGroot and Benson) Jul 2009	
					Acoustic Assessment (BlackEarth) Mar 2009	
					Preliminary Acid Sulfate Soil Assessment (GHD) Jan 2009	No further archaeological works required. Further action only on discovery of cultural material 30M APZ incorporating road and development landscaping.
					Flora and Fauna Assessment (James Warren & Associates) Jul 2007	
					Modification 1 - Stormwater Plan (DeGroot and Benson) Oct 2010	
					Director Generals Environmental Assessment Report Jun 2012	Slope instability and poor ground conditions for road manageable through appropriate design and construction. Recommends noise attenuation to mitigate night noise from Pacific Hwy for potentially affected lots.
					Modification 1 - Director Generals Environmental Assessment Report Sep 2013	

ENVIRONMENTAL STUDY

Site	Lot and DPs	Number of Houses/Lots	Status	Application Number	Documents Sited	Issues Noted in Studies (in relation to proposed development)
						Acid sulphate management plan required if soil disturbed exceed 1000 tonnes during construction. Prepare Vegetation Management Plan; Two threatened species - Moonee quassia and Rusty Plum - to be transplanted and fenced off. Only secondary koala habitat to be lost. No stormwater issues noted. Plan subsequently modified.
Moonee Parklands, Moonee Beach	Lot 1 DP 1097743 Lot 6 DP 25223	159	Concept Plan application	MP 09_0067	Environmental Assessment (JW Planning) Jun 2013	10m APZ.
					Bushfire Hazard Assessment (Building Code and Bushfire Hazard Solutions) Mar 2013	Aboriginal Heritage Management Plan required.
					Aboriginal Heritage Assessment (Myall Coast Archaeological Services) Jan 2013	No geotechnical issues noted.
					Geotechnical and Acid Sulfate Soil Assessment (Martens) Mar 2013	Erosion and Sediment plan required.
					Stage 1 Land Contamination Assessment (Martens) Mar 2013	ASS management plan required.
					Flood Assessment (Martens) Mar 2013	All flooding impacts contained within the site.
					Hydrogeological Study (Martens) Mar 2013	Adoption of mitigation measures for ecological impacts required to manage potential impacts.
					Ecological Assessment (PEA) Mar 2013	Building treatments required to meet noise compliance.
					Noise Assessment (Wilkinson Murray) Sept 2012	No traffic issues noted.
					Traffic Impact Assessment (BTF) Dec 2012	No stormwater issues noted.
					Concept Stormwater Management Plan (Martens) Mar 2013	

ENVIRONMENTAL STUDY

Site	Lot and DPs	Number of Houses/Lots	Status	Application Number	Documents Sited	Issues Noted in Studies (in relation to proposed development)
Graham Drive Sandy Beach	Lot 21 DP 1070182	102	Revoked	MP 08_0120	DGRs	NA.
Sandy Beach Mill, Graham Drive, Sandy Beach	Lot 260 DP 1110719	40	Project Approval	MP 08_0148	Environmental Assessment (SJ Connelly) Jul 2009	Site will be suitable for residential development following remediation. No major water quality issues noted. Threatened species and EEC unlikely to be impacted. No cultural heritage issues noted. Acceptable solutions required under PBP 2006. Noise mitigation measures required for some dwellings.
					ESA and Remediation Action Plan (Coffeys) Mar 2007	
					Water Quality Amendment Report (Coffeys) Jun 2009	
					Flora and Fauna Assessment (Peter Parker) Jul 2009	
					Cultural Heritage Assessment (Davis Heritage) May 2009	
					Bushfire Hazard Assessment (Holiday Coast Bushfire Solutions) Jun 2009 and addendum Jun 2010	
					Traffic Noise Assessment (Atkins Acoustics) Oct 2006	
Glades Estate, Moonee Beach	Lot 1 and 2 DP 725785	524	Project Approval	MP 06_0143	Aboriginal Cultural Heritage Assessment (ERM) Oct 2007	Area of moderate heritage significance within site 2. Management identified. Some sites should be protected during construction. Compliance with bushfire safety recommendations required. Minor impact to threatened species on the site and surrounding habitats, which can be ameliorated by several measures. Further geotechnical testing required in Zone 2.
					Bushfire Risk Assessment (RDM) Sept 2007	
					Flora and Fauna (James Warren and Associates) Nov 2007	
					Geotechnical Assessment (Coffeys) Dec 2005	
					Hydraulic Assessment (Cardno) Mar 2007 (Figures Only)	
					Noise Assessment (HK Clarke and Associates) Jan 2006	
					Environmental Assessment (ERM) Nov 2007	

ENVIRONMENTAL STUDY

Site	Lot and DPs	Number of Houses/Lots	Status	Application Number	Documents Sited	Issues Noted in Studies (in relation to proposed development)
						Noise mitigations required for selected dwellings.
Bateman Site, Moonee Beach	Lot 5 DP 252223	20	Withdrawn	MP 08_0242	Preliminary Environmental Assessment (Geoff Smyth) Sept 2008	NA.
					Preliminary Flora and Fauna (James Warren and Associates) Aug 2008	
Moonee Waters, Moonee Beach	Lot 66 DP 551005	98	Concept Plan approval	MP 05_0064	Environmental Assessment (Annand Alcock Urban Design) Nov 2007	No water management issues noted. Additional traffic impact assessment noted.
					Water Management Report (Patterson Britton) Oct 2007	
					Traffic Noise Assessment (GHD) Nov 2007	
					Flora and Fauna (F Dominic Fanning) Aug 2006	
					Coastal Hazard Definition Study (Patterson Britton) Jun 2007	
					Aboriginal and Archaeological Survey and Assessment (Umwelt) Dec 2006	
					Bushfire Assessment (ABPP) Nov 2007	
					Traffic Report (John Coady Consulting) May 2007	

ENVIRONMENTAL STUDY

Site	Lot and DPs	Number of Houses/Lots	Status	Application Number	Documents Sited	Issues Noted in Studies (in relation to proposed development)
North Sapphire Beach	Part 13/882816, 49/861518, 50/881378, Part 441/100712	300	DA approved Department of Planning March 2006. Three subsequent modifications.	DA 130-05-2005	DA Assessment Report	No issues noted. Each catchment to have retention basin. All lots to be fitted with 2.5kL water tank. New lots to be managed as OPA, and occupied lots as IPAs. Future dwellings must be constructed to standards for bushfire prone land; APZ to be maintained.
					Department of Planning Reports for DA and Modifications	
					Statement of Environmental Effects (Modification 3) Oct 2012	
					Stormwater Management Strategy Stages 5-10 (GHD) Oct 2012	
					Bushfire Report Modification 3 (Holiday Coast Bushfire Solutions) Nov 2012	
Emerald Beach, Pridel Investments	Lot 2 DP 840016	121	Revoked	MP 05_0076	Preliminary Environmental Assessment (Aspect North) Apr 2006	NA

