

BYRON BAY TOWN CENTRE MASTER PLAN

RECLAIMING THE SPIRIT OF BYRON



JOHN SPARKS

JULY 2014

BYRON BAY TOWN CENTRE MASTER PLAN

RECLAIMING THE SPIRIT OF BYRON

JOHN SPARKS

JULY 2014

BYRON BAY TOWN CENTRE MASTER PLAN

Contents

SUMMARY	3
INTRODUCTION	4
BACKGROUND	5
AIM	9
METHODOLOGY	11
PLANNING STRATEGY	15
TOWN STRUCTURE	15
BEACH	17
TALLOW	21
RAILWAY	21
MARKET	21
PLANNING CONCEPTS	23
BEACH PARK CONCEPT PLAN.....	23
LIBRARY TO TALLOW CONCEPT PLAN	28
RAILWAY PARK CONCEPT PLAN.....	34
BUTLER STREET MARKET CONCEPT PLAN	39
THE MASTER PLAN.....	45
MASTER PLAN COMPONENTS	49
LANDSCAPE MASTER PLAN.....	50
CIRCULATION AND TRAFFIC	51
ENERGY MANAGEMENT PLAN	55
WATER MANAGEMENT PLAN.....	57
WASTE MANAGEMENT PLAN	60
THE SPIRIT OF BYRON	63
IMPLEMENTATION	70
CONCLUSION	72
APPENDIX.....	75

SUMMARY

Byron Bay is a spiritual place
Always has been, always will be

In recent times, the relentless pressure of commercialism in the name of progress has pushed this small town beyond its capacity to absorb the ideal of many interest groups and activities and still maintain the alternative lifestyle we enjoy and the reason that people come here.

This study assesses the potential of a vision for Byron Bay Town Centre to encompass its natural surrounds and enhance the open environment to be an integral part of the town. This includes the potential to be self-sufficient by generating energy, recycling water, reusing waste and producing food in a sustainable zero carbon town.

We look at the background of the existing town and at the open spaces which make up the public domain where people live, work, play and communicate.

The town structure is defined by four major open spaces, north, south, east and west and each of these spaces is assessed to establish their constraints, potential and a concept to achieve this potential.

These concepts are used as the basis of a Master Plan which completes the connections between the open natural environment and the circulation, traffic, functioning and enjoyment of the town as a whole.

The Spirit of Byron is reinforced with open spaces to allow the alternative lifestyle of Byron Town which is why visitors come and why we live here.

A set of planning principles is established to co-create a new natural environment for the future growth of the town based on the economics of happiness and the enjoyment of our unique environment.

Within this framework of principles there are many opportunities for self-expression with the arts, music, cultural richness and diversity in Byron and there is potential for the built environment to reflect the true nature of Byron and its alternative ways of doing things.

This study is meant to be a catalyst for all the ideas and aspirations of many people with their many visions to keep the uniqueness of this place and to honour the land, the water and the people who are part of this town.

This study is all about reclaiming the Spirit that is Byron.

INTRODUCTION

My vision for Byron Bay Town Centre is to be totally self-sufficient in generating energy, recycling waste and water, returning our excess for community use by co-creating with nature and rehabilitating our natural environment as a beautiful place for all people to live, work and play.

Imagine a zero carbon town centre with excess energy, grey stormwater recycling, sustainable waste systems, food security and vibrant community involvement in a natural environment.

This is not only feasible but makes good economic sense to those who choose to be part of our community and sets a significant example for others.

For a small population of about 10,000 people to cater for 1,400,000 visitors each year is no small task, and we can only do this by reclaiming our community and reinforcing the assets we have, because if we lose the uniqueness of Byron we lose the reason for visitors to come and finish up like all other mundane towns that come and go.

If we give to Byron it will return to us tenfold, but those who use the Byron brand to take away will only produce the artificial sameness which has no place here.

Byron Bay is an energy centre. The energy of the land, the energy of the water, the energy of the people. It is also a healing centre and the meeting place of Cavanbah for the Aboriginal peoples since ancient times.

To heal the earth and people is the first and foremost reason for being here. This planet gives to us abundance for all our needs, we only have to respect this and accept these gifts.

This report sets out a means of connection to place through community involvement with a method of analysis, assessment and concepts for the Town Centre as an example of the potential we can generate within our community.

BACKGROUND

Byron Bay is unique – it has a special energy and spirit which is in nature and the people who choose to live here.

Byron Bay is a sacred place and we are only visitors and the caretakers of this sacred place.

The township is located behind the primary sand dune extending from Belongil to Clarkes Beach, on a large flat area which is part of the coastal wetlands.

The town centre is surrounded by these extensive wetlands, coastal heath and areas of subtropical rainforest which contain the town and define its unique geographic qualities.

The Aboriginal people have lived and cared for this area since time began and it was Cavanbah - the meeting place for the surrounding mobs.

The geography, nature, energy and spirit of the land and peoples is what defines Byron Bay and this cannot be capitalised or exploited by secular interests without destroying the reason for being here.

The spirit of Byron does not have to be explained or rationalised - it just is.

Any master plan and concept must reflect this spirit and respect the land where it sits, way ahead of any commercial interests which need to be subservient to this spirit and co-create with nature.

A brief history of the Byron Shire, the geography and climate and summary of statistics from the 2006 Census and Byron Shire Council is included on the following pages for background information.

Byron Bay is the second most popular NSW tourist destination after Sydney with over 1.4 million tourists visiting Byron each year from nearby and distant countries.

With only 10,000 residents in Byron Bay we must be vigilant to preserve our reason for being here and still be worthy hosts to those who come to share our vision and respect this land.



3.A History of Byron Shire³

Byron Shire is situated in far north-eastern New South Wales. It comprises most of the catchment area of the Brunswick River and part of the Richmond River. It adjoins the Shires of Tweed (to the north) and Ballina (south), and the City of Lismore (west). The Shire is bounded in the east by the South Pacific Ocean, in the south partly by Skinners Creek and Wilsons River, in the south-west partly by Coopers Creek, and in the north-west partly by the Nightcap Range (Figure 1). The area of the Shire is 567 square kilometres.

The Shire was proclaimed, and its initial boundary described in detail, in the NSW Government Gazette of 7 March 1906. It was a creation of the Local Government (Shires) Act 1905, under which the whole of New South Wales, exclusive of the Western Division, the City of Sydney, and existing municipalities was divided into shires.

Byron Shire had an estimated resident population of 32 378 in June 2010, growing at approximately 1.5% per year.⁴ Its major urban areas are Byron Bay (with its satellites Suffolk Park and Ewingsdale); Brunswick Heads; Mullumbimby; Billinudgel/ New Brighton/ Ocean Shores; and Bangalow (Figure 1). Mullumbimby was incorporated as a separate municipality in 1908 and for the next seven decades was administered independently of Byron Shire. The Council of the Municipality of Mullumbimby was dissolved in October 1980, and its 1.7 square miles of territory reunited with the surrounding Byron Shire.

It is acknowledged that Byron Shire contains a wealth of Aboriginal cultural sites which include middens, stone arrangements, rock shelters, and tool-making sites. Additionally, many Aboriginal words have survived in the names of places within the Shire (e.g. Mullumbimby and Billinudgel). These all testify to the long period of occupation of this area by Aboriginal people prior to the arrival of the first explorers, surveyors and settlers of European origin.

Further discussion of the history of the Byron Shire is available in 'Thematic History', which was written by Brett J. Stubbs to support the Byron Shire Community-based Heritage Study in November 2006³.

³ "The History of Byron" is an extract from *Byron Shire, Thematic History April 2006 (pp 1 – 3)*, by Brett J Stubbs, which forms part of the Byron Shire Heritage Study undertaken by Byron Shire Council.

⁴ The population figure is adjusted from Mr Stubbs' original text based on the latest available ABS Regional Population Estimates by Local Government Area.

Figure 1: The boundaries of Byron Shire, main urban areas, and some other places referred to in this report





4. Geography and Climate

Byron Shire is approximately 200 kilometres south of Brisbane and some 800 kilometres north of Sydney. The Shire is renowned for its lush, green, rolling hills fringed by white sand beaches stretching virtually the length of the coastal fringe. Rainforest remnants dot the hinterland.

The two major rivers, the Brunswick and the Wilson, provide inland water systems for fishing and boating and add to the area's scenic attraction. The Brunswick River mouth is located at Brunswick Heads flowing west to Mullumbimby and Main Arm. Both the Wilson and Brunswick rivers flood in times of heavy rain, as do many of the minor streams and tributaries. Those areas most affected are Wilsons Creek with ten level creek crossings, and Main Arm with approximately 15 creek crossings. Upper Wilsons Creek, Upper Main Arm, Huonbrook and The Pocket can be isolated in times of flood.

National Park escarpment provides a dramatic backdrop to the northern part of the area. The southern half is characterised by rolling green hills with rich red volcanic soil, which is abundant with plant growth.

The climate is pleasantly subtropical with summer-dominated rainfall averaging 2000mm per year. This is the highest rainfall of any area in the state. Cooling ocean breezes along the coastal fringe moderates summer temperatures. Warm, mild winters are characteristic of the area. Some inland valleys experience light frosts in winter but generally the area is frost-free. The climate contributes to the area's popularity amongst visitors and locals alike generally all year round. These environmental conditions, combined with volcanic soil, means the area is alive with abundant plant growth.

The following table was sourced from the Bureau of Meteorology website for Byron Bay (or Cape Byron where the weather station is located). The averages are based on the number of years since data has been available as shown in the 'years' column.

Table 4-1 – Byron Bay Weather

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Years
Temperature														
Mean maximum temperature (°C)	27.5	27.6	26.5	24.5	22.0	19.7	19.3	20.3	22.2	23.3	24.7	26.4	23.7	30 1974 2007
Mean minimum temperature (°C)	20.8	20.6	19.5	17.2	15.0	12.5	11.7	12.5	14.3	16.1	17.8	19.5	16.5	30 1974 2007
Rainfall														
Mean rainfall (mm)	165.4	189.4	204.2	186.8	180.9	162.8	106.1	91.0	65.9	108.0	120.2	146.1	1730.3	60 1950 2012
Decile 5 (median) rainfall (mm)	146.3	172.0	177.1	157.0	166.5	141.0	81.5	72.3	44.8	86.2	100.0	104.1	1668.5	61 1950 2012
Mean number of days of rain ≥ 1 mm	11.2	12.6	13.3	12.5	11.8	9.8	8.0	6.9	6.6	8.9	9.4	9.9	120.9	61 1950 2012

Source: http://www.bom.gov.au/climate/averages/tables/cw_058009.shtml

Product IDCJCM0028 Prepared at Thu 22 Mar 2012 09:29:17 AM EST



2. Quick Facts - Byron Shire 2006 Census

Climate	<ul style="list-style-type: none"> Mean max temperature: 27.6 (summer), 19.3 (winter) Mean min temperature: 20.8 (summer), 11.7 (winter) Mean rainfall: highest 205.1mm, lowest 66.4mm Mean number of days of rain per month: highest 13.3, lowest 6.5
Shire population	<ul style="list-style-type: none"> 28,767 (estimate for 2009 32,126) Growth for the period 3.5%, previously 7.8%, regions growth 6.9%, state growth 4.4% Distribution: 27% rural; 20% Ocean Shores; 19% Byron Bay; 11% in Suffolk Park; 11% in Mullumbimby; 6% in Brunswick Heads; and 6% in Bangalow.
Population Characteristics	<ul style="list-style-type: none"> Median age: 41 years old Born in Australia or have been in Australia since before 1991 Speaks English only (approx. 20% speak another language as well) 53% are married or de facto 47% are single (13% are divorced) 4% have a need for disability assistance 11% provided unpaid care to people with profound or severe disabilities. 27% of the Shire volunteer (for over 15 years of age) which is higher than region and state - state average is 17.1%. 447 people are of Indigenous origin (1.55% of the Shire)
Education	<ul style="list-style-type: none"> 1.5% above state average and increased by 10.6% since last census 23% have a Bachelor Degree (higher than region and state) 15% an Advanced Diploma (higher than region and state) 30% have certificate level qualifications 33% are enrolled in education (higher than region and state)
Income	<ul style="list-style-type: none"> Weighted average individual gross weekly income \$510 (\$491 region, \$619 state) Weighted average household gross weekly income \$944 (\$919 region, \$1,232 state)
Housing/ households	<ul style="list-style-type: none"> 10,713 households 66% are family households; 27% are lone households Over 81% live in houses (not flats or semi-detached) 64% own or are purchasing a dwelling (paying \$1,255 per month towards a mortgage – lower than state average) 30% rent (paying \$245 per week on average – higher than state average) Median house price \$515,000 (50% greater than state) 66% of households have an internet connection (40% broadband) 76% own one or more cars (a total of 10,714 cars in the Byron Shire)
Employment (people 15 years and over)	<ul style="list-style-type: none"> 51% of Byron population over 15 had employment in 2006 (region 49%, state 51%) Proportion of full time workers to total workers 52% (lower than region and state) Weighted average individual gross weekly income \$510 (\$491 region, \$619 state) Weighted average household gross weekly income \$944 (\$919 region, \$1,232 state) 90% of workers live in the Shire; the balance live outside the Shire; 3% are overseas visitors working in the Shire 85% use a car to get to work, with people walking or cycling to work higher than the region and state percentage. 12% worked at home 12% did not go to work
Economic Synopsis	<ul style="list-style-type: none"> Business revenue estimated at \$1.37 billion from approximately 3,500 businesses. Tourist spending estimated in 2009 at \$411 million² 60% sole traders. Of the balance, 60% employ less than 5 people and 31% between 5 – 19 people. Roughly 45% businesses located in Byron Bay who generate estimated 55% of the Shire's business revenue. Key industries: Retail (12.9%), accommodation and food (12.9%), health care and social assistance (10.6%), education and training (9.6%), manufacturing (8.2%) and construction (7.4%) sectors are the principal drivers of employment in the Shire. Home-based businesses estimated in community survey (2007) at 22%.
Tourism	<ul style="list-style-type: none"> Estimates for 2009: Visitor Numbers²: 1,384,367 per annum Visitor nights²: 2,982,000 (increases Shire's population by 28% if spread evenly throughout the year)

Source: Australian Bureau of Statistics 2006, 'Byron (Local Government Area), 'Community Profile'

² Source: National and International Visitor Surveys, Tourism Research Australia

AIM

This study aims to assess the Byron Bay town centre structure and meaning to recognise the needs and aspirations of the people, the land, and our future direction. Byron is part of the Northern Rivers of NSW and is not dictated to by commercial or political interests or driven by convention.

We look at the location and structure of the existing Byron Bay township to establish the natural structure, form and functions which can be summarised in a constraints analysis to outline the positive and negative factors that form the basis of our town.

This will lead to an assessment of the public domain throughout the town, which essentially covers the areas where people live and play and enjoy our environment.

With the structure and character of these spaces we can then assess the practical needs of movement, transport, access and community facilities for all people including locals, itinerants, commercial and visitors.

The natural environment is retained, enhanced, rehabilitated and used for community benefit. The commercial built environment is covered by the Council LEP and planning documents, and the freedom within this plan should encourage private interests to create a synergy with the public domain for the mutual benefit of all.

Our whole philosophy is based on Zero Carbon where we aim for a Town Centre that produces and uses its own energy, collects, treats and re-uses its own water, composts and recycles its own waste, produces its own food, converts and builds all buildings as zero energy structures, in a fully sustainable natural environment which replicates and rehabilitates the biodiversity of its location, with people living in harmony with each other and co-creating with nature to produce all our needs.

