

Noosa Biosphere Reserve

Economic Directions

Discussion Paper

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Executive Summary

This document has been prepared by the Economic Sector Board to stimulate thinking and discussion across the community, business and Sunshine Coast Regional Council. The Economic Sector board exists to:

- Leverage, connect and support current and future initiatives to promote sustainable economic development in the region
- Tackle issues that are of importance to the business community in a way consistent with our overall sustainability goals
- Translate big picture ideas into everyday actions
- Provide sound economic and commercial input to the Noosa Biosphere and Sunshine Coast Regional Council

In that context it has worked with Strategic Economic Solutions to prepare this discussion paper as a catalyst for robust discussion across the community about how to help the economy prosper without causing increasing environmental damage, contributing to the Regional Council's vision "To be Australia's most sustainable region – vibrant, green and diverse".

The challenge for any region is *how*. How to ensure an achievable economic future for its community by embarking on a path of *sustainable* economic growth. The tools are limited, but a strategic approach, based on coherent local actions, can pave the way. Noosa's approach has sought to support the growth of higher value, knowledge intensive and export-focused businesses as a way of giving the community a stronger economic foundation.

The Discussion Paper draws on global experiences to highlight how much of a new approach this is, and in addressing these complex and inter-related issues the Noosa Biosphere community is in many ways at the forefront of global experiences in local sustainable economic development.

Economic drivers

Noosa's service-based economy, and in particular its strengthening knowledge-based service industries, provide a solid platform for the transition to a genuinely sustainable economy. Service businesses in general, and especially knowledge-based services businesses, have high income and employment multipliers leading to strong positive economic spinoffs as businesses in these sectors grow.

This Discussion Paper builds on these foundations with a more holistic approach to economic development which goes beyond the usual core elements of industry development to encompass economic measure for maintaining labour and housing diversity, improving transport and energy efficiency and for enhancing the area's stock of 'natural capital'.

Recent work updating the *Sunshine Coast Regional Economic Development Strategy* showed that value of the Sunshine Coast Gross Regional Product (total value of all goods and services produced in the region annually) was around \$8.7 billion in 2008. Growth over the previous 5 years across the region was strongest in service industries: Cultural and Recreational Services; Wholesale Trade; Property and Business Services; Finance and Insurance; Accommodation, Cafes and Restaurants; and Health and Community Services as well as Construction, Government Administration and Defence and Mining.

The Sunshine Coast saw a 34% increase in knowledge economy jobs between 2001 and 2006, above the overall rate of jobs increase of 28%, and countering a fall in the number of knowledge industry jobs across Southeast Queensland as a whole in the same period. The increase in knowledge economy jobs based in the Sunshine Coast supported a major reduction in the number of knowledge workers who live in the area but work elsewhere – good news for the diversification of the Sunshine Coast's economy.

Environmental impacts

In considering the Noosa Biosphere Reserve area and its economic context, it is important that the environmental footprint of the area's economy be assessed as a baseline from which to monitor progress.

Benchmarks on key environmental footprint indicators are needed to provide a guide to the Biosphere Reserve area's environmental footprint in 1996, 2009 and (say) 2020 as the population and the economy grow. Indicators and associated performance ratios should be based on a mix of resident numbers, visitor numbers, local business activity and could comprise:

1. Water use
2. Energy use
3. Waste generation (waste to landfill, commercial/industrial waste, recyclables)
4. Greenhouse gas emission (split into core components) and could include measures such as transport kilometres divided into private cars, public transport, bikes, on foot
5. Green space, visual amenity

6. Biodiversity

Preparation of indicators and performance ratios along these lines would enable modelling of the economy's environmental footprint in the recent past and would enable modelling of future impacts based on various population and resource use intensity scenarios.

This discussion paper proposes 21 measures under three main themes: Productivity (economy and business), People and Planet.

Population growth

A core element of the Noosa community's response to the Biosphere Reserve is following through with the commitment to a sustainable development limit ('population capacity'). The sustainable development limit represents the carrying capacity of the 'permanent population' that has been assessed for the Noosa Biosphere Reserve area. The development limit is a powerful concept in the Noosa area as it has been discussed by the community for over a decade, and still has very strong support.