ENVIRONMENTAL STUDY

Site	Lot and DPs	Number of Houses/Lots	Status	Application Number	Documents Sited	Issues Noted in Studies (in relation to proposed development)
Sandy Beach North	Lot 22 DP 1070182 Lots 497 and 498 DP 227298	200	Concept Plan Approval	MP 05_0083	Concept Plan Approval Dec 2010	Approved, however development footprint reduce for ecological habitat and buffer; bushfire management and foreshore management required.
					Environmental Constraints Analysis (Sainty and Associates) Sep 2006	EEC and salt marsh, 50m - 100m buffer., 3.5m AHD buffer for development due to coastal processes.
					Preferred Project Report (Willana Associates) Aug 2010	Further commitments made with regard to access, stormwater management, Bushfire and Veg management, and acoustics.
The Pines Caravan Park, Hearnese Lake	8 Hearnese Lake Rd Lot 106 DP 1144462	53	Approved	MP 08_0005	Environmental Assessment (CoastPlan) August 2010	Proposed rehabilitation of effluent disposal areas and connection to reticulated sewer. Other services available.
					Environmental Site Assessment (Coffeys) Sep 2009	WSUD.
					Preliminary Geotechnical and Acid Sulfate Soil Assessment (Coffeys) Sep 2009	Bushfire APZs to be put in place. Buffer to Hearnese Lake and Vegetation Management Plan.
					Traffic Impact Assessment (GHD) Sep 2009	No PASS or actual ASS identified.
					Noise Impact Assessment (Reverb) Sep 2009	Geotechnical issues can be managed.
					Bushfire Assessment (Australian Bushfire Assessment Consultants) Sep 2009	Coastal hazard assessment undertaken.
					Ecological Assessment (Geolink) Jan 2008	No flooding or European heritage.
					Aboriginal Cultural Heritage Assessment (Jacqueline Collins) Sep 2009	

ENVIRONMENTAL STUDY

Site	Lot and DPs	Number of Houses/Lots	Status	Application Number	Documents Sited	Issues Noted in Studies (in relation to proposed development)
						Aboriginal heritage to be managed. Noise wall.
No 1 Hearn's Lake Road	Lot 4 DP 612977	96	Approved	DA 80-12	Statement of Environmental Effects (Geoff Smyth Consulting) 2011	Rehabilitation works from former ablution blocks and effluent ponds from previous caravan park.
					Bushfire Assessment (Bushfire Safe (Aust) Pty Ltd) 2009	Aboriginal heritage - management plan and further works to be undertaken on part of the site.
					Engineering Issues Statement (De Groot and Benson) 2011	Traffic noise - noise wall to be provided.
					Flora and Fauna Assessment (James Warren & Associates) 2010	Bushfire APZs to be put in place.
					Cultural Heritage Assessment (Bonhomme Craib & Associates) 2010	Potential acid sulfate soils areas not be developed.
					Geotechnical Study (Holmes and Holmes) 2003	No European heritage, flooding or servicing issues.
					Road Traffic Noise Assessment (SLR) 2011	Geotechnical issues can be managed.
					Stormwater Management Report (De Groot and Benson) 2011	Water quality to be addressed through WSUD and reticulated sewer.
					Contamination Assessment (De Groot and Benson) 2009	

ENVIRONMENTAL STUDY

Site	Lot and DPs	Number of Houses/Lots	Status	Application Number	Documents Sited	Issues Noted in Studies (in relation to proposed development)
198 Graham Drive, Sandy Beach	Lot 21 DP 1070182	18	Approved Dec 08	DA 93-08	Flora Assessment (Idyll Spaces Environmental Consultants) 2007	No threatened species within site. No significant impact on threatened species, populations, communities or critical habitat.
					Bushfire Hazard Assessment (Idyll Spaces Environmental Consultants) 2007	APZs required. Compliance with building in bushfire prone land.
					Management Plan for the Salvage of Artefactual Material (John Appleton) 2007	Aboriginal Heritage Management Plan required.
					Traffic Impact Study (RoadNet) 2007	No major traffic impact.
					Fauna Assessment (Kendall & Kendall Ecological Consultants) 2007	No significant impact to threatened fauna species, populations or endangered communities. Recommendation to enhance habitat for microbats and planting of Tallowood trees.
					Noise Impact Assessment (HK Clarke & Associates) 2007	No traffic noise impacted likely.

ENVIRONMENTAL STUDY

Site	Lot and DPs	Number of Houses/Lots	Status	Application Number	Documents Sited	Issues Noted in Studies (in relation to proposed development)
13 & 15 Split Solitary Rd, Sapphire Beach	Lot 15 DP 882816 and Lot 1 DP 1121000	26	Approved Mar 13	DA 167-13	Statement of Environmental Effects (Newnham Karl Weir & Partners) 2012	No major traffic issues noted. No aboriginal artefacts found on site. Further assessment required only if artefacts found during construction. No threatened species records during the survey. Two fig trees to be retained within proposed public reserve. Site previously used as banana plantation, however land is suitable for proposed future residential use. Remediation not required. No major water issues noted. APZs required, with some dwellings to be built to BAL19 standard. Access is in accordance with PBP.
					Traffic Management Plan (Geoff Slattery Partners) 2012	
					Aboriginal Objects Due Diligence Site Inspection and Assessment Report (Castlereagh Lachlan Environmental Services) 2012	
					Flora and Fauna Assessment (Bushfire Safe (Aust) Pty Ltd) 2011	
					Preliminary Soil Assessment (GHD) 2011	
					Water Management Plan (Geoff Slattery & Partners) 2012	
					Bushfire Risk Management Plan (Bushfire Safe (Aust) Pty Ltd) 2011	

ENVIRONMENTAL STUDY

Site	Lot and DPs	Number of Houses/Lots	Status	Application Number	Documents Sited	Issues Noted in Studies (in relation to proposed development)
Emerald Beach North	Lot 62 DP 1143405	38	Being Assessed	DA 172-14	Statement of Environmental Effects (Bennell & Associates) 2013	No aboriginal artefacts found on site. Further assessment required only if artefacts found during construction.
					Archaeological Investigations (John Appleton) 2011	Worley's report concludes that the earlier study by WBM overestimated the coastal impact from sea level rise. Rather, development could occur in accordance with the Draft Coffs Harbour Coastal DCP (as at 2 Aug 2012).
					Coastal Assessment (Worley Parsons) 2012	
					Flooding and Climate Change Report (WBM) 2012	Revised layout reduced flood risks identified from previous study. Impacts to revised layout likely to be negligible from a flood perspective.
					Stormwater Management Plan (WBM) 2012	No water issues noted. Further assessment recommended to improve definition of groundwater flows, infiltration.
					Bushfire Hazard Assessment (Holiday Coast Bushfire Solutions) 2012	Two access roads proposed to the site. Perimeter road will provide separation from threat. APZ (20m) required. Future dwellings to comply with building in bushfire zone.
					Biobanking Assessment (Patricia Chadwick) 2013	Vegetation management required.
					Limited Phase 2 Environmental and Geotechnical Site Investigation (RCA) 2007	Dedicated tanks required - if no reticulated water.
					Construction Noise Impact Assessment (CRG) 2011	Bio Certification granted. Onsite conditions apply. Credit retirement identified but need to be confirmed retired.