This is all feasible with current proven technology and the collective economy of the community.

Each of the four major open space focal areas will be assessed and a concept plan drawn to suggest ways to achieve different functional areas for people to work, play, communicate and enjoy.

They will represent one idea but there are many other ideas and concepts in this intellectually fertile town which should all be put forward and the pros and cons assessed with emphasis on spirit, natural environment, sustainability and social benefit to establish our collective vision for the place we have chosen to live.

It will then be a privilege to welcome all visitors to share and enjoy our wonderful home and take with them the feeling of what we enjoy every day.

To recognise the spirit of Byron, its land and people and allow this spirit to flourish is the purpose of this study. The will and inspiration of the people will make it happen.

To summarise these aspirations, we aim to present a master plan that:-

- Honours the traditional owners
- Respects the spirit of Byron - the land, the water and the people
- Reflects the natural energy lines
- Incorporates sacred geometry
- Creates, stores and uses its own energy
- Collects, treats and re-uses its own water
- Treats and recycles its own waste
- Generates zero carbon for all buildings and services
- Enhances and maintains the natural environment
- Extends nature throughout the town
- Grows food for the town with zero food miles and food security
- Continues Cavanbah as a meeting place for all peoples and ideas
- Encourages spontaneous forums for locals to interact
- Provides pedestrian priority within the town
- Allows free use of skateboards and bikes
- Gives full access to all facilities for people with disabilities
- Supports youth and respects elders
- Encourages visitors to enjoy lifestyle - not dictate it
- Provides tourists with an inspiring experience in nature
- Efficiently provides all services for local residents and tourists
- Honours all people, creatures, animals and nature
- Manages the land using nature's intelligence.

METHODOLOGY

There are three main steps in creating a Master Plan. We first look at the existing situation and its many components such as nature, topography and geography of place, the built environment, land use, movement and circulation patterns to, from and within the area, land ownership, services, infrastructure, energy lines and significant sites, all as constraints which will affect any planning of the town. These can have a positive or negative influence and can all be summarised in a constraints analysis.

The next step is to look at alternative concepts for the total town with details of focal areas within the central concept. Many concepts should be considered with involvement of the whole community and different interest groups contributing ideas for their town.

These concepts are then assessed by listing pros and cons for each scheme and how they incorporate the existing constraints, from a priority list which will give the optimum outcome specifically for Byron. From these concepts a short list is then used to establish a preferred strategy.

The third step is to use this strategy as the basis for the recommended Master Plan, explain the components of this plan and how they mesh together to provide the optimum result.

These include water, energy, waste, infrastructure, circulation, landscaping and many others, with details of each component and how this can be achieved.

The adopted Master Plan is then used to implement all components on a staged basis for the future growth and enjoyment of the Town Centre.

This general methodology is summarised as follows:-

Prepare base maps - general - overall context
- area details

1. SURVEY OF EXISTING CONDITIONS

- Land use including public amenities and community facilities
- Zoning - current and proposed
- Property ownership
- Building profiles including private open space
- Age and condition of buildings
- Circulation - vehicular - public/tourist
 - private
 - service access
 - pedestrians and mobility
 - bikeways
 - car parking
- Open space and landscaping and biodiversity
- Townscape - internal/external vistas and connections

- Engineering infrastructure services
 - Stormwater drainage – underground
 - surface
 - Sewer and treatment
 - Electricity - overhead and solar PV input
 - surface/underground
 - Gas
 - Phone and co-axial and broadband and WiFi
 - Water
 - supply general
 - fire and hydrants
- Constraints analysis and Diagrams.

2. ASSESSMENT OF ALTERNATIVE CONCEPTS

Concept Strategies	<ul style="list-style-type: none"> -central open space -linear -centralised -civic square -cultural/spiritual focus -sacred geometry -urban forest -community inclusion and consensus
Concept Vision	<ul style="list-style-type: none"> -people place and creativity -nature place and environment -sense of arrival -connection and focus -meeting place -activities/happenings <ul style="list-style-type: none"> active <ul style="list-style-type: none"> -market -ceremonies/healing -music/drumming -forum -civic functions passive <ul style="list-style-type: none"> -sitting -café -observing/watching -relaxing/enjoying

Analysis and Assessment and Priorities

Spiritual
 Ethical
 Sustainable
 Environmental
 Social
 Economic
 Political

3. PREFERRED STRATEGY

Master Plans

- Open space and landscaping
- Land use and potential
- Circulation and traffic
- Public facilities
- Engineering services
- Concept and activity sketches
- Energy management plan
- Water management plan
- Waste management plan

4. IMPLEMENTATION

- Community
- Commercial
- Government

The limited resources available for this study unfortunately do not allow for a detailed compilation and site truthing of all the survey and background input which is generally provided by specialist consultants.

I gratefully acknowledge the assistance given by Byron Shire Council in making survey information available which has allowed the preparation of base maps used for these concepts which establish the overall master plan for the Town Centre.

It is suggested that in assessing the concepts that generate a Master Plan that a weighting be given from the highest value given to Item 1 to the lowest value to Item 7 to reflect the intrinsic values of the Byron community.

The basis for assessment of each item is suggested as follows:-

1. SPIRITUAL

If it is not spiritual it is not Byron.

Does the concept support the spirit and healing of the land, the water and the people.

2. ETHICAL

It does not take advantage of others or damage a person's health or wellbeing or harm the environment.

3. SUSTAINABLE

To be self-supporting or renewable and does not deplete available local resources.

4. ENVIRONMENTAL

To support the biodiversity of the natural environment and contribute to the security of nature.

5. SOCIAL

To respect the local community, encourage social interaction and support peoples involvement and aspirations.

6. ECONOMIC

Economy is more than money and turnover. It is the efficient, not wasteful, use of resources with a direct flow of benefit to the local economy.

7. POLITICAL

To be decided locally with initial input starting at grass roots level and feeding into the system from ground up, not by outside interests.

PLANNING STRATEGY

TOWN STRUCTURE

When we live in or visit any town or city we essentially move, occupy, enjoy and experience this place from the open space between buildings or major geographical features.

This open space around the built environment can vary from a large planned area for communal activities to a small leftover space between buildings or a street or path which leads us into another space.

These streets and laneways are the arteries and the spaces are the organs which allow the town to give life and interact with the people who choose to come and experience this place.

The importance and significance of these open spaces is the basis of this study which essentially looks at the public domain - the space outside the buildings.

The unique quality of these spaces is that they are not buildings - they are open spaces where people meet, gather, play, enjoy or just sit and watch.

We will look at the activities within and around these spaces where people may eventually proceed into the buildings if they are interesting, inviting and enjoyable to their experience.

These open spaces already exist, in some cases they are exciting and enjoyable while in others they are degraded or abused but they all have the potential to fulfil many community functions and aspirations through our motivation and incentive to activate them.

This can happen as we honour and respect nature and give meaning to each area which will range from the practical and active use to the passive enjoyment of the immediate environment.

The overall structure of Byron Bay town centre is defined by four major open spaces.

These four spaces, their connections with each other, and their extensive natural assets encourage different activities but they are all important to allow the total experience of Byron.

From the photo diagram No 1 we recognise these areas mostly by the green planting that remains, some from intentional landscaping, and others from the natural wetlands and connections to the beach environment.



Disclaimer : While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, no warranty is given that the information contained on this map is free from error or omission. Any reliance placed on such information shall be at the sole risk of the user. Please verify the accuracy of the information prior to using it.

Note : The information shown on this map is a copyright of the Byron Shire Council and the NSW Department of Lands

Scale = 1:5,000

Metres 100 200 300 400

(Scale correct at A3 size)



22/07/2013

The open areas are located throughout the town, in the north at Apex or Beach Park including Main beach and Clarkes beach, to the south is Railway park and the station, in the east is the area from the Library to Tallow beach and to the west is the Butler Street reserve extending to the Cumbebin wetlands.

For simplicity these spaces will be referred to in this study as Beach, Tallow, Rail and Market.

These spaces all have a character that is both individually unique yet collectively significant. They are outlined on the plan diagram No 2 which shows the extensive green areas around and through the town with their links to each other.

Each space generates a theme based on their general use and location, their connections and potential activities and uses which would enhance the overall functioning of the town.

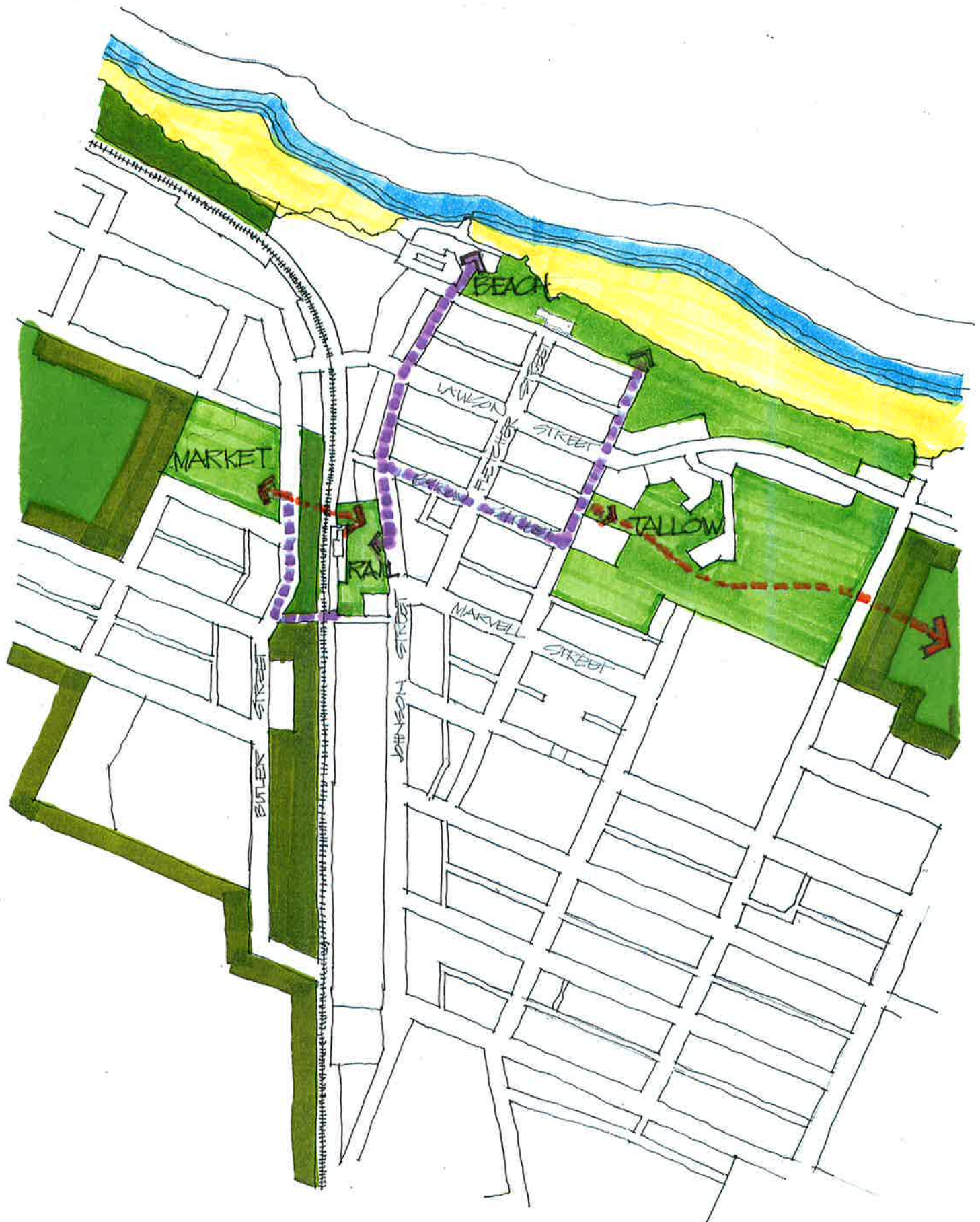
The general feelings, activities and potential these spaces evoke are listed in diagram No 3 and there are no doubt many others that could be added.

BEACH

Beach park connects directly with the vast north facing beaches extending from Clarkes beach through Main beach and Belongil and eventually to Brunswick Heads. The sea environment extends through a unique protected marine reserve to Julian Rocks and contains many reefs with their abundance of sea creatures and marine life.

Beach is fun, the open sea, distant views, the vastness of nature, the pristine ocean, the different moods of the powerful, turbulent, stormy and calm sea, the movement of the tides, the ever changing beach, the refreshing water, the waves, the whales and dolphins, the wreck, Julian Rocks, the coral reefs and abundant sea life, to swim, sunbake, surf, relax and play on the beach, the drummers, the patterns on the sand, kids playing, music and art, sunsets over the hinterland and sunrise over the headland, the moon, the clouds, the sun, the seasons, canoes, snorkelling, scuba diving, kites and para-surfing, sunshine and lighthouses all in the open cradle of nature's caldera under the watchful eye of Wollumbin.

To walk through the town and open to the expansive panorama of the beach is a must do experience for Byron town.