While only one tool in moving towards a sustainable economy, it is a very important tool. Recent international research has highlighted the difficulty faced globally in reducing the net impact of economic activity while global population continues to grow. Dramatic improvements in energy and resource use efficiency are needed to stabilise CO₂ emissions, for example, but the scale of efficiency gains per capita required is magnified many fold once population growth is factored in. Slow population growth for the Biosphere Reserve area is a core component in minimising the environmental impact of the area's economy. The challenge is one of decoupling the typically negative impact on the local (and global) environment from economic growth, enabling prosperity to grow in a low-population growth scenario.

The Discussion Paper summarises the main economic approaches, and the overall finding is that population growth alone is not the key to successful economic development as the correlation with economic growth ... "appears to be positive but small" in the words of the Productivity Commission.

The Discussion Paper recognises that the development limit is the foundation of a sustainable (quadruple bottom line) future for the Noosa Biosphere Reserve area and also recognises the economic impacts of slowing population growth. Analysis of the construction

industry in the Noosa area indicates a solid foundation of ongoing work, even without greenfields development in Noosa itself. As population growth slows it is very likely that construction and development industry income from new building work will fall.

Replacement and renovation work will continue to grow while the development limit is approached, and after, but Noosa's economy must continue to diversify into high value, low environmental impact knowledge based industries.

Businesses will need to be innovative, and quick to adapt to emerging trends and responding to new challenges. Slower population growth in a growing economy will mean increasing capacity for higher per capita expenditure on key components of economic infrastructure like roads, public transport etc.

An economy within a Biosphere

The Discussion Paper highlights that the foundations for this greater focus on a higher value economy are already in place, with growth trends in home-based businesses, wellness, creative industries and recreation. It recommends activities to work on infrastructure and strategic programs to provide an environment of growth for businesses compatible with sustainability – such as those in lifestyle, technology, environmental services, alternative energy, energy efficiency, smart design, eco tourism and human services including conferences. Diversity will need to be stimulated and assisted with strategies going forward as business pressures increase (such as the availability of staff under a development limit).

Tourism is and will continue to be a vital part of the area's economy, and the aging population will bring other growth opportunities for some businesses. This Discussion Paper recognises that promotion will be important to stimulate knowledge and take-up of these opportunities to help minimise negative repercussions from restructuring towards a lower environmental impact economy. It will be important for the Noosa Biosphere Reserve area to be recognised as being at the leading edge in providing health/wellbeing and medical facilities for all ages – especially older residents.

The Discussion Paper recognises the links between demographic diversity, education opportunities, creativity and a robust local economy. Accordingly, as Noosa's population growth slows, potential impacts may arise from more restricted labour pools, less diversity in tourists, changed local business and service needs, and the need to attract and retain young people. A high priority is to ensure the educational opportunities in the area continue to broaden. A particular concern is to stop the development limit contributing to labour

shortages – across a range of skill and occupational groupings. There is also a potential problem of high staff turnover as people may move to the area and then find out they can't afford to live here.

Strong foundations

It is clear that there are strong foundations in the Noosa Biosphere community for addressing a challenge of this scale. In the past Noosa has thrived because of the way it has been able to draw from and build on diverse views to create something unique. Community consultation and involvement has been a key to this success.

1. The aspiration to be declared a Biosphere Reserve itself
2. Sunshine Coast Creative Alliance
3. Connecting the Coast
4. Sustainable Town Centres
5. Eco-Biz
6. Living Smart
1. Travel Smart
8. Sustainable Tourism Plan 2006-2015
9. Sunshine Coast Housing Affordability Task Force
- 10 The Sunshine Coast Regional Council Sustainability Advisory Panel

Toolbox

There is a growing consensus on the need to minimise the environmental impact of global economic activity. While there are some signs of global action, there is also a perception that there is limited scope for local ownership and response. The toolbox for local (and regional action) comprises actions to enhance:

1. Comparative advantage
2. Productivity
3. Value-adding
4. Exports
5. Environmental impacts

Actions

The Discussion Paper offers a range of actions under these themes for consideration by the key actors in the regional economy:

1. Business
2. Educators and researchers

3. Community
4. Council
5. Economic Sector Board
6. Biosphere Board

The Economic Sector Board looks forward to continuing to drive an agenda of open discussion and action across the Sunshine Coast – engaging Council, business and the community in a progressive approach to developing a sustainable local and regional economy.