ENVIRONMENTAL STUDY

Site	Lot and DPs	Number of Houses/Lots	Status	Application Number	Documents Sited	Issues Noted in Studies (in relation to proposed development)
						Coastal plain requires management by conventional measures. Further geotechnical assessment required, but site suitable for proposed development. No issues regarding construction noise noted.
Graham Drive, Sandy Beach(Sandy Beach Mill)	Lot 260 DP 1110719	24	DA approved (deferred commencement) Feb 08	DA 508-07	Statement of Environmental Effects (SJ Connelly Pty Ltd) 2006	Acid sulfate soils present. Further investigation and testing required for alternative footing types and soil classification. Acid Sulfate Management Plan completed.
					Environmental Site Assessment & Preliminary Geotechnical & Acid Sulfate Soils Assessment (Coffey Geotechnics) 2006	
					Traffic Impact Study (RoadNet) 2005	Adequate capacity in road network. Intersection upgrades may be required in the future.
					Flood Assessment (GHD) 2006	Site is predominantly low / no flood risk operation.
					Flora and Fauna Survey (Peter Parker Environmental Consultants) 2006	No significant impact to threatened fauna species or endangered communities.
					Bushfire Hazard Assessment (Barry Eadie Consulting Pty Ltd) 2005	Maintain APZs. One lot with construction to requirements for bushfire prone land.
					Traffic Noise Planning Assessment (Atkins Acoustics) 2006	. Noise mitigation measures required for dwellings adjacent to east and west boundaries.
					Water Quality Assessment (GHD) 2006	WSUD used to achieve stormwater mgt. Final treatment dependent on final lot layout.

ENVIRONMENTAL STUDY

Site	Lot and DPs	Number of Houses/Lots	Status	Application Number	Documents Sited	Issues Noted in Studies (in relation to proposed development)
1026 Pacific Highway, Sapphire Beach	Lot 1 DP 1110623	6	DA approved Jun 2007	DA 770-07	Environmental Study (Peterson Consulting Group) 2007	No contamination issues noted. No further investigation required. Assessment in accordance with PBP 2001. APZ provided. Road access complies. Construction standard of dwellings required for bushfire prone land.
					Preliminary Site Contamination Assessment (GHD) 2004	
					Testing for Chemical Residues Split Solitary Road Sapphire (Holmes & Holmes) 1995	
					Bushfire Risk Management Report (Bushfire Safe (Aust) Pty Ltd) 2006	
3 Moonee Beach Rd, Moonee Beach	Lot 4 DP 252223	16	DA approved Jun 2002	DA 787-02	Statement of Environmental Effects (Smyth, Maher and Associates) 2001	NA.
Spilt Solitary Rd, Sapphire Beach	Lot 11 DP 1081287	9	DA approved Aug 2005	DA 984-05	NA	NA
Moonee Beach Rd, Moonee Beach	Lot 6 DP 1140702, Lot 6 DP 252223, Lot 1 DP 1097743	NA	DA approved in L&E Court	DA 1132-10	Statement of Environmental Effects (RDM) 2010	No issues noted.
198 Graham Drive, Sandy Beach	Lot 21 DP 1070182	24	DA approved Apr 2008	DA 1349-07	Vegetation Management Plan (GHD) 2010	NA.

ENVIRONMENTAL STUDY

Site	Lot and DPs	Number of Houses/Lots	Status	Application Number	Documents Sited	Issues Noted in Studies (in relation to proposed development)
North Sapphire Beach Beachfront Precinct	Lot 13 DP 882816	12	Assumed approved	DA 1474-06	REF Pedestrian Access Way and Dune Rehabilitation (Great Eastern Ecology) 2006	Acid sulfate soils potentially present. Management plan prepared. APZs required, fire trail provided, Access is in accordance with PBP 2001, BMP required. Development not affected by, or affecting, coastal processes. Dune vegetation should be maintained. Implications for development forms noted in the Plan.
					Acid Sulfate Soil Assessment (Coffey) 2006	
					Bushfire Risk Management Report (Bushfire Safe (Aust) Pty Ltd) 2006	
					Coastline Hazard Definition Study (Patterson Britton) 2005	
					Engineering Infrastructure Development Application Report (GHD) 2005	
					Flora and Fauna Survey (Peter Parker Environmental Consultants) 2006	
					Groundwater and Water Cycle Report (GHD) 2006	
31 Split Solitary Rd, Sapphire Beach	Lot 1 DP 628408	17	Approved (Deferred Commencement) Nov 2003	DA 1926-03	Linen plan issued by Council 27/10/2004. Validation of arsenic remediation 29/07/2004.	NA.
1 Hearnese Lake Road	Lot 4 DP 612977	86	Revoked	MP 05_0095	Part 3A DGRs, Preliminary Environmental Assessment for Part 3A, SEPP 71 Ministerial Submission, SEPP 71 Planning Report	NA - DA application relodged.

10. RECOMMENDATIONS

The overarching aim of this study was identify land use zones for areas deferred under Coffs Harbour LEP 2013. In coming to the final recommendations a number of issues were considered. This includes:

- Environmental constraints as identified from previous work, Council held information and some ground truthing (flora and fauna);
- Development that has already been approved by Council or DPE, including Concept Plan approvals issued under the former Part 3A of the Environmental Planning and Assessment Act 1979;
- The zoning provisions of the site under Coffs Harbour LEP 2000;
- Draft LEP amendments to LEP 2000 which were not gazetted;
- Strategic documents prepared by Council and State agencies;
- The zonings that were proposed under the draft Coffs Harbour LEP 2013 as exhibited;
- Consultations with Council, State agencies and key stakeholders;
- Future population growth projections and land supply issues in Coffs Harbour.

In addition, it is identified that there are still Part 3A projects and modifications to Part 3A projects still under assessment. Similarly, there is at least one DA currently under assessment by Council for a residential subdivision. While consideration was afforded to these proposals, the final outcome is unknown.

All these issues were considered in recommending the land use zones as identified below. It should also be noted that there are development applications and modifications to former Part 3A projects that are still ongoing. On this latter point, it is identified that at the time of writing the provisions of Coffs Harbour LEP 2000 still apply to the deferred areas, and that changes in zoning that may be recommended in this study may change the permissibility of those development applications and modifications.

Notwithstanding this, after weighing up all the considerations identified above the following changes are recommended to Coffs Harbour LEP 2013, as identified in Figures 10.1 to 10.3. For ease of use the study area has been categorised into several precincts:

- Hearnese Lake – land off Hearnese Lake Road;
- Sandy Beach (west) – land to the west of the Highway;
- Sandy Beach (east) – land to the east of the Highway;
- Moonee Beach (north) – land to the north of Moonee Beach town centre;
- Moonee Beach (west) – land to the west of the Highway;
- Moonee Beach – land to the east of the town centre;
- Emerald Beach (north) – site to the north of Emerald Beach;

- North Sapphire – lands to the north of the locality of Sapphire Beach;
- Sapphire – area around the existing caravan park

Table 10.1 also provides an overview of the proposed zonings. More detail is provided in Appendix F.

Figure 10.1 to Figure 10.3 below shows the recommended zonings, height limits and minimum lot sizes. It is also recommended that the current LEP acid sulphate soil maps will need to be updated in accordance with the acid sulphate soil planning maps. In accordance with the current LEP no floor space ratios have been applied to the areas. The LEP heritage maps and biodiversity maps do not require updating.