BYRON BAY TOWN CENTRE STUDY OPEN SPACE LINKS

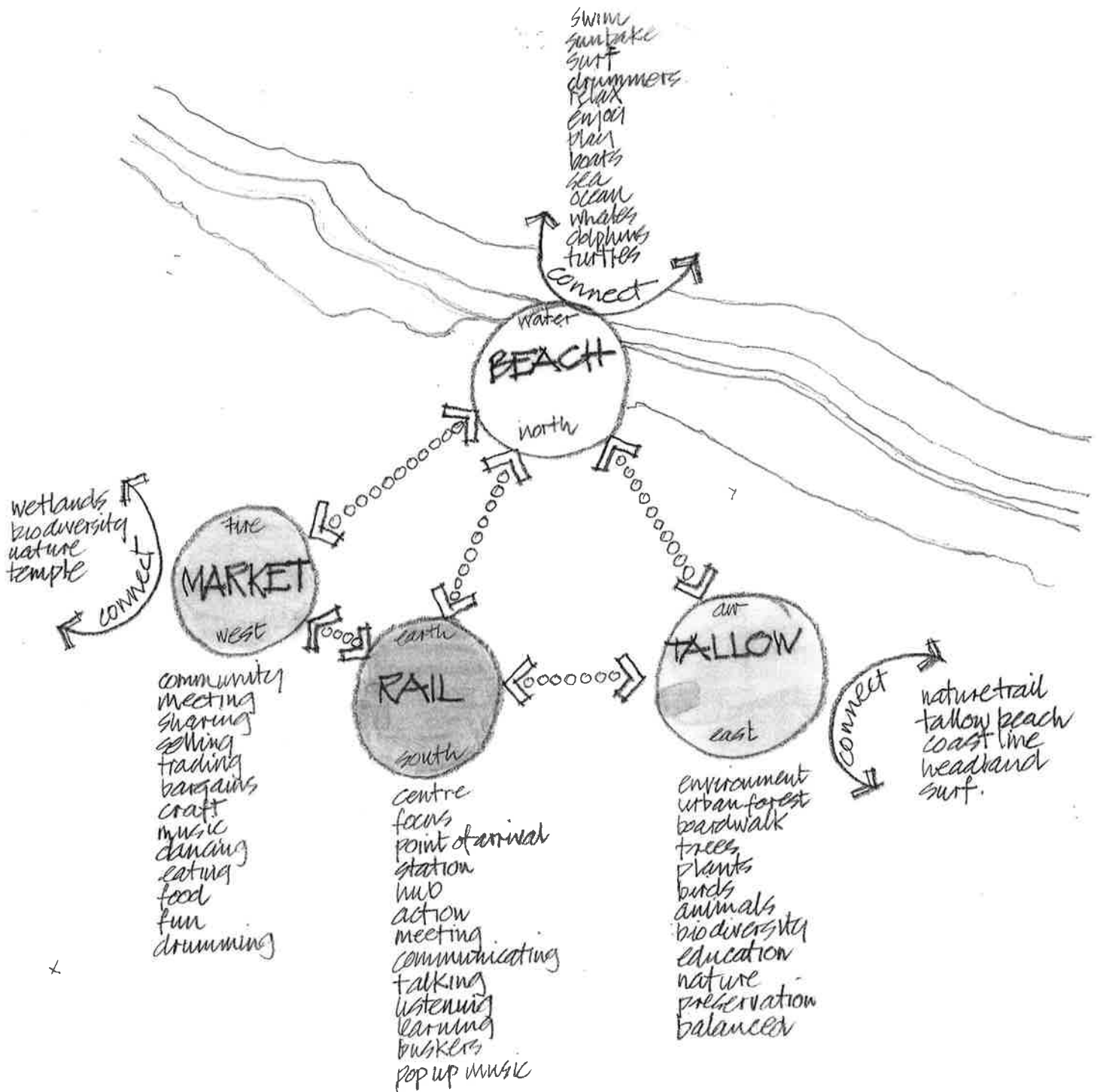
MASTER PLAN

john sparks August 2013

0 100 200 300 400
SCALE 1:5000

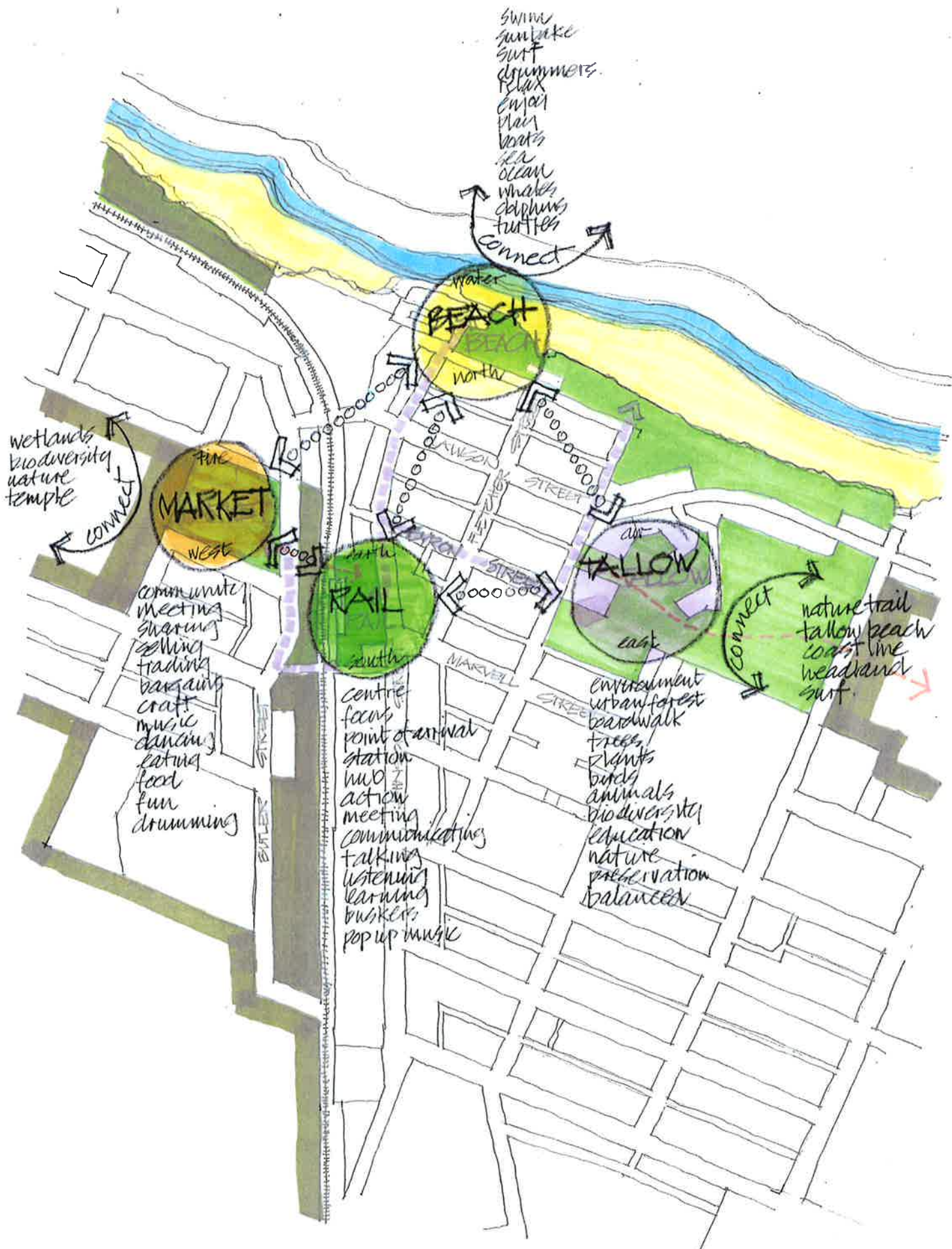
DIAGRAM 2





BYRON BAY TOWN CENTRE
OPEN SPACE CONNECTIONS

MASTER PLAN
DIAGRAM 3



BYRON BAY TOWN CENTRE OPEN SPACE CONNECTIONS

MASTER PLAN DIAGRAM 4

TALLOW (Library to Tallow)

Tallow is a more intimate area mainly accessed from Middleton Street and connecting through extensive wetland, coastal heath and national park, to the east facing Tallow beach.

The area closest to the town centre contains the library, Courthouse, child care centre and youth activities centre giving an immediate community focus. This space then extends to Tallow beach through a natural environment.

Tallow suggests community, a meeting place, connection, local forums interaction, natural environment, biodiversity, regeneration, enjoying nature, environmental education, learning, house gardens, permaculture, growing food, treating waste, a balance between community and nature.

The preservation of this area has the potential to become a significant focus for visitors to absorb, learn and enjoy as well as contributing to the social wellbeing of residents.

RAILWAY

Railway Park is an active space in the centre of town, it is a point of arrival and departure for many visitors, it is the central focus for public meetings, social interaction, the town square, the link with the Community Centre, a place for buskers and entertainment, a transport hub and interchange from bus to rail, local to interstate, private and public, a place of continual movement and a transition zone between the outside world and the township.

MARKET

The Butler Street reserve west of Railway Park is the market centre where the weekly farmers market and regular craft markets are held as well as other outdoor community meetings and entertainment.

It is for buying and selling, eating and enjoying, entertainment, trading, bargains, music, dancing, meetings friends, drumming and is fully accessible without disrupting the general flow within the town.

Market is an ideal venue for outdoor pursuits and is part of the environmental area that extends to the west through the Cumbebin wetlands to Belongil creek. These areas are environmentally significant, although in need of rehabilitation immediately to the west of Butler Street reserve and are part of the natural stormwater drainage from the town to the creek.

These areas also have potential for restoration, treating stormwater before discharging to Belongil Creek and are a significant natural buffer zone around the township to preserve and enhance its village character.

These thoughts are superimposed on the town map in diagram No 4 together with their internal links and external connections to show the importance of the interactions between these individual spaces and how they establish the functional framework and structure of the town centre.

Each of these spaces is now assessed within its immediate context showing the existing constraints, and putting forward some ideas which provide a concept to realise the full potential of the areas within the aims and ideals outlined previously.

PLANNING CONCEPTS

BEACH PARK CONCEPT PLAN

EXISTING CONSTRAINTS

The aerial photo in diagram No 5 shows the existing area and surrounds of Apex Park, Main Beach and the north end of Jonson Street.

The dominant feature of this precinct is the large car parking area along the beachfront, the town swimming pool, the adjoining caravan park and public car park, the shops, trees and parking in the north end of Jonson Street and the Bay Street area with the Surf Club and residential accommodation.

POTENTIAL

The potential for this area is:-

- to provide more people space along the beachfront
- to connect the natural beach to the natural features of the town
- to rationalise the car parking areas as part of an overall traffic plan
- to prioritise movement of pedestrians, bikes and skateboards
- to allow more efficient servicing of commercial premises
- to provide new, fully accessible public facilities
- to fully landscape all public areas
- to ensure that any future buildings or structures in this area reflect the beachside character and theme
- to provide interesting and iconic street furniture
- to allow more outdoor eating places for café patrons
- to encourage local participation with artists, drummers, buskers and performers interacting with the public.
- to allow occasional park concerts and community performances
- to enhance the theme of Peace Park with paving, sculpture and ceremonies
- to provide new and larger people spaces with interesting paving, sculptures and landscaping
- to encompass a natural and nautical theme for this precinct

and generally allow the full gambit of recreation functions compatible with this area.

DESIGN CONCEPT

A concept to encompass the incredible potential of Beach Park is shown in diagram No 6.

The basic theme is based on nature, open space, separation of cars and people and providing for more people activities to circulate, enjoy, relax and eat.



Disclaimer: While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, no warranty is given that the information contained on this map is free from error or omission. Any reliance placed on such information shall be at the sole risk of the user. Please verify the accuracy of the information prior to using it.
 Note: The information shown on this map is a copyright of the Byron Shire Council and the NSW Department of Lands.

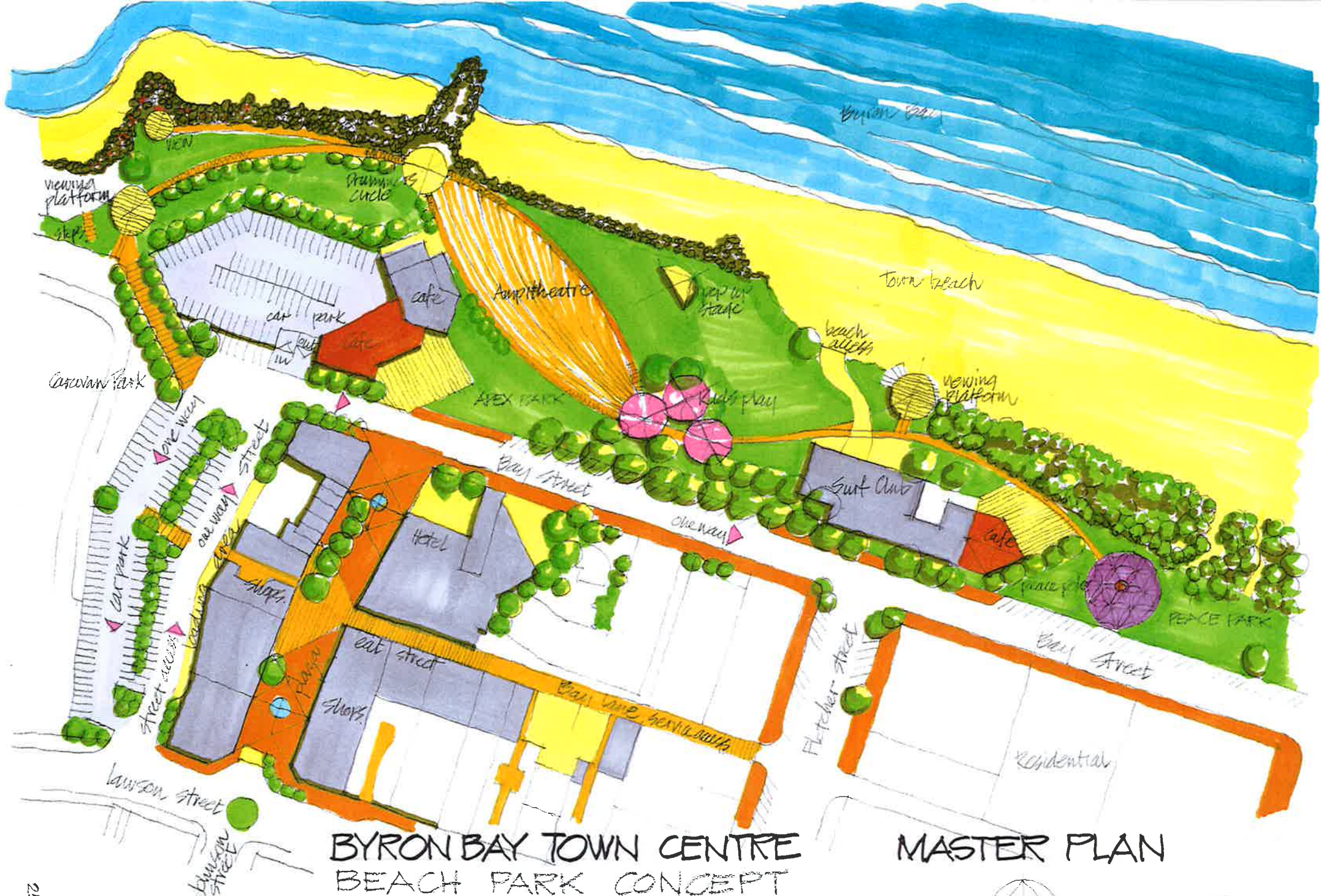
Scale = 1:1,000
 Metres 20 40 60 80

(Scale correct at A3 size)

DIAGRAM 5

17/03/2014





A people plaza is provided in Jonson Street which is closed to vehicles between Lawson and Bay Streets. An alternative street for traffic is provided behind the shops on the western side through the existing car park. This allows a free flow of traffic one way from Lawson Street to Bay Street as well as giving direct access to existing car parking spaces and a dedicated loading zone for servicing behind the shops.

The plaza would be available for limited vehicular servicing during nominated restricted hours out of peak periods to avoid any pedestrian conflict.

The design of the plaza should retain the existing trees, provide more trees, planting and landscaping, have interesting geometric paving, use art and colour on all street furniture and encourage the shops to use bright rainbow colours and natural materials to reflect this beach location and encompass the real spirit of Byron.

It should encourage people to slow down, chill out, be happy and lose the ego.

The plaza would also feed directly into Bay Lane behind the hotel to provide a safe venue to all the restaurants fronting this lane and turn it into an intimate 'eat street' with its own theme and to be an exciting retreat from the main street activities.

The eastern end of Bay Lane could be used for service only vehicle access during the day whilst maintaining the existing arcade connections between Bay Lane and Lawson Street.

The public swimming pool has been moved and relocated in another more suitable site within the town, to provide a larger swimming and water sports centre, with high grade facilities, and direct parking access.

The beachfront car park is relocated onto the existing swimming pool site and can be designed as a one level, two level or split level car park to reduce its impact and present a low profile in this area. In the future it may also be possible to build a one or two level low profile building over the car park to provide additional retail or community facilities but extreme care would be needed for a site sensitive design on this prominent site to minimise any intrusion into views or vistas from the town or from the beach.

The existing 'Fisheads' restaurant and historical building is retained and a new café built next to it with an outdoor eating area. This new building has been shown with a 45 degree angled façade to Bay Street so as not to impede on the ocean view that opens up as you walk up the Jonson Street plaza.

The area of the existing beachfront car park and roadway now becomes an extension of the park as a spectacular open green space joining the two beaches on either side of the rock groin.

Additional viewing platforms provide interesting lookouts with the platform to the west of the new car park accessed also from a new pathway through the corner of the caravan park and linking to the beach access. The corner of the car park is also splayed to increase the vista from the platform and the green space in this new waterfront park.

The iconic drummers circle is now enlarged with plenty of safe space around it for the many people who come to dance, watch, listen or take their photos of the sunset over Wollumbin.