Contents

Executive Summary	2
1. Introduction	9
2. Structure and Drivers	17
2.1. Noosa Biosphere Reserve economy in its regional context.....	17
2.2. Biosphere Reserve area environmental footprint	26
3. Links between population growth and economic growth.....	30
3.1. Pros and cons of population growth	30
3.2. The main economic approaches	31
3.3. Population and economic growth in the Australian context.....	33
3.4. Population and economy issues in regional Australia.....	36
3.5. Separating economic growth from population growth.....	37
3.6. Will restricting growth weaken the community?.....	39
3.7. Noosa building activity levels	40
3.8. Population modelling and tracking towards limits of urban development.....	42
3.9. Recent population trends	43
4. An Economy within a Biosphere Reserve.....	46
4.1. Solid foundations in Noosa	48
4.2. Boards / community commitments	53
5. Toolbox – supporting an environmentally sustainable regional economy	55
5.1. Local Actions	55
5.2. Five economic foundations for action.....	57
6. Actions.....	59
7. Conclusion	69

1. Introduction

Purpose

This document is designed to stimulate thinking and discussion across the community, business and Sunshine Coast Regional Council (SCRC). It seeks to explore the potential that Biosphere status will bring to the region as Noosa seeks to deal with the global and local challenges ahead. It seeks to explore potential economic strategies to allow the Noosa Biosphere community to reach its full potential. In doing so, it draws on excellent work that has previously been carried out in Noosa along with latest Australian and overseas initiatives to foster local economic and ecological sustainability.

Noosa has thrived because of the way it has been able to synthesise seemingly diverse views into something unique. Community consultation and involvement has been a key to this success. The former Noosa Council recognised the value of this approach and took it to a new level with the creation of advisory sector boards. The model has received a good deal of attention. It is one of the factors that UNESCO specifically recognised in the awarding of Biosphere status.

Biosphere status is awarded under UNESCO's *Man and the Biosphere Programme*. The program is designed to promote and demonstrate a balanced relationship between humans and the biosphere.

UNESCO's Madrid Action plan states that:

"... the Biosphere reserve [BR] concept has proved its value beyond protected areas and is increasingly embraced by scientists, planners, policy makers, and local communities to bring a variety of knowledge, scientific investigations and experiences to link biodiversity conservation and socio-economic development for human well-being. Thus the focus is on developing models for global, national and local sustainability. And for biosphere reserves to serve as learning sites for policy professionals, decision makers, research and scientific communities, management practitioners and stakeholder communities to work together to translate global principles of sustainable development into locally relevant praxis."

Clearly, Biosphere status has raised the bar. And, given the challenges the world faces, raising the bar is essential – regionally as well as globally. Success in the future will depend on how we engage the community to deliver outcomes that may have seemed impossible in the recent past.

As we go forward, we will need new ways of thinking, new solutions, unprecedented focus and co-operation. This document is an attempt to kick-start the process.

Noosa's strong foundations

Noosa's recent history shows a series of strategic initiatives designed to respond to the community's desire for a more sustainable foundation. One of these, Noosa's sustainable development limit, or 'population cap', has become well-known as an ambitious tool to ensure that unfettered growth does not compromise the area's high environmental values. In addition to the commitment to the sustainable development limit, re-affirmed many times since it was first mooted in the mid 1990s, Noosa has complementary development controls and environmental/biodiversity initiatives. But Noosa has also made significant progress in aligning its social, community and environmental values with its economic future as well. 'Sustainable growth' has been an overarching goal for almost a decade in economic strategies like *Noosa 2015 A Chosen Future* and its successors including the *Knowledge Economy Strategy*, *Clever Networks* program, and associated initiatives

A common theme in these strategies has been to diversify Noosa's economy, maximising the value that can be added from a relatively stable population base. This is in marked contrast to most other local government areas in Australia where economic growth is based on population growth and associated business activity – of whatever form. Many regions are actively chasing increases in population to stem gradual declines, while others are actively embracing population growth and the economic stimulus it brings as the basis of their way forward.