In coming to the following recommended zoning the following should be considered:

- Based on a review of current policies and guidelines and discussions with state agencies and Council a 50 metre buffer should be applied to existing creek lines/major watercourses. This may increase due to other environmental issues (e.g. ecology, archaeology, water quality, sea level rise etc). However, a reduction would only be considered where it is evident from appropriate detailed studies that all environmental issues including water quality is considered. In this regard, all future development will need to consider Council's water quality policy. A review of this policy as part of this work has deemed it to be satisfactory in addressing water quality from development sites.
- The proposed zonings do not guarantee a development outcome. Appropriate studies will need to be prepared for future development applications, and other relevant legislation (e.g. Threatened Species Conservation Act) will still need to be considered.

Additional Zoning Provisions in the LEP

It is recommended that Council consider as part of their broader strategic land use studies the issue of infrastructure provision within certain zones. That is, there are numerous examples in the LGA where E2 zones are adjacent to residential zones (e.g. R2 zones). However, the E2 zone does not allow some infrastructure works that may be required to service a residential development. It is considered that the E2 should be for the protection and conservation of land and that other zones (e.g. E3) may need to be considered to provide a buffer between the E2 zones and residential areas. As part of this study some R2 zones are proposed to be extended on sites already approved for development to allow infrastructure development that is not possible in the current E2 zone.

It was also noted recommended that as part of future strategic planning work that Council consider the use of an E3 and E4 zone. There are significant areas of vegetation to the west of the study area and the use of an E3 or E4 zone may be an appropriate zone for use within certain areas of the LGA.

Medium Density Housing

Consideration was afforded to identifying potential R3 Medium Density zones in parts of the deferred areas. Given the current market preference (including previously approved DAS) for single detached dwellings it was considered that there is not the demand within the deferred areas for such dwellings at the present time. Some areas around Moonee town centre are already zoned and approved for such development, but have not been

constructed, which is likely to be ample supply in the area. It is noted that the current minimum lot size in residential zoned areas in Coffs Harbour is 400 square metres, however, there are a limited number of lots being developed at this size with lots tending to be larger. This also suggests that there is limited demand at present for medium density housing in the area.

Notwithstanding, it is identified that the demand for medium density housing or small lot housing may change into the future. This issue should be revisited when Council undertakes its regular reviews of the land use strategy. Of the areas considered in this study, the potentially largest growth area will be around Moonee (some development is already approved in this area). This area, in the future, could be considered for some smaller lot housing or more medium density forms of housing given its closeness and linkages to the Moonee town centre, but also the future development of schools and sub-regional sporting facilities in the area.

West Moonee

In preparing this study a number of consultations and pieces of documentation were examined. There were significantly diverse views on the deferred areas to the west of the Pacific Highway at Moonee. There are a number of identified constraints, and opportunities, in the West Moonee area and potential land use conflict issues mentioned during consultations with key stakeholders. This includes issues associated with ecology, water quality, and spray drift for adjacent agricultural pursuits. This study has weighed up a number of issues in coming to the proposed zoning for this area (as identified above). Notwithstanding, it is considered that Council may wish to explore the option of undertaking an area specific DCP for this specific area to provide more detail to prospective developers and the community.

It is recommended that Coffs Harbour LEP 2013 include a Key Sites Map which identifies the area in West Moonee and includes provisions within the LEP outlining the requirement for a DCP including the objectives of the DCP (Figure 10.4). Similar provisions exist in other LEPs such as Lake Macquarie.

Minimum Lot Sizes

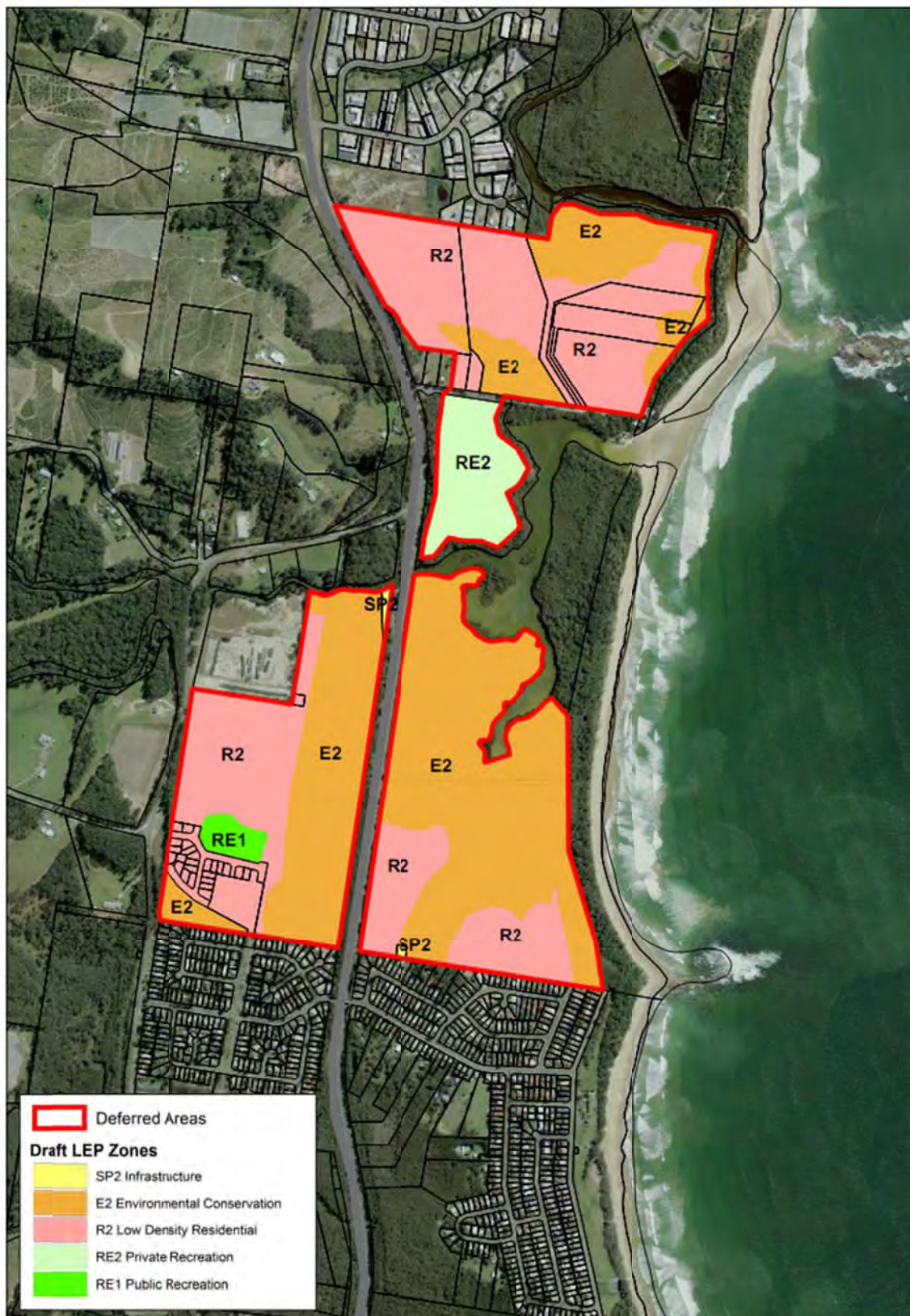
It is noted that under the current LEP 2013 the minimum lot size maps for the deferred areas include minimum lot sizes of 400, 550 and then 1200. It is recommended that as part of Council's future strategic work that other minimum lot sizes between 550 and 1200 be included in the LEP to provide more flexibility across residential zones. Based on the findings of this study a 600 minimum lot size is to be added to LEP 2013.