The landscaping and design of this new park presents an opportunity to create a significant Byron Bay theme reflecting the water, beach, trees, nature, colours and activities of the local people.

It should allow for open air functions, sculptures, a pop-up stage, kids play area, direct beach access, viewing areas and platforms, colourful paving in geometrical shapes inspired by the sand mandalas which often appear on main beach at low tide.

Apex Park extends past the Surf Club to the east into Peace Park and the foreshore park through to Clarkes Beach.

Peace Park is the ideal place for the new peace pole created at the recent Uplift Festival. It could be set into new paving with a sacred geometry motif such as the seed of life or other significant symbol. Ceremonies held in this area have been a vital and integral part of our town culture in the past and should continue.

There is potential for a new small café on the eastern end of the Surf Club with an outdoor eating and viewing area which would open up this space and be part of the market days when they are located here.

ESSENTIAL COMPONENTS

For the Beach Park precinct we have outlined some ideas which would reinforce the Byron theme and provide upgraded facilities for community and general public benefit.

There are many more ideas and concepts which should be considered before a final design is implemented.

However, there are several principles within this concept that should not be compromised. These significant concepts and principles are to:-

- provide a new pedestrian plaza in Jonson Street between Lawson Street and Bay Street.
- extend this plaza into Bay Lane to create a unique 'eat street'.
- provide a new bypass road through the existing car park between Lawson and Bay Streets.
- relocate the town swimming pool.
- remove the beachfront parking area.
- extend the existing park across the full width of the beachfront area.



Disclaimer: While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, no warranty is given that the information contained on this map is free from error or omission. Any reliance placed on such information shall be at the sole risk of the user. Please verify the accuracy of the information prior to using it.
 Note: The information shown on this map is a copyright of the Byron Shire Council and the NSW Department of Lands.

Scale = 1:2,000
 Metres 50 100 150

(Scale correct at A3 size)

DIAGRAM 7

17/03/2014

2

- to make nature trails, boardwalks and cycleways through the sensitive wetlands
- to link the town centre through alternative nature trails and tracks to Tallow Beach
- to provide an interlinked pedestrian network for adventure and discovery tours
- to provide interesting nodes and information points along the walkways and trails
- to link the town area with the Arakwal National Park
- to encourage Aboriginal input to community
- to provide a healing garden with yoga and meditation
- to provide a sensory garden with facilities for impaired people
- to provide full access to all areas for people with disabilities
- to incorporate geomancy and restore energy lines under the guidance of the Aboriginal people.
- to connect this area through walkways to Clarkes beach.

DESIGN CONCEPT

The library to Tallow concept is outlined in diagram No 8 which aims to rehabilitate the wetland green areas, create a communal activity area, manage the stormwater, provide food self-sufficiency, provide a swimming and water sports centre and become an environmental research and education venue for Byron.

An active community focus has been created around the library, Courthouse, Child Care and Youth Centres accessible off Middleton Street. This would become a local meeting place with areas for community discussion, education, recreation and ceremony. An environment centre would complement the existing Byron Environment Centre with a focus on the natural environment and sustainability. A small café would complement the nearby eateries and act as a social drawcard.

The emphasis in this area would be on the local community and inclusion of kids, youth, elderly, Aboriginal, disabled and all peoples in their connection with the land.

An environmental education, conference and information centre is shown fronting Lawson Street for easy access and visibility to encourage the dissemination of local research to the outside world.

All wetland areas and coastal heath are rehabilitated and interspersed with urban forest, green buffer zones, water gardens, discovery gardens, adventure gardens and picnic areas.

The area is traversed by nature trails with boardwalks to protect sensitive areas and nodes which create focal points along the way to sit, rest, or connect with a specific landscape feature. Some of these would be active meeting points while others could be quiet meditative places.

The nature trails lead through Massinger Street where they connect with another path that leads through to Tallow beach to the east.

Other branch pathways extend north across Lawson Street to provide multiple access points to Clarkes beach.

The importance of this area is to integrate all the surrounding areas with the town centre, by connecting to Tallow beach and Clarkes beach and connecting to the residential areas, all through a natural and functional environment.

All pathways and activity areas within this precinct can be made accessible for people with disabilities and incorporated as an integral part of the design.

A sensory garden is provided with easy access to Lawson Street for people with disabilities and others to enjoy the full range of sensory experiences through smell, sight, touch, feel and sound that are provided with special plants and sculptures within this garden.

The existing creeks which collect the stormwater from the town centre and surrounding areas discharge to Clarkes beach and the low point in Massinger Street.

The degraded creeks have been expanded into a series of ponds to hold and cleanse the water through reed beds and rehabilitated riparian zones before they overflow to external drainage areas.

These ponds are generally located in areas where the wetland is degraded or overgrown and will assist the rehabilitation of their surrounding environment.

During periods of heavy rainfall these ponds will also provide storage capacity and are part of a stormwater management system.

All stormwater from the town centre could be piped to these ponds where it would be stored and purified through natural reeds, plants and rocks then filtered and pumped through the water treatment plant shown in Cowper Street to a grey water circulation main servicing the town centre. This simple collect, store, treat and reuse water system is fully sustainable and environmentally positive.

All buildings could incorporate a grey water system with personal drinking and washing by town water and all other uses such as toilets, cleaning, landscaping and fire using the cheaper grey water.

Apart from the stormwater, grey water and wetland rehabilitation functions of these ponds they would enhance the bird life and biodiversity, create visual interest, and give active and passive enjoyment to many people.

Around the central pond a picnic area for family enjoyment is provided and a water play park area attached to the swimming pool opens out to connect with this natural water feature.

The new swimming and water sports centre is located on part of the existing sports oval fronting Tennyson Street where generous parking can be provided and to connect the water sports and recreation with the communal pond and natural green areas to the north.

This new water sports facility occupies a larger area than the existing beachfront pool and will allow the provision of a high standard of amenities for both competitive and recreational water sports with a family orientated theme to encourage full community access.

The venue is ideal with generous parking and open space connections and no traffic conflicts with tourist movements.

The remaining section of the existing football oval has been used for a permaculture market garden which can supply the fresh food needs of the town, cafes and restaurants as well as selling fresh produce to the public. This would be a fully commercial market garden with organic local produce and zero food miles and zero carbon - a totally sustainable enterprise with many direct local benefits.

In addition, a town centre compostable waste collection system could be established to collect all suitable waste for the commercial worm farm located along Cowper Street. Existing enterprising companies will provide a worm farm to process waste and produce compost and fertiliser on a commercial basis with sales through the shop in Cowper Street.

For local residents a community garden is provided behind the residential buildings in Marvell Street. This can also provide produce for the local community as well as being a meeting place connected to the nearby communal meeting and recreational areas.

This major green space is an important part of the town centre structure providing a local community focus, rehabilitating the wetlands, providing a water management system, creating environmental research and education areas, allowing a significant Water Sports Centre, providing organic produce, allowing pathways linking the town with the beaches and connecting with the diverse surrounding functions of the neighbourhood.

ESSENTIAL COMPONENTS

Within the positive and sustainable uses outlined for this precinct the significant principles that should not be compromised are:-

- the rehabilitation of all wetland areas and biodiversity
- the provision of internal nature trails linking all external areas
- the environmental research and education facilities
- a meeting place for inclusion of the whole community
- a stormwater management, treatment and recycling system
- a first class swimming and water sports centre
- a commercial permaculture market garden with compost and fertiliser recycling.

The true value of this precinct is in its ability to provide essential community functions in a fully sustainable, zero carbon environment that is so enjoyable and accessible to the major beaches, town centre and neighbourhood areas.

RAILWAY PARK CONCEPT PLAN

EXISTING CONSTRAINTS

Railway Park is in the centre of the town and is the connecting focus of all other pathways which interconnect through this park. The area of the existing park and immediate surrounds is shown on photo diagram No 9.

It is the place where people arrive and depart, come and go and gives the town that important sense of arrival.

The park is opposite the central axis of the town Community Centre which gives this open area a civic focus and the ability to become a town square for important civil ceremonies.

The existing area is not pleasant with an old public toilet having pride of place between a degraded car park area, the hotel as part of the station building and the abandoned railway line along the western boundary.

The north section of the park has a significant tree and pleasant grassed areas but is difficult to maintain with the weekly night market during summer and other people intensive activities.

The degraded car park and hotel service area extends to a laneway connecting Jonson Street to Butler Street across the railway line. This lane has a dilapidated house on one side and the ugly rear shop servicing area along the south side.

A bus shelter on Jonson Street is in permanent use with many buses and tourist vehicles using this kerbside as the pick- up and set down area for the town.

The tourist information centre is in an old historic weatherboard building surrounded by planting and trees.

POTENTIAL

Although this park is a disparate collection of degraded areas and unsympathetic buildings it has enormous potential to become:-

- a significant internal focus for all functions within the Town Centre
- a formal ceremonial space for civic functions
- a central point of arrival and departure for visitors
- a town square
- a place for small pop-up performances and buskers
- a place to sit, observe and relax with cafes and restaurants
- a transit centre for all visitors to pass through
- a centre for tourist information and directions
- a central pick-up and set down area for private cars and tourists
- a transition from regional to local transport modes
- an ideal location for a busy, operating railway station



Disclaimer: While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, no warranty is given that the information contained on this map is free from error or omission. Any reliance placed on this map is at the user's sole risk at the user's. Please verify the accuracy of the information prior to using it.
 Note: The information shown on this map is a copyright of the Byron Shire Council and the NSW Department of Lands.



22/07/2013

- a tourist meeting and activity area
- a connection to Butler Street across the railway tracks
- a limited vehicle service connection to Butler Street
- a formal connection to the Community Centre
- a fully landscaped green park with co-ordinated landscaping to the town landscaped links.

DESIGN CONCEPT

The design concept outlined on diagram No 10 shows how this central town area can realise its true significance and functions.

The north part of the site retains the significant tree and grassed area for markets, buskers and small, more intimate gatherings. There is a suggestion for variation of the café boundary line to the northern adjoining property to open this corner to the street and provide a more pleasant outdoor area for both park and café.

Along the eastern side Jonson Street has been narrowed with removal of 5 car spaces and extension of the kerb line to give a significant landscape border to the park and improve the landscape.

An open town square is located on the central axis from the Community Centre to the railway station building and this ceremonial space becomes the visual and people focus for the park. A pop-up stage allows small performances and the Byron Environment Centre Kiosk remains as an expression of the real Byron ethic.

New public toilets are provided to replace the existing bus shelter and are set back into the landscaping to soften their impact and still provide a necessary amenity. The tourist information historic building remains with all its landscaping and a small café provides refreshment to passing tourists and travellers.

A new transit centre is provided along the southern section of this park and extends through the old house site to Jonson Street. This allows a new upgraded transit facility building with kiosks for tour managers, directional information, public amenities, refreshment and waiting areas in a sustainable convenient all weather accessible environment.

This building connects travellers directly into the central town park instead of the existing unceremonious discharge onto the Jonson Street footpath.

This transit centre is accessed by a one way bus and authorised vehicle only access from Butler Street, across the railway and through to Jonson Street where departing buses can travel north or south.

This not only keeps large tourist vehicles out of the narrow town streets with the congestion of small vehicles and people, but also provides a safe direct traffic flow based on convenient left-hand turns for arrival and departure.

The transit centre can also become a meaningful showcase to give a good first impression for visitors after their weary journey. The thought of arriving in a beautiful natural park from a bus or train from distant regions is much more enjoyable and benefits the whole town with a happy tourist.

A vehicle service area is maintained for the hotel although this building would be more suited for a restaurant or art gallery as a focus for this community space.

From the transit centre, walkways give a more direct pedestrian access to the adjoining shops, to Jonson Street and across the rail tracks to Butler Street.

The car parking currently provided in the park area can be relocated in Butler Street where a small car park is shown near the water tower.

A lot of additional parking can be accommodated within the Butler Street reservation by providing 45 degree angle parking along the full length of this section of road with the retention of the generous landscaped buffer zone between the street and railway reservation.

These car parks are designed with groups of trees to break up the streetscape and reduce the impact of the cars. New walkways connect Butler Street directly with the central town area and Railway Park with new pedestrian rail crossings at convenient safe locations.

This parking can also provide many extra spaces for market days as well as long term parking during the week for town access.

The connection between Railway Park and the library green space in Middleton Street is an important part of the town experience and a path through Fundies to the laneway to Fletcher Street and along Byron Street is seen as a significant experience along the walking journey through town.

For this reason the site on the corner of Byron and Fletcher Streets is seen as a prominent site for an art gallery.

This could be designed with a sacred geometry and sculptural theme on this three dimensional site. Geometric paving could extend across this intersection with the whole street area presenting a landscaped street art space as yet another experience to be enjoyed in this place called Byron.

We certainly have the artistic talent and drive to produce this within our community and what a fitting statement this would be for the town.

ESSENTIAL COMPONENTS

To make this central town area a proper focus for the town with a civic square and the point of arrival for the continuous transits through our centre the essential components and principles are:-

- to increase the park area by moving the kerb line along the Jonson Street frontage
- to provide new toilet amenities with landscaping
- to retain the heritage tourist information centre building and landscaping
- to provide new cafes and meeting places
- to look at alternative uses for the station buildings
- to reactivate the railway line and station even for short journeys from the town periphery
- to relocate all car parking and extend the park green open space
- to provide additional parking along Butler Street with pedestrian walkways to the centre
- to provide a transit centre with full and efficient facilities
- to redirect bus and tourist vehicle arrivals through Butler Street and a new rail crossing.

BUTLER STREET MARKET CONCEPT PLAN

EXISTING CONSTRAINTS

The area shown in photo diagram No 11 extends from Railway Park to the western Cumbebin wetlands and from Shirley Street to Burns Street in the south.

This location has vast areas of natural vegetation which are critical to the biodiversity of the western town area but also facilitate efficient stormwater management and environmental sustainability.

The eastern section is partly degraded by mine tailings remaining from past activities and the cleared area now used for regular markets.

Butler Street is the primary connection of this area to the outside world and fulfils many functions from a local residential traffic collector road to a major access and car park during markets and other activities and as a controversial town bypass to reduce future traffic congestion through the town centre.

The markets are an essential part of the Byron culture and symbolise much of the town as well as providing an essential outlet for the trading of locally made products from the many artisans and talented people who live here.

The Thursday farmers market supplies much of the town and allows local producers to be self-supporting.

It is important to retain the local identity of goods and people in the major Sunday markets and not to allow outside interests to infiltrate.

The stormwater drainage from the town drains through the open creek along the northern site area before progressing through the wetlands to Belongil creek and then to the ocean outlet at Belongil beach.

The overall process of natural filtering and purification of this water is essential to the survival of the mangroves and species in Belongil creek and ultimately the health and stability of marine life and the ocean.

POTENTIAL

The potential to upgrade this precinct is to satisfy both active and passive needs and keep the area in balance by:-

- extending shade trees through the market area
- upgrading the market facility
- providing adequate parking
- facilitating traffic movements
- providing direct pedestrian connections to the town centre
- maintaining the connection between residential and open space
- rehabilitating the wetland



Disclaimer: While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, no warranty is given that the information contained on this map is free from error or omission. Any reliance placed on such information shall be at the sole risk of the user. Please verify the accuracy of the information prior to using it.
 Note: The information shown on this map is a copyright of the Byron Shire Council and the NSW Department of Lands.