But evidence is emerging that there is no net gain from population growth. Global population growth has been recognised as a challenge for decades. But it has been too easily dismissed as 'someone else's problem', and as a problem that technological changes in food production and economic efficiency will overcome.

Very few countries or regions have addressed issues of sustainability of population growth, and of economic activity itself, though the issues have been on the periphery of discussions for decades.

In 1991, the South Australian Department of Environment and Planning released *2020 Vision, Ideas for Metropolitan Adelaide*. In relation to growth the report commented:

“From an economic perspective, it is difficult to demonstrate that net economic benefits will arise from continuing immigration to Adelaide. It may cause a stimulus to private investment, expanding the size of the local market which Adelaide business can serve and improving the skill levels in the workforce. On the other hand, it may be that immigration requires greater investment in relatively unproductive urban infrastructure, diverts attention and resources from servicing export markets, and provides a pool of low-skilled labour which encourages low technology production,. As a result of these conflicting factors the net benefits of population growth are not clear.” (p 44, emphasis in original)

The report went on to recommend (as most planning and environment organisations usually do) new subdivisions, new infrastructure and new commercial areas as the platform for the future. Little has changed.

Much more recently, the Sustainable Development Commission in the United Kingdom presented the results of its enquiry into ‘*Prosperity without growth*’, only in March 2009. The enquiry drew together and augmented the findings from a series of workshops in 2007 and 2008 on topics including ‘economy lite’ and ‘stationary state economies’. In *Prosperity without growth*” Commissioner Tim Jackson commented on the lack of interest, research and experiences in this crucial search for a low growth economic approach field:

“Astonishingly, there is almost no attempt at this task in the literature at all.” (p79)

Yet this is not due to a lack of discussion – the negative impacts of economic growth have been the subject of literature, science and philosophy for decades, even as the industrial revolution and its associated social dislocation was getting underway. Concerns rose through the 20th century with Japan’s Minamata Bay mercury poisonings, Rachel Carson’s *Silent Spring* and the Club of Rome’s *Limits to Growth*.

But the fundamental economic drivers have still not changed. Former World Bank Chief Jeffrey Sachs has commented that:

“For years economists thought the ‘big problem’ in their discipline was how to bring economic opportunity to all countries in the world, and we as economists have solved that problem – we now know how to do that. But just as we understood that problem to be solved, we realised that it was not in fact the ‘big problem’. The ‘big problem’ was how to do that without triggering environmental catastrophe.” (speech to China Update, Canberra June 2008)

There is still so much momentum in the economic system that dissenting voices are either trivialised, ignored or pilloried. Tim Jackson wrote:

“.. a culture of consumption ... sends all the wrong signals, penalising ‘good’ environmental choices and making it all but impossible, even for highly-motivated people, to live sustainably without personal sacrifice. In this context, simplistic exhortations for people to resist consumerism are destined to failure. Urging people to insulate their homes, turn down the thermostat, put on a jumper, drive a little less, walk a little more, holiday at home, buy locally produced food (and so on) will either go unheard or be rejected as manipulation for as long as all the messages about high street consumption point in the other direction.

For this reason, structural change must lie at the heart of any strategy to address the social logic of consumerism. And it must consist in two main avenues. The first is to dismantle the perverse incentives for unproductive status competition. The second must be to establish new structures that provide capabilities for people to flourish – and in particular to participate meaningfully and creatively in the life of society – in less materialistic ways.

The advantages in terms of prosperity are likely to be substantial. A less materialistic society will enhance life satisfaction. A more equal society will lower the importance of status goods. A less growth-driven economy will improve people’s work-life balance. Enhanced investment in public goods will provide lasting returns to the nation’s prosperity.” (Prosperity without growth, p11)

The challenge for any region is *how*. How to ensure an achievable economic future for its community by embarking on a path of *sustainable* economic growth, not banishing them to the rigours of ‘living in caves’, as many critics comment. The tools are limited, but a strategic approach, based on coherent local actions, can pave the way. Noosa’s approach has sought to support the growth of higher value, knowledge intensive and export-focused businesses as a way of giving the community a stronger economic foundation.