Table 10.1: Recommended Zonings Provisions by Sub-Area

Locality	Recommended Zone(s)	Comments
Hearnes Lake	RE2 for the Caravan Park R2 Low Density Residential Development E2 Environmental Conservation	RE2 zone currently permits caravan parks. SEPP 14 and vegetated areas zoned for conservation. Development has been identified in this area in previous planning documents. However, larger minimum lot sizes are identified in the north-eastern area where more sensitive areas exist. Consideration was afforded to whether Hearnes Lake Road should be closed as discussed with some stakeholders. It is considered this is unlikely given it is currently the main access into a number of sites with multiple owners.
Sandy Beach (west)	R2 Low Density Residential E2 Environmental Protection SP2 Infrastructure RE1 Public Recreation	Approved residential development off Graham Drive to be zoned R2. Other areas for potential development zoned R2. Land to the immediate west of the Highway has some environmental constraints and zoned E2. Land in north-eastern corner zoned SP2 as part of the Highway upgrade works. Some vegetation in the southern area is zoned for environmental conservation purposes. It is noted that future development may occur adjacent to Graham Drive.
Sandy Beach (east)	R2 Low Density Residential E2 Environmental Protection	Approved residential development under Part 3A to be zoned residential. Significant constraints in some parts of this area, which are considered suitable for an environmental protection zone. It is noted that a Part 3A modification has been lodged for an additional part of the site to be approved for residential development. This approval has been lodged under the previous zoning. If approved Council should undertake an LEP amendment or preferably the Department of Planning and Environment request the Minister/DG to change the zoning as part of the approval. It should be noted that this proposed residential area was previously rejected by the Department and as such has not been identified for residential development.
Moonee Beach (north)	R2 Low Density Residential E2 Environmental Conservation RE1 Public Recreation	Buffers to creek provided (indicatively 50 m) and proposed to be zoned E2. Vegetated areas and riparian corridors zoned for environmental conservation purposes. Area proposed for residential development identified as R2. Some slight increase in R2 areas to cater for future infrastructure where appropriate. In general, approximately 20 metres or up to the edge of vegetated areas has been identified. . Proposed recreation spaces identified as RE1. SP2 zone in the south west corner for Highway works.
Moonee Beach (west)	R2 Low Density Residential	Areas identified for low density residential development. Some areas may not be fully developed due to ecological issues which will need to be assessed as part of future DAs. However, proposed recreational node and school, and current residential zones to the north support consideration for future residential development, as well as previous zoning provisions.

ENVIRONMENTAL STUDY

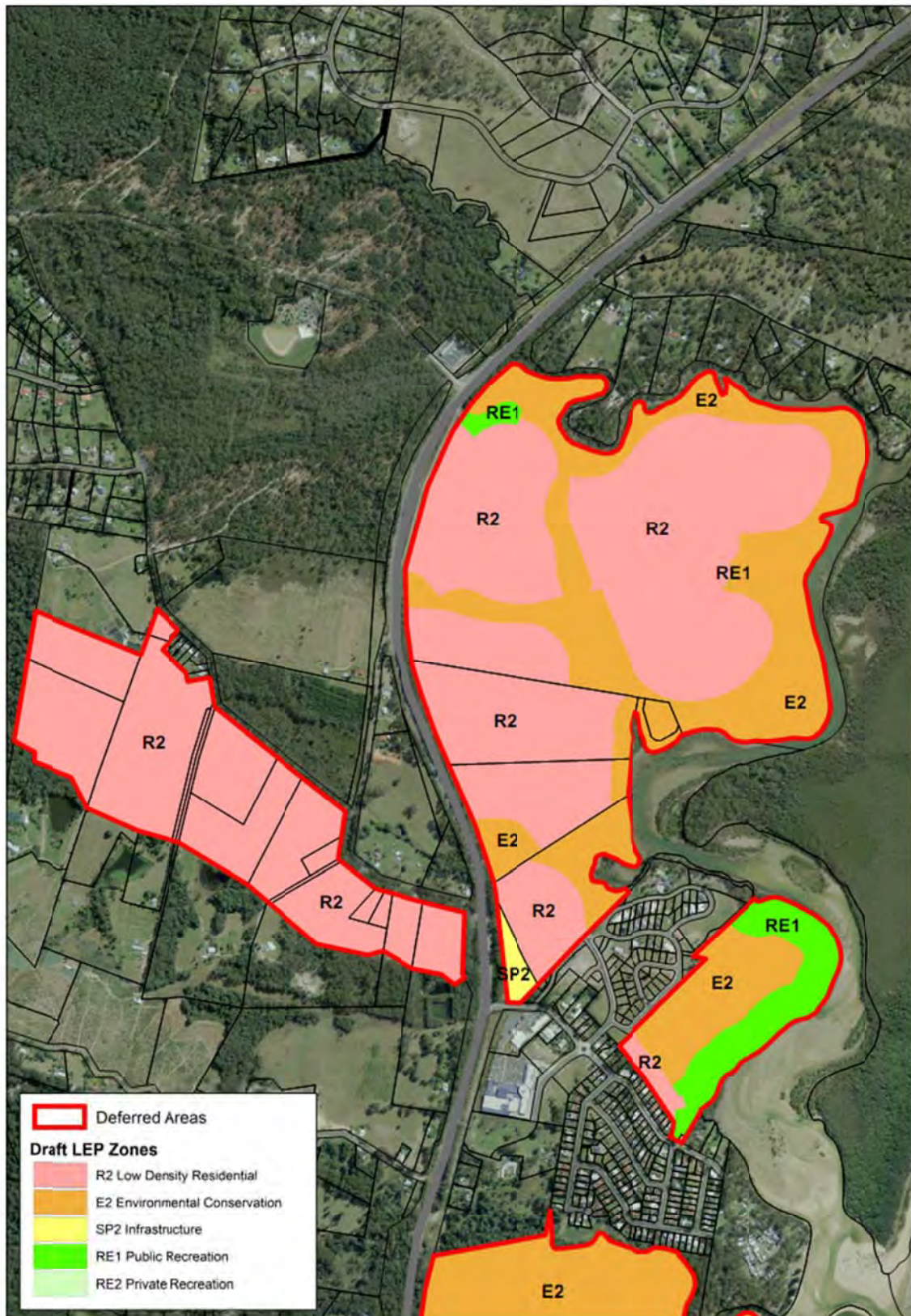
Locality	Recommended Zone(s)	Comments
Moonee Beach (east)	E2 Environmental Conservation RE1 Public Recreation R2 Low Density Residential	Key stakeholders have identified this as an environmentally sensitive site. It is recommended for part E2 zone and part RE1. The proponent raised the issue of a dwelling on this property. A dwelling house is permissible under this zone, however, would require further detailed assessment from Council given the sensitive nature of the site. The area adjacent to Skinners Creek to managed by Council is proposed to be zoned RE1. A small existing residential lot is zoned for residential development.
Emerald Beach (north)	Existing caravan park RE2 Private Recreation Area north of caravan park Part E2 Environmental Conservation and part R2 Low Density Residential Other areas to be zoned E2 Environmental Conservation	RE2 zone currently allows a caravan park. At the time of writing this area currently has a DA under assessment by Council. Stakeholders have raised issues with the site given some of its environmental constraints. It was concluded that a residential zone be recommended on part of the site. Consideration was afforded to the ecological constraints analysis presented in this study. Consideration was also afforded to Section 117 Directions in relation to the fact that the site is zoned for residential development under Coffs Harbour LEP 2000, and it is understood that residential development has been permissible since 1988, also bringing into considering equity issues given the sites historical zoning provisions. Notwithstanding, there are potential issues pertinent to this site including flood liability, potential sea level rise impacts, bushfire and visual impacts that would need to be addressed in more detail at a development application stage. It is noted that there is a biobanking agreement on the site as well. Overall, a number of issues were weighed up in coming to the proposed zonings in this area particularly the ecological analysis undertaken as part of this study. It is considered that this is a challenging site, however, at this strategic level it is considered some residential zoning is warranted after balancing up all the issues investigated as part of this study, but that more detailed assessment at the development application stage would be required. Larger minimum lot sizes (550 sq m) are also preferred as is currently provided under the LEP.
Sapphire (north)	R2 Low Density Residential E2 Environmental Conservation	Area of approved development to be zoned for low density residential development. Areas adjacent to the watercourse identified for E2. RMS Biodiversity offset site zoned for environmental conservation.
Sapphire	Area around existing caravan park RE2 Private Recreation E2 Environmental Conservation	Existing caravan park to be rezoned to RE2. Other areas to be zoned E2 for conservation.