Scale = 1:2,000
 Metres 50 100 150

(Scale correct at A3 size)

DIAGRAM 11

17/03/2014





BYRON BAY TOWN CENTRE BUTLER STREET MARKET CONCEPT

John Sparks May 2014

SCALE 1:2000 AT A3 SIZE

MASTER PLAN



DIAGRAM 12

- enhancing the biodiversity within the wetlands and its extended environmental areas
- preserving the wetland, creek and ocean environments
- facilitating stormwater storage, filtration and discharge through natural channels
- using stormwater with natural treatment for grey water reuse in the town centre
- providing nature trails and eco walks through the wetlands for enjoyment and education
- maintaining the green buffer zone between Butler Street and the town
- providing a new aged care community facility on the existing hospital site when it becomes redundant.

DESIGN CONCEPT

The eastern end of this concept outlined in diagram No 12 is the activity area where the markets are held and is closely connected to the town centre.

An alternative layout for the market stalls is shown as a suggestion only to the current configuration which works well.

The market area can be upgraded by extending the trees from the western side through the centre of the markets to link with the landscape buffer along the western side of the railway tracks. This would provide shade and shelter which would be welcomed by stallholders and customers and complement the existing shaded tree frontage to Butler Street.

Another suggestion is a market square to act as a focus for group activities and give a sense of arrival as well as a pop-up stage to give better facilities for performers in the south western corner.

New toilets along the Butler Street frontage and a meeting circle for visitors and drummers would formalise the activities in this area.

Pedestrian walkways from the market to the town centre are important to directly link these two areas and connections are shown to Byron and Jonson Street shops as well as Railway park past the north end of the existing station platform.

Car parking is always an issue on market days and many additional spaces are provided with angle parking along both sides of this section of Butler Street. This would also provide long term parking during the week for workers and visitors so that spaces within the centre could be replaced by additional circulation space for people and landscaping.

The multiple pedestrian access points and flow between the town centre buildings and the open park space is a logical connection for residents and visitors and will expand the horizons and experience of the town.

This concept also provides an important connection from the wetlands to the landscaped buffer along Butler Street, to the landscaped areas in Railway Park and into the street planting which expresses the natural feeling of the town.

At the south end of Butler Street a roundabout is shown to separate through traffic and the residential areas along Butler Street. This would allow a one-way bus only access to the new transit centre located at the south end of Railway Park, as mentioned previously, and would also feed into a new town bypass road located directly next to the existing railway line reservation.

This bypass would also provide additional parking with direct pedestrian access to Jonson Street, have much less impact on the natural environment and completely separate the residential precinct west of Butler Street from the busy town activities with a landscaped buffer zone.

Details of this bypass are provided later in the overall master plan.

From the active eastern end of the Butler Street markets we proceed to the wetlands of the Cumbebin Swamp National Park to the west.

The area immediately west of the markets is an old tailings site left over from sand mining operations and is in need of rehabilitation to restore the natural balance and biodiversity of the national park.

The existing open creek along the north side of this precinct drains the town stormwater from around Byron Street to discharge through the swamp to Belongil Creek and subsequently to the ocean.

A pond is provided in this area to assist with the rehabilitation works which provides additional flood storage capacity as well as being a natural filter for the water flow with reed beds and other plants to provide filtration.

This pond could also be used as part of the town grey water reticulation system with final treatment and pumping back to the town for toilet flushing, cleaning and landscaping.

The pond would enhance the natural environment for the adjoining residential area and would be accessible from the existing bikeway and the new bikeways and nature trails through the swamp.

The nature trails could extend from the existing boardwalk off Wordsworth Street to Belongil Creek and connect through to Milton Street as an extension of the existing bikeway.

These trails have focal points of natural interest along the way which all adds to the experience and enjoyment of our unique environment for locals and visitors alike.

ESSENTIAL COMPONENTS

The real value of this precinct is to enhance the active eastern market section and rehabilitate the passive western area to give value to the biodiversity and access for all to learn and enjoy.

There are many options for market layouts, parking and pathway locations but the principles in this concept that should not be compromised are to:-

- upgrade the market facilities
- provide a row of shade trees through the market to connect the natural wetland and town landscaping
- retain the landscape buffer between Butler Street and the railway line

- provide additional walkway connections between Butler Street and the town centre
- upgrade Butler Street to supply additional parking
- provide a new town bypass road away from the Butler Street residential area
- provide the one way bus only access road to the Railway Park transit centre
- rehabilitate the wetland west of the market area
- connect the wetland and open space to the Cumbebin Swamp National Park
- provide a water management and treatment pond to the existing creek stormwater drainage
- provide nature trails and boardwalks to experience the wetlands and connect with the town bikeways.

THE MASTER PLAN

Each of the concepts for the four major open space areas which form the structure of the town are now combined to produce the overall town concept shown in diagram No 13.

This master plan now includes the commercial hub and extends south to Browning Street to include the town approaches.

The central town area which is dominated by the built environment is softened by street landscaping which extends the natural environments on the periphery and brings this theme through the town.

To make the area more people friendly, car spaces have been reduced in a section of Lawson Street and removed in the narrow end of Jonson Street to be replaced with wider footpaths, tree planting and landscaping.

A row of trees along the centre of Lawson Street also provides a shady canopy to the streetscape. The car parking spaces are compensated by the many additional spaces in other parts of the town.

The central town area is a place of high pedestrian activity and there is potential to provide additional arcades and use lane access more effectively for covered market spaces, additional shops, creative artistic spaces or coffee places.

The connecting streets, pathways and links between the major open spaces now gain more significance as they give purpose to the journey from one experience to the next as well as facilitating the dispersal of many visitors throughout the town.

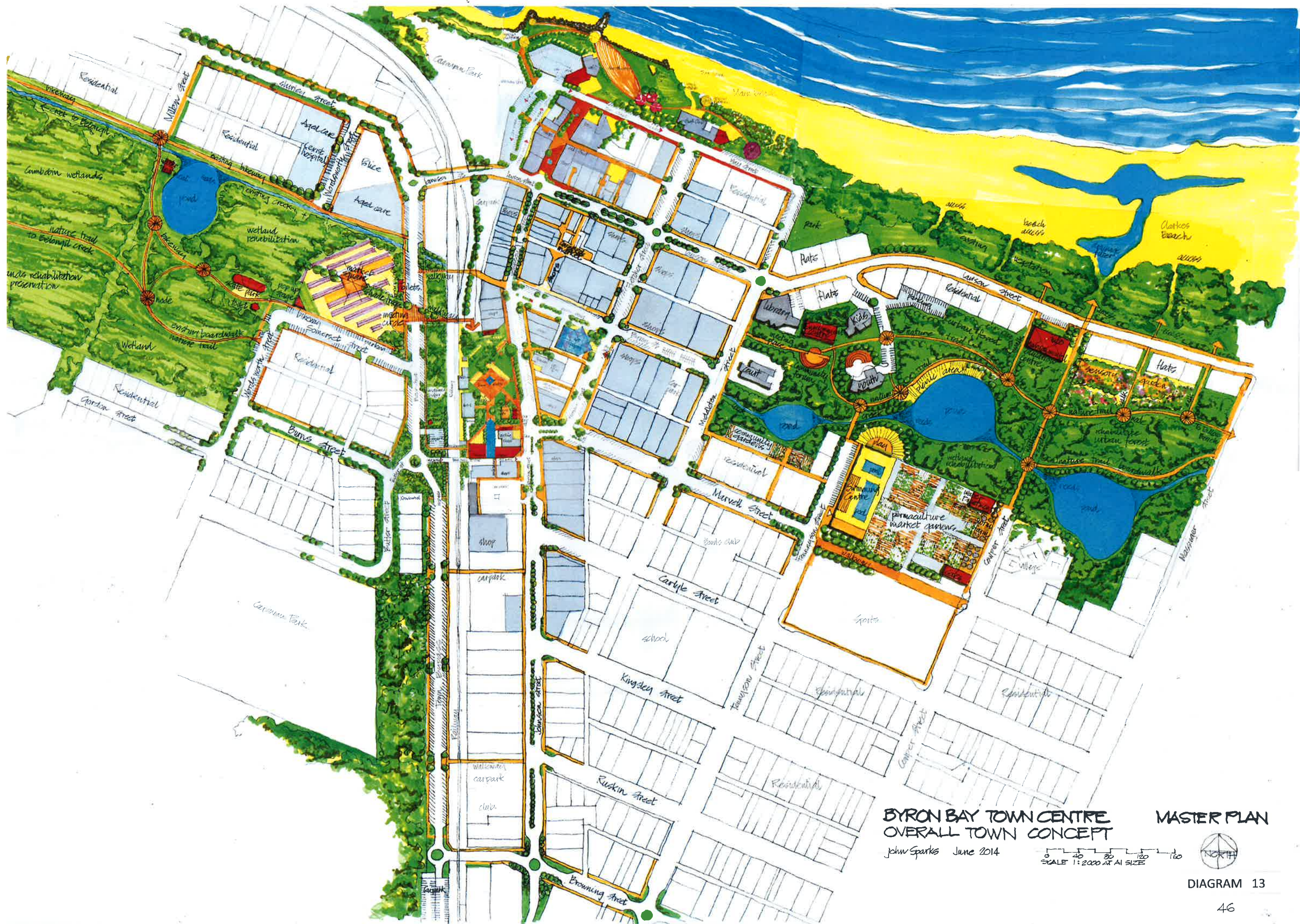
The interest and enjoyment of the town is now extended to encompass the complete range of active and passive, educational and recreational, intimate and expansive, personal and community, inspirational and challenging pursuits which are all part of Byron Bay.

The commercial hub of the town centre is an area of high pedestrian activity so preference should be given to people, bikes, skateboards and access for people with disabilities with any service vehicles or cars encouraged to operate outside of peak pedestrian periods.

A town road bypass is provided along the top end of Butler Street, then alongside the railway reservation which will not only keep through traffic out of the town centre but will also provide many additional car parking spaces with increased pedestrian links and walkways directly to the full length of the town commercial activities.

This bypass uses the top end of Butler Street along the park and market place, it is then diverted with a roundabout giving access to the existing Butler Street residential road, to a bus only town access and to the new bypass road reservation alongside the railway.

This location allows the Butler Street residential area to remain as a separate residential precinct, has less impact on the natural environment, provides car parking and allows direct pedestrian access to town facilities. At the southern end of this road a multi-level car park could be provided with a station platform next to the existing railway track for a short enjoyable train ride to the town station.



BYRON BAY TOWN CENTRE
 OVERALL TOWN CONCEPT
 john Sparks June 2014
 SCALE 1:2000 AT A1 SIZE
 NORTH
 0 40 80 120 160
 DIAGRAM 13
 46

Another car park in Kendall Street at the end of Shirley Street could also have a platform for a northern train ride to town and with these trains operating from each end of the town an efficient public transport system is provided at minimal cost.

The overall town concept sets out a framework and principles for the town to function more efficiently and use the natural assets that are available to us in a sustainable way.

This framework, once established, will provide a positive direction, focus and cohesiveness for the town yet allow for spontaneity, innovation and flexibility within the overall framework to best use the town's resources and the initiative of the people who live here.

The essential components shown in the overall town concept and for the principles to be established in realising our Master Plan are to:-

- provide a pedestrian plaza at the top end of Jonson Street
- relocate the roadway between Lawson and Bay Streets through the existing car park
- relocate the swimming pool on the beachfront
- provide a new pool and water sports centre in Tennyson Street
- relocate the beachfront car park
- extend the Main Beach park across the whole beachfront
- rehabilitate the natural wetland and all vegetation areas
- provide a community meeting place and facilities around the Library/Middleton Street precinct
- provide environmental information and education centres
- establish a nature based stormwater management system with grey water reticulation to the town
- establish a permaculture market garden on a commercial basis to service the food needs of the town
- provide a composting worm farm for efficient waste treatment
- create a high pedestrian priority area in the town
- replace car parks with landscaping in the central town area
- provide a new town bypass with car parking and direct pedestrian access to the town
- provide new car parks in Kendall Street and Cowper Street with train access to Railway Park station
- upgrade Railway Park to a central town square
- provide a new transit centre with bus only access from Butler Street
- upgrade the market facilities in Butler Street
- provide nature trails and walkways through wetland areas.

These principles will allow us to satisfy our aims for a future Byron Town Centre which will be:-

- a zero carbon town centre for all buildings and services
- self-sufficient in energy, water and food
- a fully sustainable natural environment
- a holistic community with health and well being
- respectful to the spirit of the land, the water and the people

- respecting the traditional owners
- a meeting place for all communities
- an alternative place for people to visit
- a people place with pedestrian priority
- a venue for all community activities
- an efficient producer of goods and services
- an environment of biodiversity for all plants and species.


Of concern to all!
A tree is worth
\$193,250

according to Professor T.M. Das of the University of Calcutta. A tree living for 50 years will generate \$31,250 worth of oxygen, provide \$62,000 worth of air pollution control, control soil erosion and increase soil fertility to the tune of \$31,250, recycle \$37,500 worth of water and provide a home for animals worth \$31,250. This figure does not include the value of fruits, lumber or beauty derived from trees. Just another sensible reason to take care of our forests.

From Update Forestry
 Michigan State University

THE VALUE OF A TREE

SAVE OUR MOTHER EARTH



MASTER PLAN COMPONENTS

The overall master plan is a representation of the many components which contribute to the total environment.

There are essentially many master plans which include a:-

- Landscaping master plan
- Circulation and traffic plan
- Energy management plan
- Water management plan
- Waste management plan

All of these would need to be prepared by specialist consultants in order to implement many of the ideas presented and to fulfil the overall principles of the Master Plan.

A brief overview of some of the components which may be covered by these plans is included as a basis for ongoing design.

LANDSCAPE MASTER PLAN

This would cover all of the natural environment and biodiversity including:-

- existing wetlands, coastal heath, sand dunes and natural areas to be retained or rehabilitated
- areas to be enhanced, studied or new facilities introduced
- areas throughout the town centre built environment including streets, parks, nature strips, buffer zones, screen planting and amenity planting.
- community gardens and permaculture market production
- waste and compost facility requirements
- street furniture and public art.

As a suggestion to cater for the diverse interests of the Byron community we include the following:-

Healing garden
Sensory garden
Water garden including wetlands, and boardwalks
Gardens for teaching and learning
Food, permaculture, community and herb gardens
Urban forests and nature trails
Crystal garden
Geomancy, energy lines, stone circles and sacred geometry
Adventure and discovery gardens
Meditation and yoga garden
Starseed and propagation gardens
Sculpture and artistic garden
Youth garden and skateboard ramps
Marine garden

And many other ideas which would consolidate our greening of Byron theme, rehabilitating, caring for our land and co-creating with nature.

CIRCULATION AND TRAFFIC

Cars cause traffic.

The simplest way to solve the traffic conflicts is to take the cars out of Byron Town Centre and accommodate them elsewhere.

The town centre should then be made a 'high pedestrian activity' area with a 40 Km/hr speed limit and pedestrian priority areas allowing full and safe movement by people.

This Master Plan contains many features to resolve the traffic issues based on common sense, personal observation and experience within the town. They are not based on traffic counts, intersection and road design, engineering and drainage calculations which I choose to leave to the experts.

It would be interesting to compare traffic flows and parking before and after the planning changes outlined.