The population capacity concept that underscores the Noosa Plan 2006 was developed on the principles of sustainability, long before that concept had the prominence it has today. It is an early example to the world of how a community and its political representatives identified not just a problem, but found a viable solution. For them, the status quo was never enough. Their foresight and vision has provided a solid foundation - a head start - for the Noosa region. The Biosphere gives us the opportunity to rekindle that passion and provides a great vehicle to help us deal with the challenges ahead.

Current imperatives

The Madrid Action Plan identifies the following challenges:

- Accelerated climate change with consequences for societies and ecosystems;
- Accelerated loss of biological and cultural diversity with unexpected consequences that impact on the ability of ecosystems to continue to provide services critical for human well-being; and
- Rapid urbanisation a driver of environmental change.

When we add to this the notion of peak oil, the impact of the global financial crisis [and the new approach to debt that brings] and rapid world population growth coupled with an aging population in the developed world, the challenges can at times seem insurmountable. The path is not clear, even to the UK Sustainable Development Commission when it examined the scope for new engines of economic growth:

“So what exactly constitutes productive economic activity in this [new] economy? It isn’t immediately clear. Selling ‘energy services’, certainly, rather than energy supplies. Selling mobility rather than cars. Recycling, re-using, leasing, maybe. Yoga lessons, perhaps, hairdressing, gardening: so long as these aren’t carried out using buildings, don’t involve the latest fashion and you don’t need a car to get to them. The humble broom would need to be preferred to the diabolical ‘leaf-blower’, for instance. The fundamental question is this: can you really make enough money from these activities to keep an economy growing? And the truth is we just don’t know. We have never at any point in history lived in such an economy. That doesn’t mean we couldn’t. But it sounds at the moment suspiciously like something the Independent on Sunday would instantly dismiss as a yurt-based economy – with increasingly expensive yurts.” (Prosperity without growth p 76)

While there has been thundering silence on addressing these uncomfortable root causes of unsustainable economic activity, however, there is still room for creative local initiatives to play their part and drive a regional, national and global change in direction. Communities like Noosa are the best placed for this leadership, and are perhaps the only places we can expect this kind of leadership to come from.

Coupled with the fact that we have a regional council with the vision **“To be Australia’s most sustainable region – vibrant, green and diverse”** Biosphere status gives us a unique tool to make a difference.

This discussion paper takes a deliberately holistic approach – recognising that economic activities have significant impacts on many other issues usually allocated to different silos like waste minimisation, biodiversity, food production, revegetation, skills & education, transport, planning and property development.

The paper recognises that these issues cannot continue to be put in separate boxes. Treating these issues in isolation has contributed to creating the challenges we face. Biosphere status gives the community a clear foundation on which to build a more cohesive approach that integrates these different issues – and which integrates them into a sustainable economic future.

But in looking across the usual boundaries the paper does not seek to claim a wide territory as the province of economics alone. It is becoming clear that an *economics dominated* approach, based on the usual assumptions implicit in economics, is an important cause of many of the challenges we now face. Rather than appropriating other issues and *imposing* economic responses, this paper seeks to open active partnerships across organisations and disciplines to pursue a genuinely sustainable economic future for the Noosa Biosphere area.

Practical approaches to complex questions

The discussion paper draws on and highlights some innovative approaches happening in other parts of Australia and overseas. The document goes beyond what is happening in Biosphere Reserves alone, as grass roots creative responses are happening outside the formal Reserves, and there will be great gains for Noosa in building on a diverse knowledge base.

The paper takes the view that we should be getting our ideas from everywhere we can – from Biospheres, Transition Towns, Cittaslow, universities, Creative Alliance activities, change management theories, great ideas from the community and schools etc. Where we will add value is integrating the best of them into something that works for Noosa. In the process we can add to the capacity of the community to be truly resilient. And then, we also have something to take back into other communities around Australia and the world.

While it is relatively easy to find people, and even organisations, willing to sign on to these ideals, they are topics that many have talked about but almost no-one has acted on. This paper seeks to re-invigorate not just the level of discussion of these topics in the Noosa area, but to inspire action, through offering a range of actions different parts of our community can take.