Figure 10.1: Recommended Land Use Zonings**Hearnes Lake/Sandy Beach**

Emerald Beach



Moonee Beach



Sapphire Beach

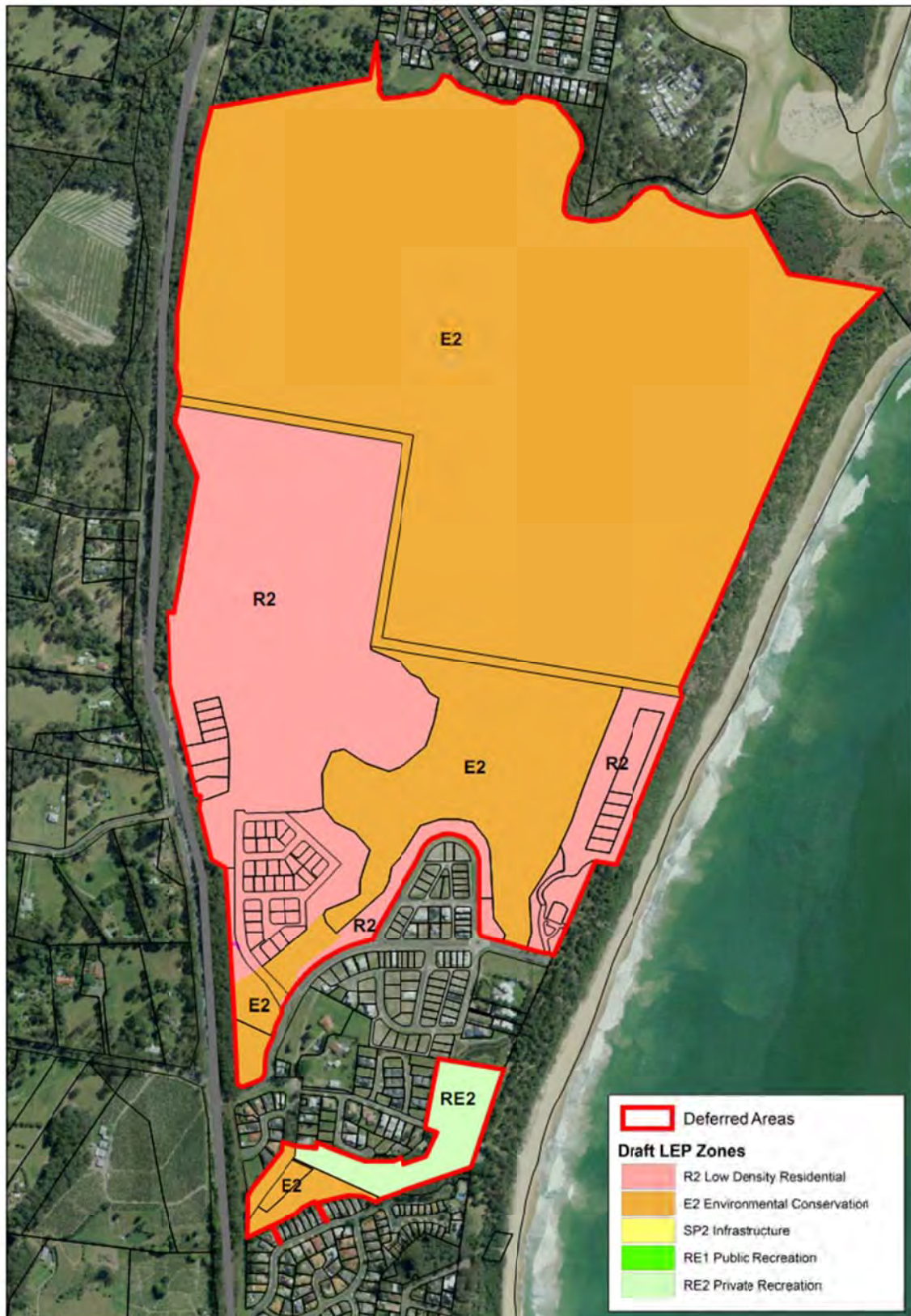
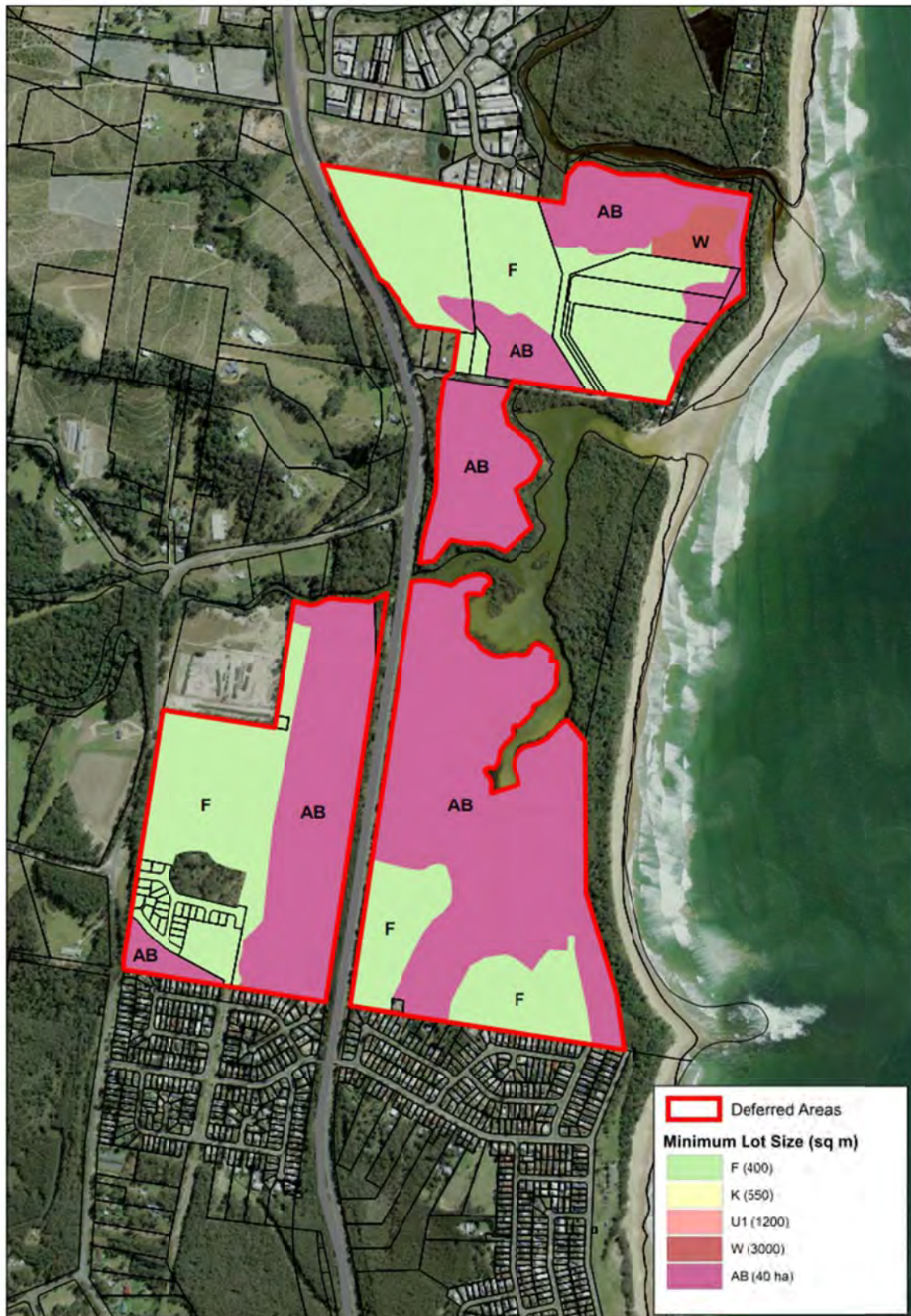
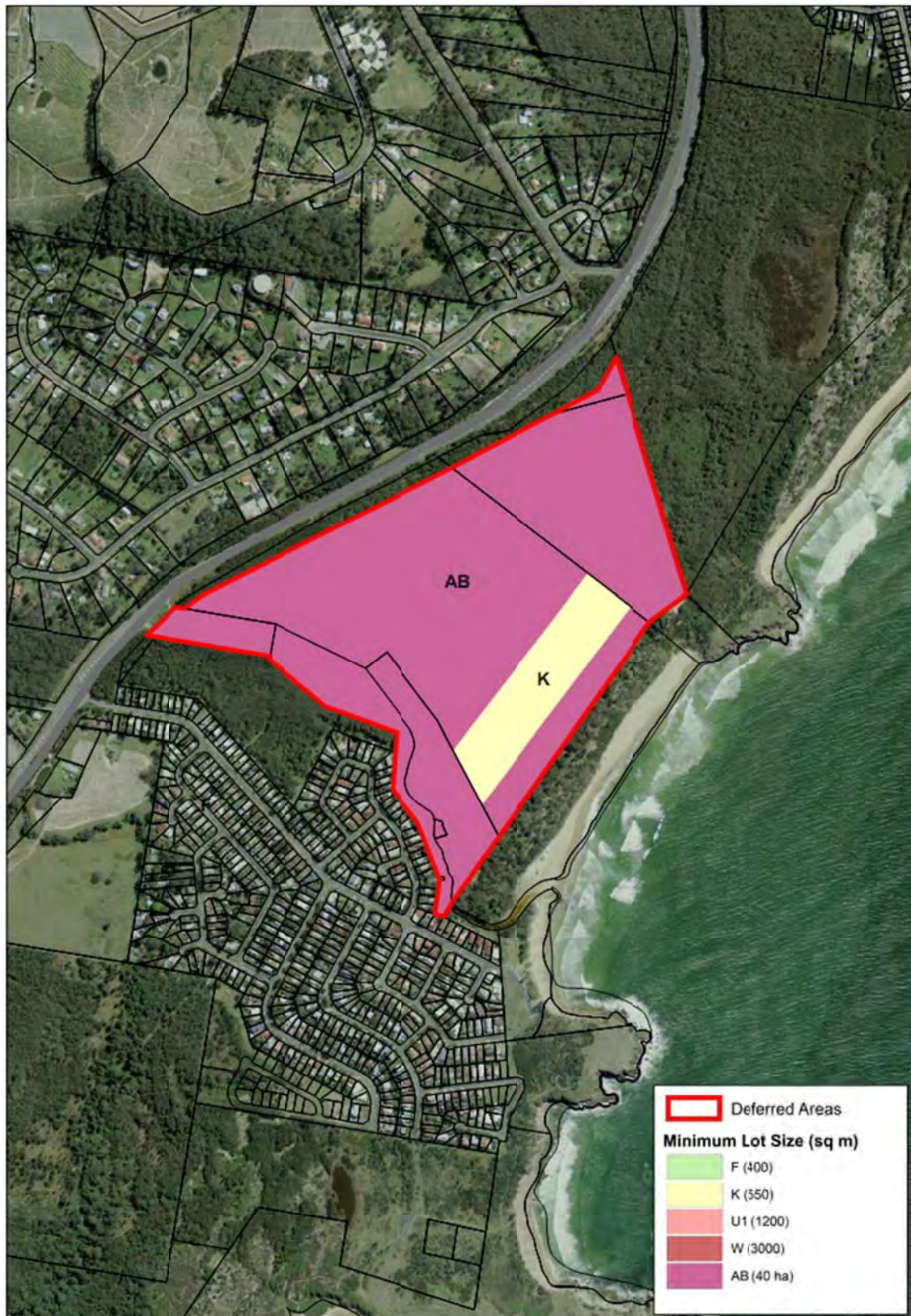