The main features incorporated within the Master Plan are:-

- remove the car park area on the beachfront at Main Beach
- provide a new car park on the existing swimming pool site (the pool is relocated)
- close the top section of Jonson Street between Lawson and Bay Streets and create a pedestrian plaza.
- provide a new one way street access through the car park west of the Jonson Street shops
- in Lawson Street, between Jonson and Fletcher Streets - (see diagram No 14)
 - remove angle car parks and allow only parallel parking both sides
 - widen the footpaths for pedestrian use to 6m wide
 - provide a 2m wide landscaping strip along the edge of each footpath
 - provide a 2 m wide tree planting strip down the centre of the road
- basically, remove car parks, allow through traffic and give more space to people not cars
- in Jonson street between Byron and Lawson Streets – (see diagram No 14)
 - remove all car parking
 - allow two lanes of through traffic (one each way)
 - widen the footpaths
 - provide a landscaped area and tree planting 2m wide along the kerb line on both sides of the road with gaps to allow pedestrian crossings
- in the Butler Street reservation provide angle parking both sides with footpaths
- provide new walkways from Butler Street across the rail line directly into the town centre
- provide a new town bypass road using the north end of Butler Street and a new road reservation along the western side of the railway line
- the southern bypass section has angle parking both sides and footpath connections
- new walkways across the rail line into the Woolworths car park and Services Club car park will provide direct access to Jonson Street and the southern end of town

- multi-level car parks are proposed at both north and south road approaches
- in the north, a multi-level car park on the vacant land in Kendall Street between Shirley Street and the railway line gives direct walking, cycling and rail access to the town centre
- in the south, there is room for two multi-level car parks, at the end of the new bypass road reservation and on the eastern side of the rail line behind the existing buildings
- if these two parking stations were built they can be linked to a new station platform to give direct train access to Station Park
- with station platforms at both north and south parking stations you could run a train shuttle service between the two with a busy timetable.

See diagram No 15 which shows the car park locations and connections.

The measures outlined concern mostly traffic flows and cars but efficient circulation involves much more than through traffic.

Other issues to be considered are:-

- | | |
|-------------------------------------|--|
| Vehicles | -through |
| | -destination |
| | -service |
| | -emergency and security |
| Pedestrians | -safe access for walking and strolling |
| | -flow lines and destinations |
| Access for people with disabilities | |
| Wheelchairs and scooters | |
| Bicycles | |
| Child strollers and skateboards. | |

Walkways and nature trails are provided to connect existing bikeways and lead to interesting destinations. They can be used for bikes, skateboards, disabled access and any mode of slow travel except motor vehicles which would damage the environment.

The latest estimate of through traffic which would use the bypass is at 30%.

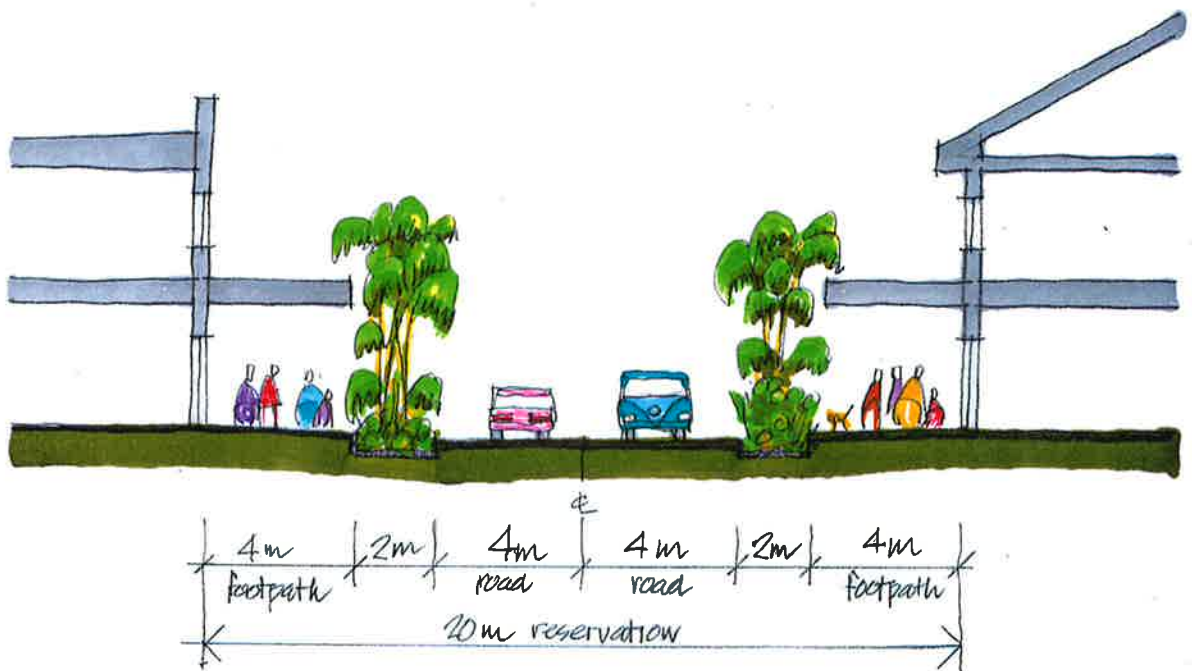
The parking stations would substantially reduce the long term parking capacity required in the town.

The many new car parking spaces along Butler Street and the new bypass with direct pedestrian access to all parts of the town would remove many more cars from the chaos of the town centre.

Every major city with traffic gridlock or at saturation capacity from vehicles has solved their problems with a range of public transport options. These range from buses, to people movers, light rail, trams or monorails. It is logical for Byron to look at a public transport system using the existing railway line which would greatly assist people coming to town from near and far.



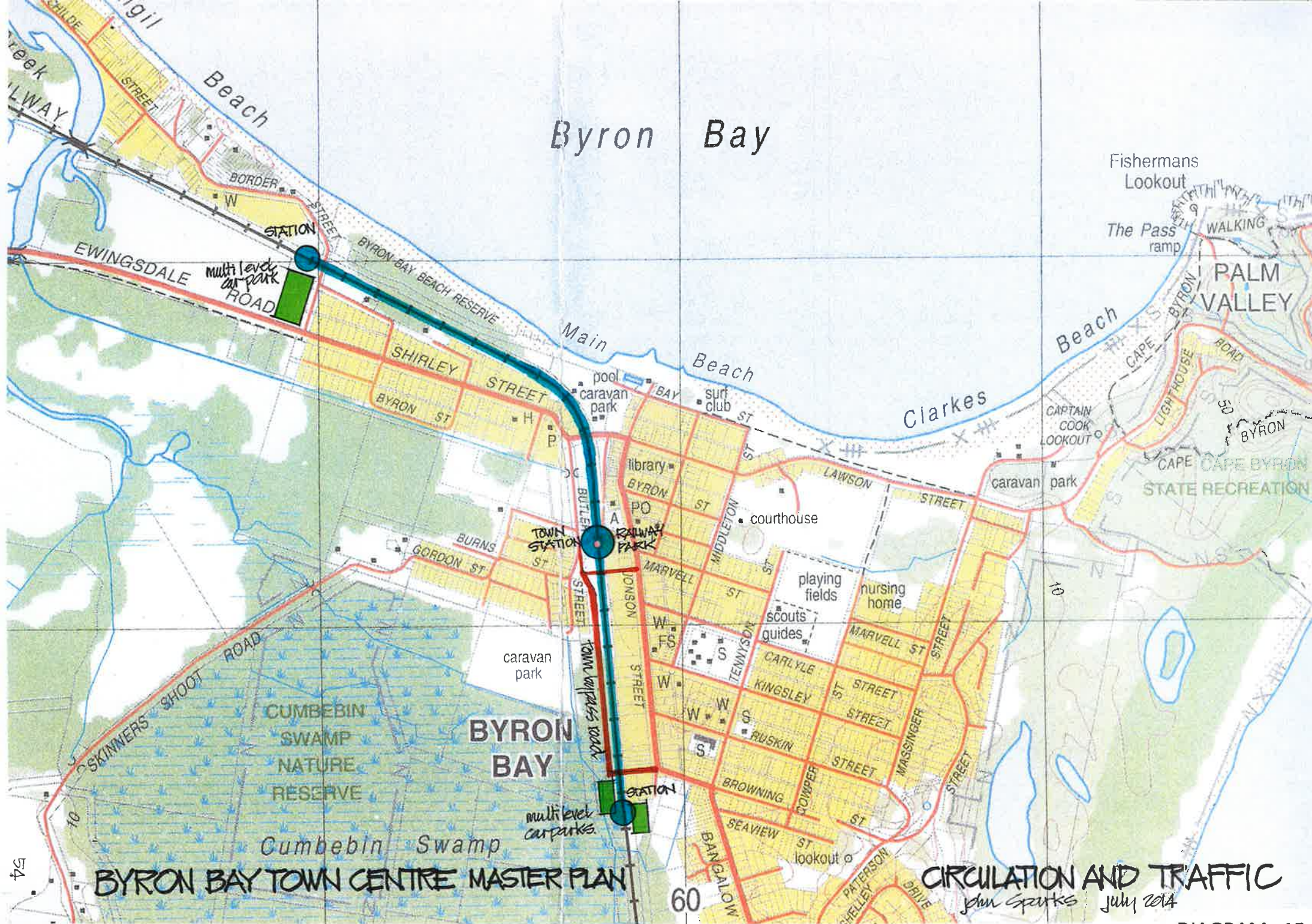
SECTION THRO' LAWSON STREET between Fletcher and Johnson



SECTION THRO' JOHNSON STREET between Byron and Lawson

BYRON BAY TOWN CENTRE
CIRCULATION AND TRAFFIC

MASTER PLAN
John Sparks July 2014
DIAGRAM 14



ENERGY MANAGEMENT PLAN

To give more emphasis to the concept of self-sufficiency and sustainability we now summarise a list of alternatives and items to be considered in assessing the most suitable energy management system as follows:-

ENERGY MANAGEMENT PLAN:

- Power generation systems
 - solar collectors:
 - power
 - light
 - hot water
 - space heating
 - heat pumps
 - hot plate collectors
 - micro turbine
 - slow combustion stoves
- Power sources
 - sun
 - wind
 - rain (water)
 - geothermal
 - bio mass
- Mains Infrastructure
 - back up and returning power to the grid
 - power
 - water
 - sewerage
 - roads
 - communications:
 - phone
 - postal
 - cable
- Single service trenching
 - authority requirements
 - design concepts.

The use of high energy efficiency rating fixtures and fittings for use in the construction and use of the built environment of the Town Centre will conserve water use as well as electrical demand.

To achieve sustainability the Master Plan integrates the use of land, energy, water, food and materials consumption, waste and transport so that the ecological footprint of the Town Centre is reduced as far as possible to the area of land available.

A sustainable development supports the needs of its community using the land and resources where the community lives. It provides the food to sustain life there, it generates the least use of transport, and it replicates the pre-development hydraulic regime.

Worldwide, there exists 1.4 biologically productive global hectares per person.

The average ecological footprint in Australia is 9.6 global hectares per person.

We would need more than four earths to sustain everyone on the planet at the level of the Australian average lifestyle.

Energy is important for the ongoing use and costs to the Town Centre as well as the viability and sustainability of future growth.

The journey to self-generation and zero carbon for the Town Centre needs an expert to assess our options and needs.

Byron has many such people who could contribute to this discussion.

WATER MANAGEMENT PLAN

The general supply and usage options involved in the balanced management of water is summarised as follows:-

THE WATER MANAGEMENT PLAN:

Assess Geological Structure – topography, geotechnical substrata, and geography

Primary water supply sources	<ul style="list-style-type: none">-underground water table-surface systems-rain water-mains supply backup from Rous water
Water Usage	<ul style="list-style-type: none">-needs assessment-quality-demand-drinking and human consumption-washing-cleaning and waste removal-plants and irrigation
Storage	<ul style="list-style-type: none">-underground-surface, dams, tanks-quantities, distribution, location, pumping-economies of scale
Grey Water	<ul style="list-style-type: none">-reuse systems-quality control-source of supply
Waste Disposal	<ul style="list-style-type: none">-wet-dry-individual-grouped and common system
Waste water treatment	<ul style="list-style-type: none">-primary-secondary-recycle-storage
Purification Systems	<ul style="list-style-type: none">-sealed-open – reed beds

Transpiration	-spray irrigation -trickle irrigation – soakage
Zero Impact	-collect, use, return, balance.

The main principle behind water management is to look at the predevelopment regime when rainfall and nature had a direct connection.

The water from the primary sources is now collected, used, treated and returned to the environment. The amount returned should reflect the original supply to keep nature in balance.

The connection between the water supply, use and waste water is shown in diagram No 16 which also shows the connection between recyclable and composting waste and water.

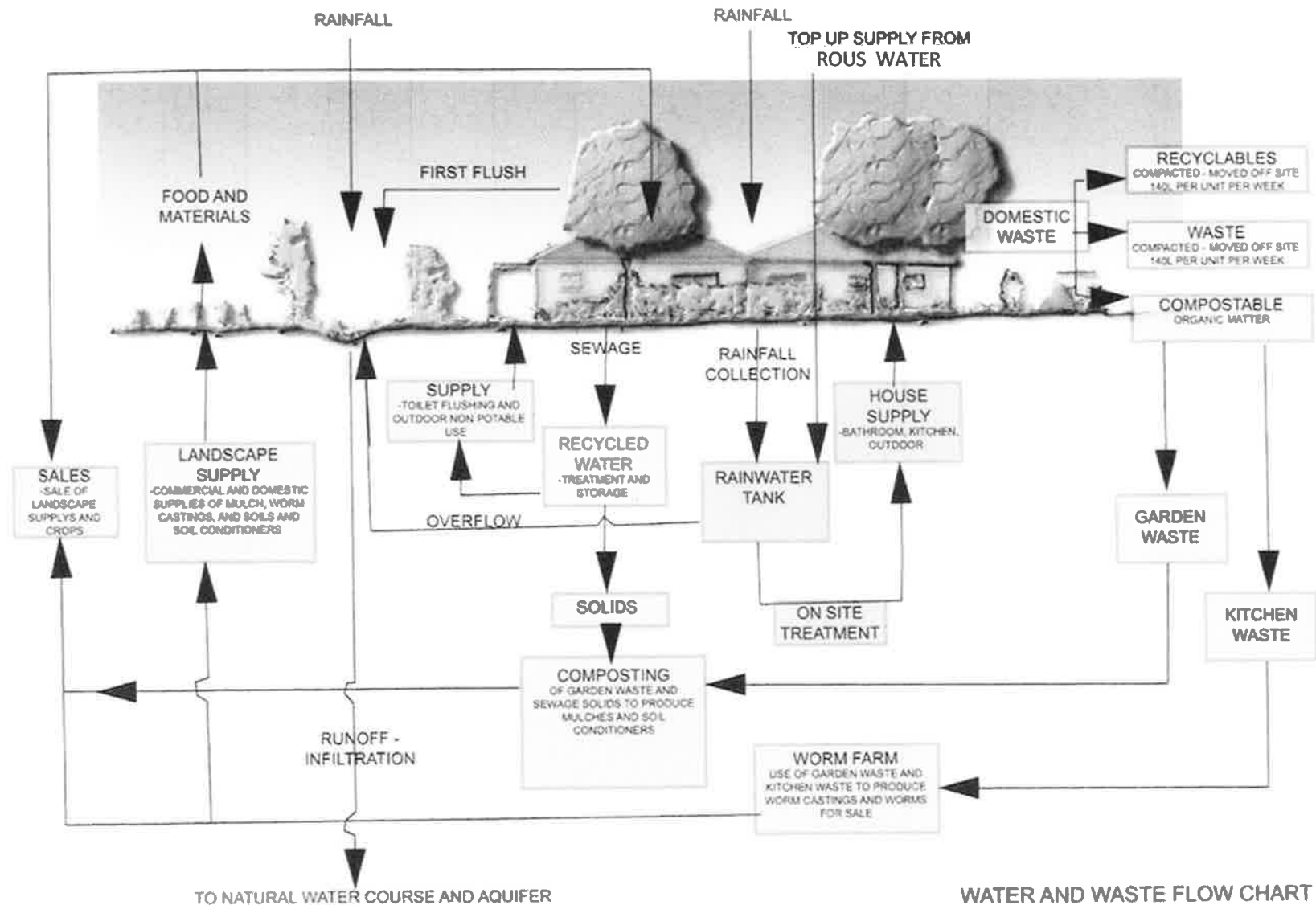
Water is essential to life and is connected to all other life forms as well as humans. We have a right to clean water. It is given freely and nature provides all our needs but with our present explosion of population we need to protect and value our water supply to stop pollution and waste.