Noosa Biosphere Economic Board's role

Noosa has been characterised by many innovative partnerships to address and deliver on challenges facing the community. This paper seeks to stimulate the same response in addressing the complex inter-relationships between the economy, environment and community in the Noosa Biosphere area and avoid the risk of individual groups “guarding their patch” rather than problem solving across disciplines and interest areas.

This discussion paper has been prepared for the Economic Sector Board. It is part of a process the Board is undertaking to determine how and where it can add most value to the Noosa Biosphere community. Several key principles are emerging:

- The Board is determined to make a difference and gain traction as we all come to grips with the full potential that Man and the Biosphere status presents,
- The Board recognises that flexibility is key if we are to deliver results and leverage the innovation and grow the resilience that is evident in the community,
- The Board acknowledges that there are many players doing excellent work in the region and that results can be achieved through creating robust connections between them rather than attempting to do everything ourselves.

It therefore sees part of its role encompassing ways to leverage, connect and support current and future initiatives to promote sustainable economic development. These may include:

- Monitoring and promoting excellent work that is already occurring on the Sunshine Coast and beyond

- Providing additional high quality input into issues being debated
- Identifying and instigating debate on issues not receiving sufficient attention
- Encouraging the stretching of ideas, a 'ginger group' pushing the envelope by keeping in touch with leading global ideas and actions
- Translating big picture ideas into everyday actions, including packaging simple tools for business and the Biosphere
- Providing sound commercial input to SCRC and Noosa Biosphere Limited
- Creating linkages between players that support the objectives of the Noosa Biosphere Plan of Management and the SCRC Corporate Plan.

The agenda will be ambitious and a high level of communication will be one of the keys to success ... and the Board is ready to add value to the processes currently underway that are shaping our region's future.

In offering this discussion paper to the community, the Board looks forward to dialogue across traditional demarcations, and to fostering actions that are similarly open.

2. Structure and Drivers

2.1. Noosa Biosphere Reserve economy in its regional context

Noosa's natural beauty and lifestyle positions the region as a desirable residential and tourist location. The former Noosa Shire Council and local residents recognised that over-development and over-use would impact on these attractive qualities and accordingly, they sought mechanisms to manage growth and development within the Shire.

Existing economic strategies are written within the context of high environmental sensitivity and recognise the importance of the environment for the attractiveness of The Biosphere Reserve area from an economic and lifestyle perspective. The natural environment and the man made environment need to be protected to maintain the 'Noosa Experience'.

To move to a genuinely sustainable economic framework, the economy in the Biosphere Reserve area will need to evolve to one with a greater emphasis on higher value goods and services which have less drain on the stock of natural capital – the natural environment's assets recognised in the Biosphere Reserve designation.

A key role for policy makers and the community is to provide a climate in which Noosa's economy can continue to grow and diversify without negative impacts on the local environment. Diversity is important – this Discussion Paper emphasises the importance of diversity and balance across a number of areas that are crucial to Noosa's prosperity: biodiversity; diversity in the age and interests of Noosa's residents; diversity in the number of industries growing here; and diversity in the cultural and entertainment offerings are some of the key issues.

This Discussion Paper has been developed around an underlying principle that economic growth in the Biosphere Reserve area is both necessary and desirable. In order to demonstrate that the community can live in harmony with nature it is important to give weight to community sustainability (and associated respect to community expectations of prosperity) alongside environmental protection.

The challenge this Discussion Paper addresses is how to support both the Biosphere Reserve economy and its ecological integrity. The challenge is one of decoupling the typically negative impact on the local (and global) environment from economic growth.

It is hoped that this Discussion Paper will help Sunshine Coast Regional Council achieve its vision, as offered in its July 2008 *Growth Management Position Paper* and its 2009 *Draft Corporate Plan*:

***To be Australia's most sustainable region -
vibrant, green, diverse***

The 13-year vision of Council's *Growth Management Strategy* is one which balances population and economic growth aspirations which respect and protection of the region's ecological integrity:

In 2031, the Sunshine Coast is a sustainable, self sufficient community which is internationally recognised as a region which has been able to achieve outstanding environmental protection while at the same time delivering a sustainable lifestyle, economic prosperity and innovation and community well being.

Growth and change are managed in ways that maintain the region's environmental values, distinctive character and unique identity.