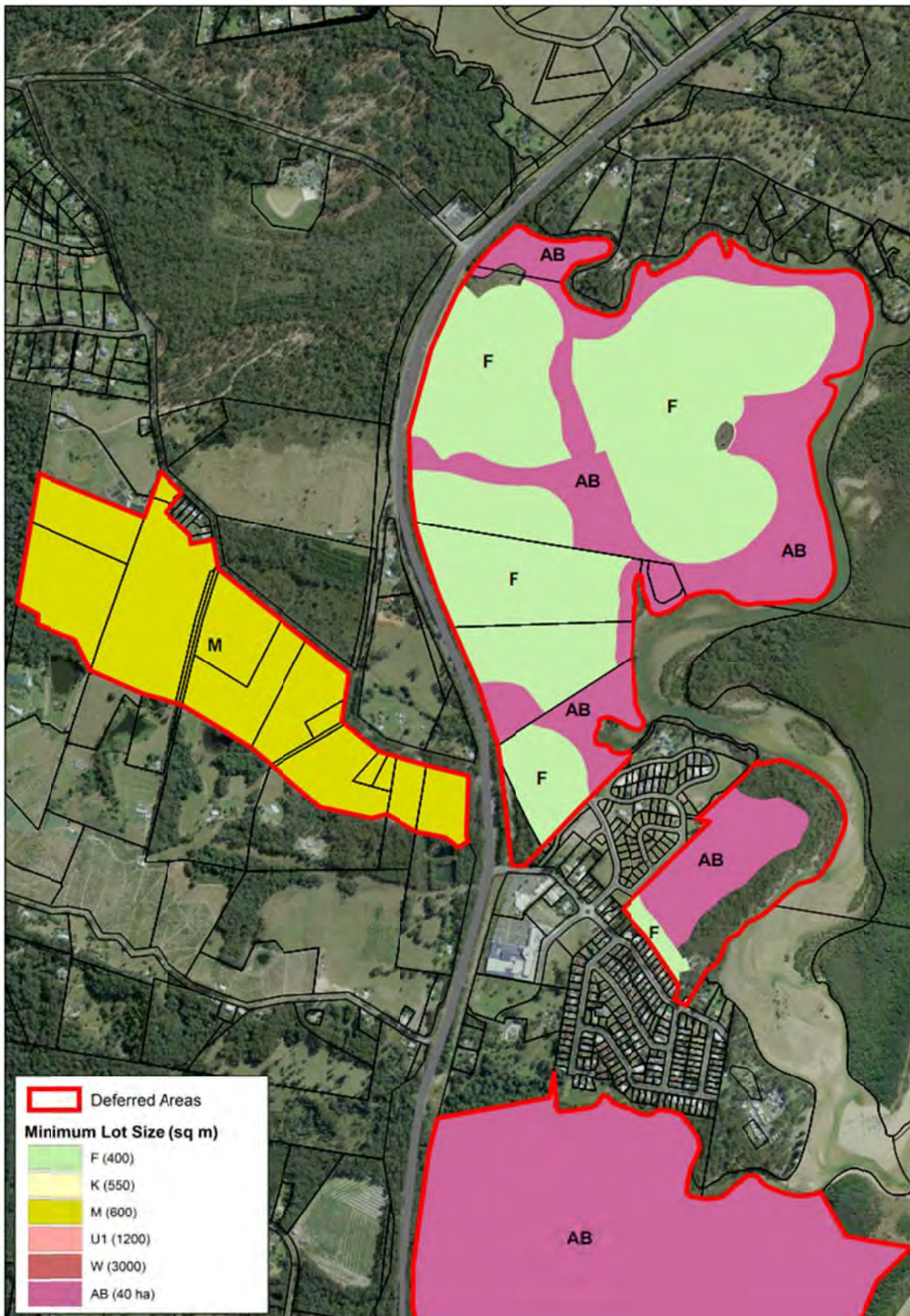
Figure 10.2: Recommended Minimum Lot Sizes**Hearnes Lake/Sandy Beach**

ENVIRONMENTAL STUDY

Emerald Beach



Moonee Beach



Sapphire Beach

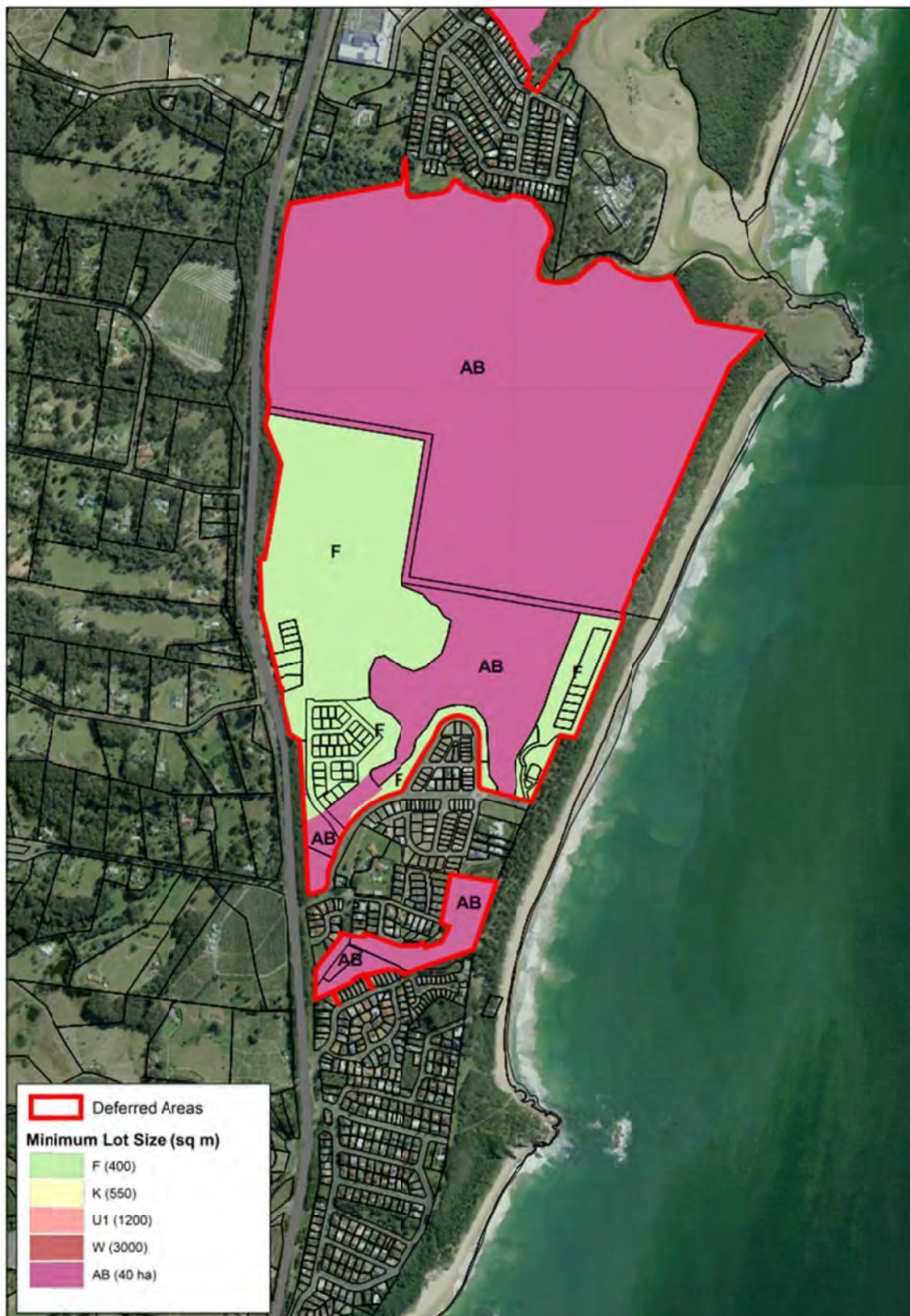


Figure 10.3: Recommended Building Heights**Hearnes Lake/Sandy Beach**

Emerald Beach



Moonee Beach



Sapphire Beach



Figure 10.4: Recommended Key Sites Map