Our planet is 90% water but only 3% of this comes as potable and renewable rain. The balance between nature, biodiversity and rainfall must be understood and maintained to ensure a sustainable supply.

The master plan incorporates a collection, treatment and reuse system by regenerating and using the natural environment within our town. Reed beds and aeration rock flow paths purify our stormwater which is then pumped back into the town centre by solar powered pumps to be used for all purposes except personal washing and drinking.

These ponds also create a pleasant natural environment for passive recreation and enjoyment as well as providing important habitat for wild life which will increase because we have given them a home.

The connection and balance of nature is always so simple.



WASTE MANAGEMENT PLAN

The general issues considered in the design of the bio system incorporated within the waste management plan are summarised as:-

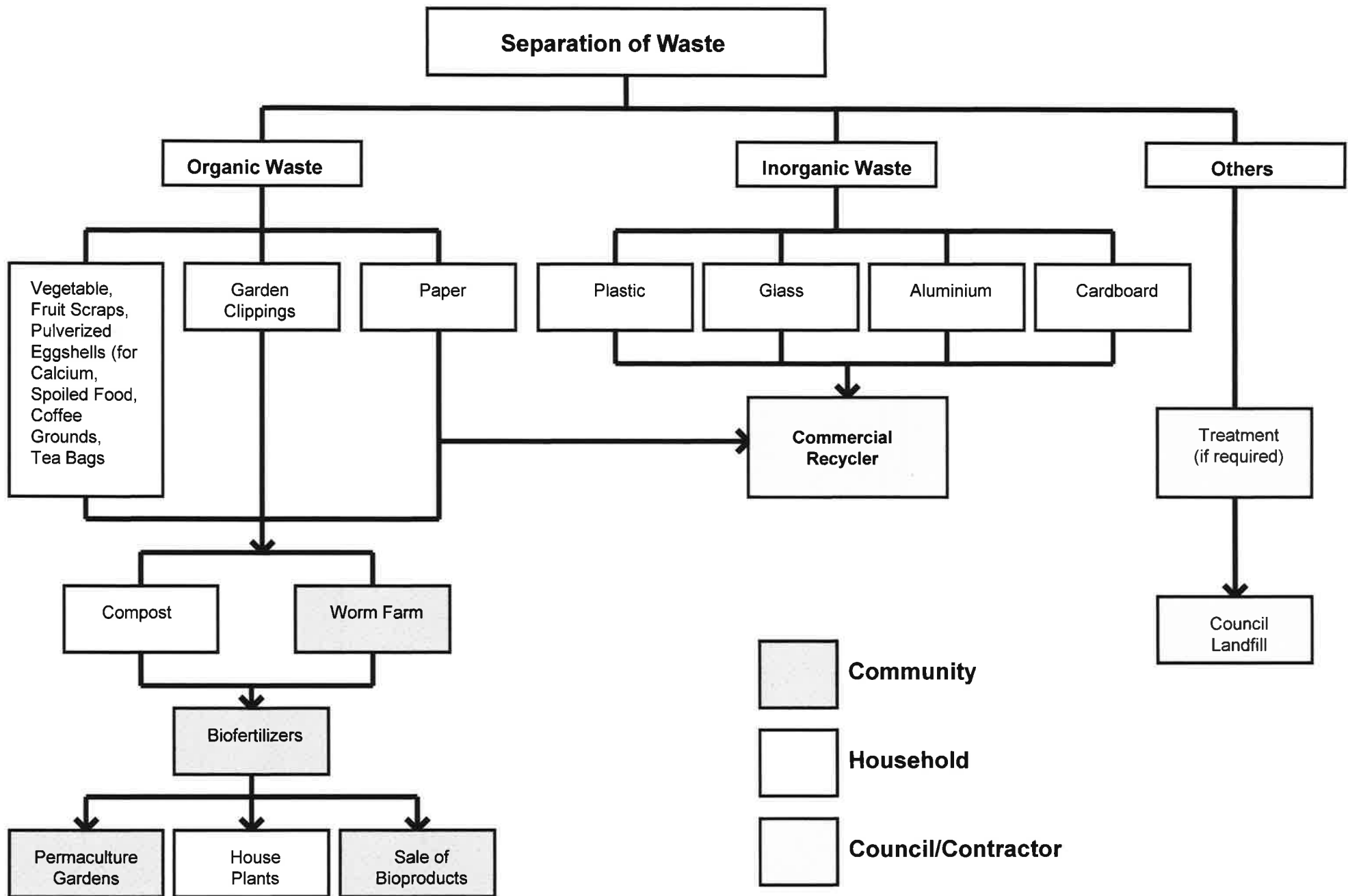
- Process the organic waste produced on site
- Render harmless any initially toxic waste from the town centre
- Recycle all solid waste
- Process liquid waste
- Avoid adverse environmental impacts off site from the use and disposal of any products
- Handle solid liquid and gaseous wastes from buildings in an ecologically friendly manner
- Minimise the need for motorised transport
- Integrate waste products with permaculture
- Establish compost collection and fertiliser distribution system
- Composting systems available:
 - worm farms
 - dry bins
 - wet systems
 - odour and pest control
- Economies of scale and system thresholds
- Organic foods: pecans, citrus, vegetables, fruits, eggs, bread
- Pollution neutral
 - air (smell, dust)
 - water (weeds, runoff)
 - chemical (fertiliser)
 - noise (internal/external)
- Permaculture – design with nature.

Waste is a resource. It can be collected, processed and reused and there are many ways of making this a sustainable activity.

There is an opportunity in the Town Centre to collect organic waste to process in a worm farm to produce fertilizer for sale and to use in the market food garden - all as a commercial enterprise.

There are organisations who will set up a worm farm given the land and waste supply, for very little cost and this would be compatible with our intention to use nature and integrate all activities within the Town Centre.

A waste flow chart is shown in diagram No 17 outlining the processes and possibilities for community or commercial involvement.



THE SPIRIT OF BYRON

Byron Bay is a spiritual place.
Always has been, always will be.

This master plan outlines an alternative way of being by valuing our natural assets and the open spaces where we live, work, play, communicate and interact.

We are an alternative to the relentless push of commercialism and political expediency that would only destroy the reason for being here and the attraction that draws visitors.

We present an alternative lifestyle that seeks to emulate the proper values of a society that respects each other and believes in themselves, to feel free to express ourselves with the abilities and initiative we have been given.

The natural beauty and cultural diversity of Byron has attracted the people who have come to make this place their home and our community use of local resources, knowledge and skills, the creative artists, innovative enterprises, growers of food, performers and our wealth of talented people now create the unique alternative community which attract visitors from around the world.

We have been given a legacy of whaling, mining, and the unsustainable results of commercial exploitation which came in the name of progress.

Our future depends on repairing the real assets that are Byron Bay – the nature, the people and the energy to make this town self-sufficient and sustainable so we can enjoy it now and show future generations a better way to live.

This is the real progress – to a better way of living and the visitors who come to see an alternative lifestyle will leave refreshed and uplifted.

Byron Bay is not a commodity to be exploited, it is a living, breathing community of people who honour the spirit of the land, the water, each other and ourselves.

We are not in competition with other resort destinations or commercial institutions, we are a self-sufficient co-operative of loving people who speak from our hearts. As the sign painted on the footpath says – lose the ego, this is Byron Bay.

We don't want the fragmentation of urbanism, we don't benefit from the designer boutiques, the dominating technology, the imported commodities, or the loss of social esteem that is offered in the name of profit. We only ask to be ourselves because that's who we choose to be. We all have a choice and we have made ours.

Imagine a Town Centre without alcohol.

There would be a decreased level of violence, less aggression, quiet nightclubs, less frustration, less personal abuse, less domestic violence, reduced crime, reduced injuries, safer hospitals, less medical demand, no need for emergency services, reduced police presence, and, no need for security cameras. There would be happier people, family friendly venues, safer streets, more co-operation

not conflict, less poverty, less intolerance, more social interaction and inclusion, less illness, higher self-esteem, peace and respect for others and greater personal freedom.

Imagine a smoke free town centre.

Lismore has done this – why not Byron?

Imagine a town where profits made in the town were channelled back into the community.

Imagine a town where all the buildings are painted in bright colours and the street furniture are pieces of art.

Imagine a town with less cars and priority to pedestrians.

Imagine a Town Centre with street trees and planting in all of the streets and open spaces bringing the open landscaping of our surrounding nature into the Town Centre.

Imagine zero food miles with all our food sourced locally.

Imagine a fully sustainable zero carbon Town Centre with energy, waste, and water systems using natural resources.

Byron is all about giving, contributing, caring and communicating with loving intent. This is sustainable and we welcome visitors who want to share this love for people, for community, for nature and for self. This is sustainable because it is the proper way.

Byron is a place of healing, it connects the material realm to the universal realm. Many people are involved in healing and alternative therapies, including energetic healing, acupuncture, chiropractic, land energy, geomancy, earth healing, space healing, feng shui, and ley lines.

We co-create with nature, we respect and honour the natural beauty of this place because this is the reason for being here and the life we have chosen.

We are allowed to be free and enjoy our freedom to sing, dance, create and express ourselves as the individuals we choose to be and live as we should, in harmony with nature and each other.

This is the Byron way.

This is the Spirit of Byron.

The real essence of Byron Bay is shown on the following pages in diagrams 18 to 21 prepared by Debby Horne which illustrate some of the natural assets, spontaneous activities and possibilities as we continue to manifest our community fully in tune with our natural environment.

BYRON BAY IS

RAINBOW COUNTRY



WHITEBELLED
SEAEAGLE



WEDGETAIL
EAGLE



ARAKWAL



WHALES



TURTLES



DOLPHINS



LIGHTHOUSE



DIAGRAM 18 WALLABIES



KOALAS



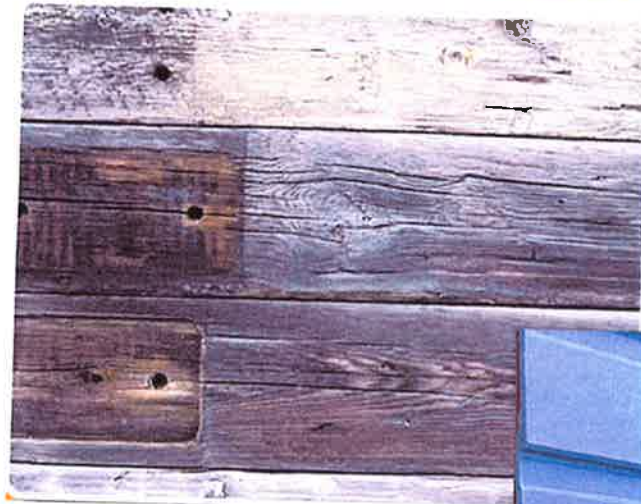
PANDANAS



COLOUR



BANGALOW PALMS



SLEEPERS



WEATHERBOARD



MELALEUCAS



STONEWALLS



DIAGRAM 19

MOSAICS



RAINBOWEXPRESS



LOCAL PRODUCE



MARKETS



DRUMMERS

CHAI TEA



VEGETARIAN CUISINE



CREATIVE ARTS



FESTIVALS



CRYSTALS



SPIRITUAL HEALING



LOSE THE EGO



YOGA



HEART & SOUL



INSPIRATION



IMPLEMENTATION

The concept outlined in this Master Plan won't be totally achieved through the government granting money or from big business investing in capital works, it is not their method of working. It will be achieved by the co-ordinated vision of local people co-operating with each other and collectively manifesting this reality.

Through people wanting to plant trees and gardens, to grow food, to make electricity, to use water and waste as a commodity, all because our respect for the natural environment will inspire its rehabilitation and working with nature will supply all our needs on a local basis.

We will pool our resources and energy by being aware of opportunities and sharing our money locally and by keeping what we produce, and by good stewardship and the efficient use of our resources.

This is real sustainability in action.

The social cohesion and growth we gain from co-creating with nature is our most valuable asset, starting with our own self-esteem and demonstrating the proper ways to use our planet's resources.

This does not even register on our nation's Gross Domestic Product (GDP) calculations and cannot be bought with money.

A healthy community comes from a healthy environment. Our natural environment will supply all our needs, we only need to value what we have and stop destroying it in the name of progress.

An alternative to destruction is co-creating with nature, to use and enjoy these assets which will regenerate to continue supporting us.

The natural areas and biodiversity around us have a much higher value than commercial exploitation because they are essential for our life and survival. The highest use value of a property is when its natural abundance gives us all our needs. It is not a market assessment of how much money someone can make out of it to satisfy their own greed or make the company balance sheet look good.

You cannot legislate for good design. Beautiful buildings come from the heart through a love and understanding of nature and the people who will interact with the environment you create. We already have many businesses and volunteer groups who willingly contribute to our community.

This study tries to focus on the real needs of our town and provide directions that are achievable. Our existing resources can then be channelled into a program of priority projects that will lead to the cohesiveness of the whole town.

We have nature, bush care, dune care, and community garden groups which could lead to the rehabilitation of our wetlands and green areas. The worm farm and market food garden are seen as commercially viable enterprises that return profit to the town.

The stormwater collection, treatment and reticulation could be sold back to the town at a lower price than mains water.

Garbage is a resource and can be recycled, composted and sold to generate income to cover costs and more.

A co-ordinated solar energy collection system to store the energy and redistribute the power through a local town grid would be sustainable, self-supporting and profitable. The co-operation of all building owners and a planning requirement to install solar panels on all buildings would return enough power to support the whole town on a direct feedback basis. Other forms of co-operation could also be investigated. There are many people and businesses in Byron that would be pleased to be involved, and the journey to a zero carbon Town Centre is challenging, exciting and rewarding.

The multi-level parking stations at each end of the town approaches are a commercially viable project with, say, paid parking after a 2 hour free period for long term parking.

These stations allow train travel to the Town Centre, and could hire bikes, skateboards, wheelchairs or scooters for a greater town experience with these conveyances returned when they collect their car.

There is enormous potential to reinstate a train network using the existing tracks for tourists, commuters, freight service and adventurous kids who would enjoy the ride.

Station buildings and surplus land could also be upgraded to a more compatible and economic use.

Local owners and businesses could be part of an 'adopt-a-street' or 'adopt-a-park' scheme to take responsibility and care for their immediate surrounds on a tax deductible, business advertising and marketing basis.

Local businesses could sponsor individual community projects, as many of them already do, but they would need specific details, guidance and direction for co-ordination of all projects.

There are many ways to implement all of the ideas put forward, some are large capital works and infrastructure but these should allow the local input and initiative using our local resources, knowledge and the skills available throughout the Byron Community.

CONCLUSION

A town is not about buildings, it is about people, For this reason, this study has focussed on the open spaces, the public domain, because this is where people eat, play and communicate.

The four major open spaces called Beach, Tallow, Railway and Market define the overall structure connected by the streets and paths that link them to complete the town framework.