Compact, well located and thoughtfully designed urban forms protect important natural values, maintain open space and enable more efficient use of resources.

Communities enjoy a high quality of life in a variety of well connected coast and hinterland centres that reflect their individual strengths, character and identity and provide a wide range of housing and transport options along with ready access to employment and retail, business, education, recreation, sporting, cultural and health facilities.

Prosperous, dynamic, interdependent and self reliant urban and rural economies are characterised by diversity and innovation and the provision of goods and services to the local economy. (p35)

The approach is absolutely consistent with the Noosa Biosphere's Vision statement:

“Your Noosa Biosphere will be a learning community that cultivates harmony between people and nature, for both conservation and sustainable development”.

Sustainability – of economy, community and ecology, is also the core challenge for the Biosphere Reserve and is the focus of this Noosa Biosphere Reserve *Economic Directions Discussion Paper*.

Existing economic development strategies are in place for the Sunshine Coast as a whole which emphasise employment generating high value industries in knowledge-based and

creative sectors, alongside tourism and value-added agricultural products. These have been a priority for the Noosa area for many years, based on the understanding that Noosa's traditional economic drivers— like construction, business services and retail – cannot be relied upon as future drivers of the economy according to Biosphere values as they are based too heavily on continuing population growth. It is now becoming clear that population growth brings more challenges to environmental sustainability than it brings answers.

The Noosa Community Sector Economic Plan 2002-2015 *Noosa 2015 – A chosen future* that was prepared in 2002 proposed that future driver industries for Noosa's economy should emphasise:

- Tourism (incl events – low impact events, reducing impact of visitors e.g. sports, eco-tourist, cultural etc)
- Knowledge-based industries
- Environmental industries including water, environmentally friendly building and design and sustainable energy (particularly solar)
- Advanced manufacturing
- International education – English language and Biosphere-related
- Creative industries
- Food and food processing
- Primary production and processing
- Health and aged care
- Business and other professional services
- Construction (particularly renovation and refurbishment)
- Niche retail

These themes are echoed in the economic development approaches already underway in the Noosa area, supplemented by initiatives to stimulate 'village' local economies in the area. The initiatives currently underway are summarised in Section 4.1 of this Discussion Paper, and they provide a solid foundation for a high value-low environmental impact economy around the Biosphere Reserve.

This Discussion Paper builds on these foundations with a more holistic approach to economic development which goes beyond the usual core elements of industry development to encompass economic measure for maintaining labour and housing diversity, improving transport and energy efficiency and for enhancing the area's stock of 'natural capital'.

Structure and drivers

The economy of the Noosa Biosphere Reserve area is strongly based on tourism and services, with retail, hospitality and other service industries accounting for some 60% of the Noosa area's Gross Regional Product in 2002-03¹. Manufacturing accounted for another 9% of GRP, construction another 12% and primary industries a further 6%.

Industries with largest contributions to Noosa and Sunshine Coast Gross Regional Product