A healthy environment makes a healthy community. We have outlined a vision for Byron Bay Town Centre to become a people place which is self-sufficient in energy, water, waste and food. This is not only achievable with current proven technology but is essential to create a fully sustainable natural environment.

These aims and aspirations have been applied to the existing natural and built environments to establish principles for future directions and co-ordination of the many ideas outlined.

Each area presents its own unique character and purpose based on its connections to nature and the town activities and this theme is used to establish their functions, facilities and purpose.

The design concepts for each area conclude with a set of principles or essential components which combine to establish the overall Master Plan which shows their combined links and the connections between the town and the natural environment.

Within these established principles there is flexibility with design elements, artistic expression and the overlap of the town functions which spontaneously occur in many areas.

In summary these principles are:-

BEACH

- Provide a new pedestrian plaza in Jonson Street between Lawson and Bay Streets
- Extend this plaza into Bay Lane to create a unique 'eat street'
- Provide a bypass road through the existing car park between Lawson and Bay Streets
- Relocate the town swimming pool
- Remove beachfront parking area
- Extend the existing park across the full width of the beachfront area.

TALLOW - LIBRARY

- Rehabilitate all wetland areas and the biodiversity
- Provide internal nature trails and walkways linking all surrounding areas
- Provide environmental research and education facilities
- Provide a meeting place for inclusion of the whole community
- Provide a stormwater management, treatment and recycling system
- Provide a first class swimming and water sports centre
- Provide a commercial permaculture market garden with compost and fertilizer recycling.

RAILWAY

- Increase the park area by moving the kerb line along the Jonson Street frontage
- Provide new toilet amenities with landscaping
- Retain the heritage tourist information centre building and landscaping
- Provide new cafes and meeting places
- Consider alternative uses for the station buildings
- Reactivate the railway line and station, even for short journeys from the town periphery or new car parks
- Relocate all existing car parking and extend the park green open space
- Provide additional parking along Butler Street with pedestrian walkways to the Town Centre
- Provide a transit centre with full and efficient facilities
- Redirect bus and tourist vehicle arrivals through Butler Street and a new rail crossing.

MARKET - BUTLER STREET

- Upgrade the market facilities
- Provide a row of shade trees through the market to give shade and connect the natural wetland with the town landscaping
- Retain the landscape buffer between Butler Street and the railway line
- Provide additional walkway connections between Butler Street and the Town Centre
- Upgrade Butler Street to supply additional parking
- Provide a new town bypass road away from the Butler Street residential area
- Provide the one way bus only access road to the Railway Park transit centre
- Rehabilitate the wetland west of the market area
- Connect the wetland and open space to the Cumbebin Swamp National Park
- Provide a water management and treatment pond to the existing creek stormwater drainage
- Provide nature trails and boardwalks to experience the wetlands and connect with the town bikeways.

The overall master plan has many components with the landscaping master plan rehabilitating the wetlands, beach and biodiversity and linking them with green connections throughout the town, giving a nature theme to the streetscape. The permaculture market gardens compost fertilizer and supply food directly to the town with zero food miles.

The circulation and traffic plan shows how cars and people can be separated within the town centre by providing alternative car parks and direct walkway links.

Energy, water and waste management then allows the Town Centre to generate its own electricity, collect, treat and recirculate grey water, and recycle waste to be profitable.

This plan demonstrates one way that Byron Bay Town Centre can rehabilitate and use nature to be self-sufficient, to become an environmentally aware people place, to be the relaxed alternative lifestyle we enjoy, and to enhance our spiritual wellbeing in an economically balanced system by co-creating with nature.

This puts humanity over economy because we are only the caretakers of this sacred place.

We now reclaim The Spirit of Byron.

JOHN SPARKS

JULY 2014

APPENDIX

- 1. BYRON LEP 2014**
- 2. LAND OWNERSHIP**

APPENDIX 1

BYRON LOCAL ENVIRONMENTAL PLAN 2014



Byron Local Environmental Plan 2014

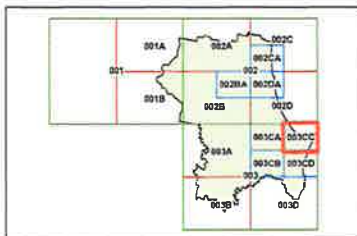
Land Zoning Map - Sheet LZN_003CC

Zone

- B1** Neighbourhood Centre
- B2** Local Centre
- B4** Mixed Use
- B7** Business Park
- E1** National Parks and Nature Reserves
- IN1** General Industrial
- IN2** Light Industrial
- R2** Low Density Residential
- R3** Medium Density Residential
- R5** Large Lot Residential
- PE1** Public Recreation
- RE2** Private Recreation
- RU1** Primary Production
- RU2** Rural Landscape
- RU3** Village
- SP2** Infrastructure
- SP3** Tourist
- W1** Natural Waterways
- W2** Recreational Waterways
- DM** Deferred Matter

Cadastre

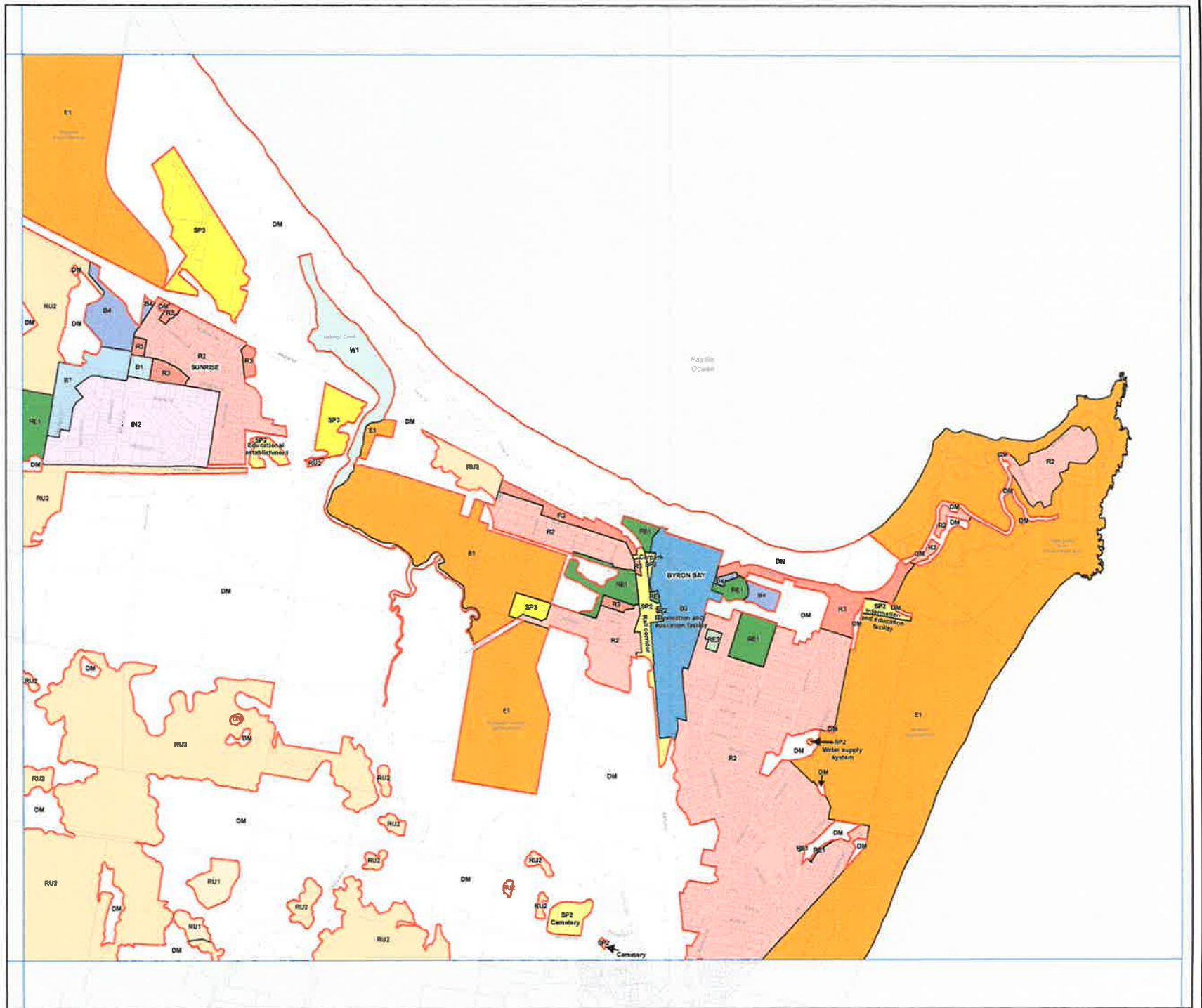
Base data 01/07/1991 © Land and Property Information (LPI)
Addendum data 30/09/13 © Byron Shire Council

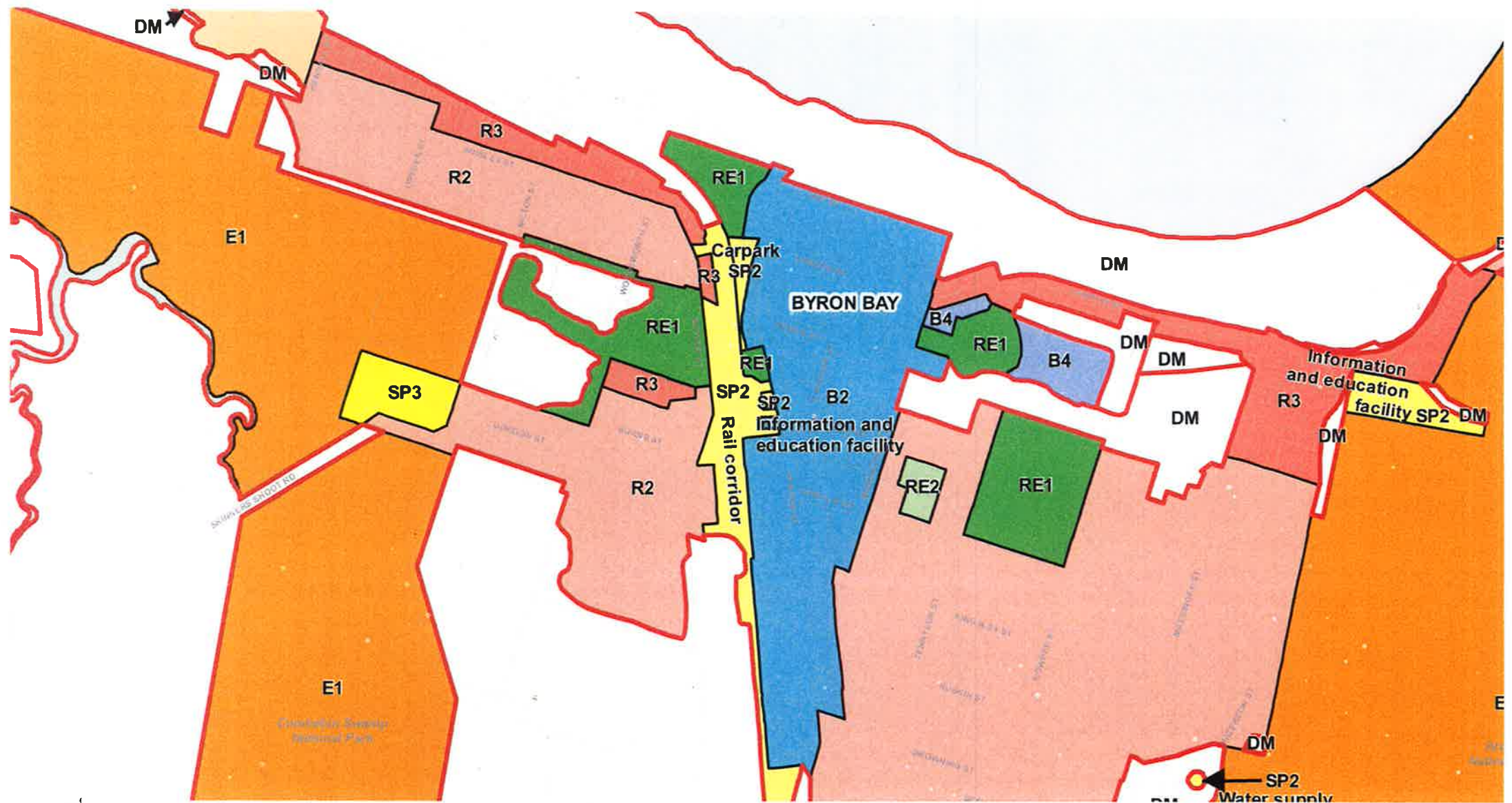


0 200 400 Metres
Scale: 1:20,000 @ A3

Projection: GDA 1994
Zone 56

Map Identification number:
1390_COM_LZN_003CC_020_20140114

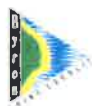




APPENDIX 2

LAND OWNERSHIP

Land owned by State rail



Disclaimer: While all reasonable care has been taken to ensure the information contained on this map is up to date and accurate, no warranty is given that the information contained on this map is free from error or omission. Any reliance placed on such information shall be at the sole risk of the user. Please verify the accuracy of the information prior to using it.
 Note: The information shown on this map is a copyright of the Byron Shire Council and the NSW Department of Lands.

Scale = 1:3,794
 Metres 50 100 150 200

(Scale correct at A4 size)

14/03/2011

ABOUT THE AUTHOR

JOHN W SPARKS

ASTC (Arch) Dip CD, MPIA, ARAIA, FAPI

Managing Director of John Sparks and Associates (now JSA Architects Pty Ltd) from 1975

PROFESSIONAL QUALIFICATIONS

- Diploma of Architecture University of NSW
- Chartered Architect NSW
- Post-Graduate Diploma of Civic Design
- Certified Practicing Planner NSW

AFFILIATIONS

- Associate of the Royal Australian Institute of Architects
- Corporate Member of the Planning Institute of Australia
- Fellow of the Australian Property Institute
- Former member of the International Federation for Housing and Planning, the Hague, Netherlands
- Member of the Retirement Village Association of NSW
- Representative on former Ku-ring-gai Education Group, assisting the NSW Premier on Educational issues.

John is an Architect and Town Planner, with 35 years experience in architectural design, documentation and administration, urban planning, master planning, land use assessment and the design of new and expanded towns. He established his own private practice with responsibility for retail, commercial, industrial, houses, medium density residential, child care centres, clubs, ski lodges, rural subdivisions, motels, taverns, retirement villages, health care, recreational, resort, interior commercial fit-outs, civic and urban planning for government, corporate and private clients, sustainable eco-village master planning and resort projects.

Additionally, John

- Was a part-time Lecturer and Tutor, School of Town Planning, University of NSW from 1969-1977.
- Australian delegate to the 30th World Congress of the International Federation for Housing and Planning at Barcelona in 1970 and the Congress at Adelaide in 1986.
- Guest Lecturer at UTS Post Graduate Urban Estates Management course and tutorials in 1998-99.
- Founding member of the Retirement Village Association, he has published features on design for retirement villages, presented seminars on planning for disabled access and the Master planning of Retirement Villages for the RAIA and Australian Property Institute.
- Currently represents the API on the preparation of Standards for accessible purpose made buildings for Standards Australia.

He has initiated and contributed to Mobility maps, Development Control Plans on Access and Mobility and Adaptable Housing, access awards and other issues through current involvement in the Willoughby Council Access Committee and the Northern Region Access Forum, as well as contributing to State Environmental policy and planning reviews.

CONTACT DETAILS

John Sparks PO Box 321 Bangalow NSW 2479

Phone: 0417 088 806

Email: john@rainbow-spirit.com.au