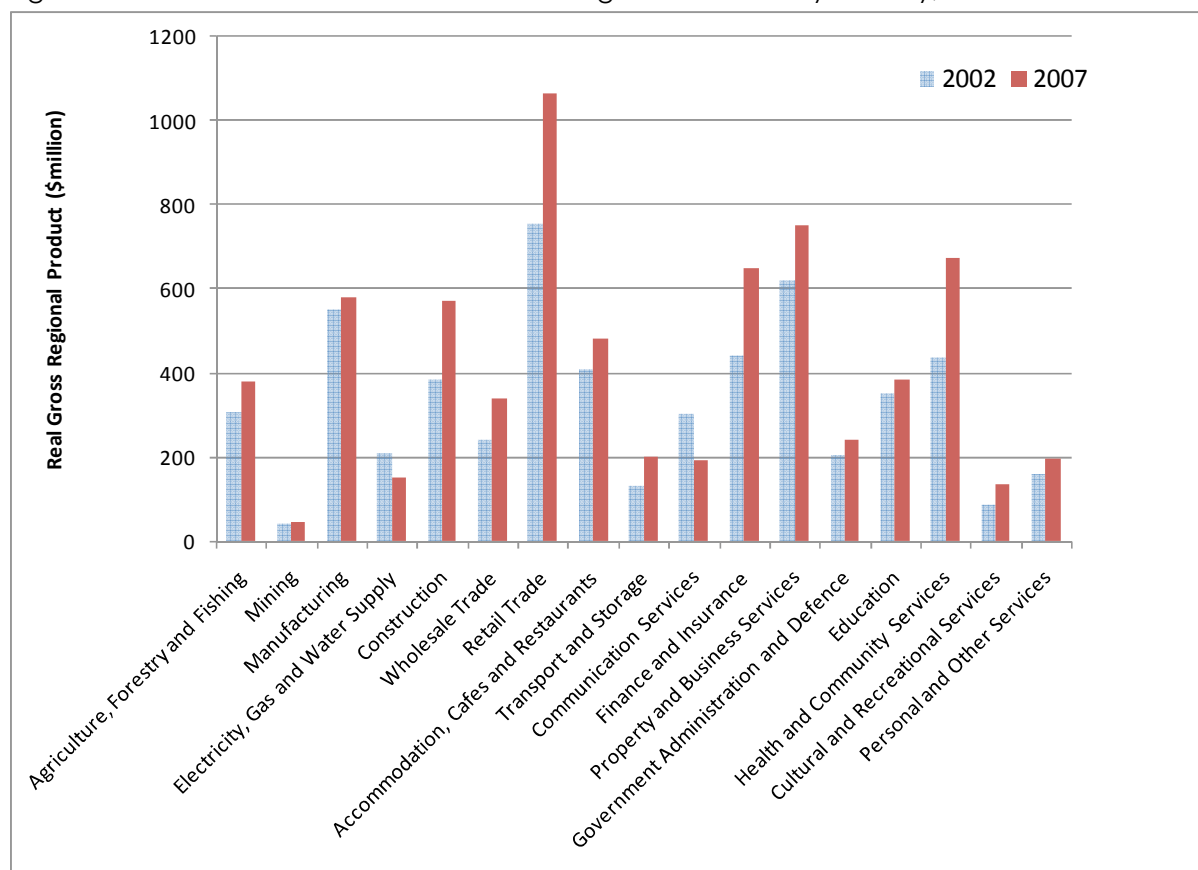
	Noosa (2004)	Sunshine Coast (2004)	Sunshine Coast (2008)
Property and Business Services	13.8%	10.8%	11.5%
Construction	11.9%	7.7%	8.9%
Retail Trade	9.9%	12.7%	13.3%
Manufacturing	8.7%	10.6%	7.5%
Accommodation, Cafes and Restaurants	7.9%	7.4%	6.6%
Health and Community Services	7.8%	9.5%	12.0%
Finance and Insurance	5.9%	5.9%	5.2%
Agriculture & mining	5.7%	4.3%	4.2%
Education	5.3%	7.5%	7.2%

Source: AECGroup *Significance and Future Prospects for Selected Industry Sectors in the Noosa Shire Economy*, April 2004 and SGS Economics and Planning: *Tracking the Sunshine Coast Economy: Trends in the Sunshine Coast's GRP*, March 2009.

Recent work updating the *Sunshine Coast Regional Economic Development Strategy* showed that value of the Sunshine Coast Gross Regional Product (total value of all goods and services produced in the region annually) was around \$8.7 billion in 2008. Growth over the previous 5 years across the region was strongest in service industries: Cultural and Recreational Services; Wholesale Trade; Property and Business Services; Finance and Insurance; Accommodation, Cafes and Restaurants; and Health and Community Services as well as Construction, Government Administration and Defence and Mining.

¹ AEC Group 2004, *Significance and Future Prospects for Selected Industry Sectors in the Noosa Shire Economy*, commissioned by Noosa Council

Figure 1 Estimates of Sunshine Coast Gross Regional Product by industry, 2002 and 2007



Source: *Repositioning the Sunshine Coast Regional Economic Development Strategy*, SGS Economics and Planning June 2008

Earlier work on the Discussion Paper noted that Noosa itself accounted for 18% of the Sunshine Coast's GRP in 2001, and 18% of Sunshine Coast employment and 18% of Sunshine Coast population.

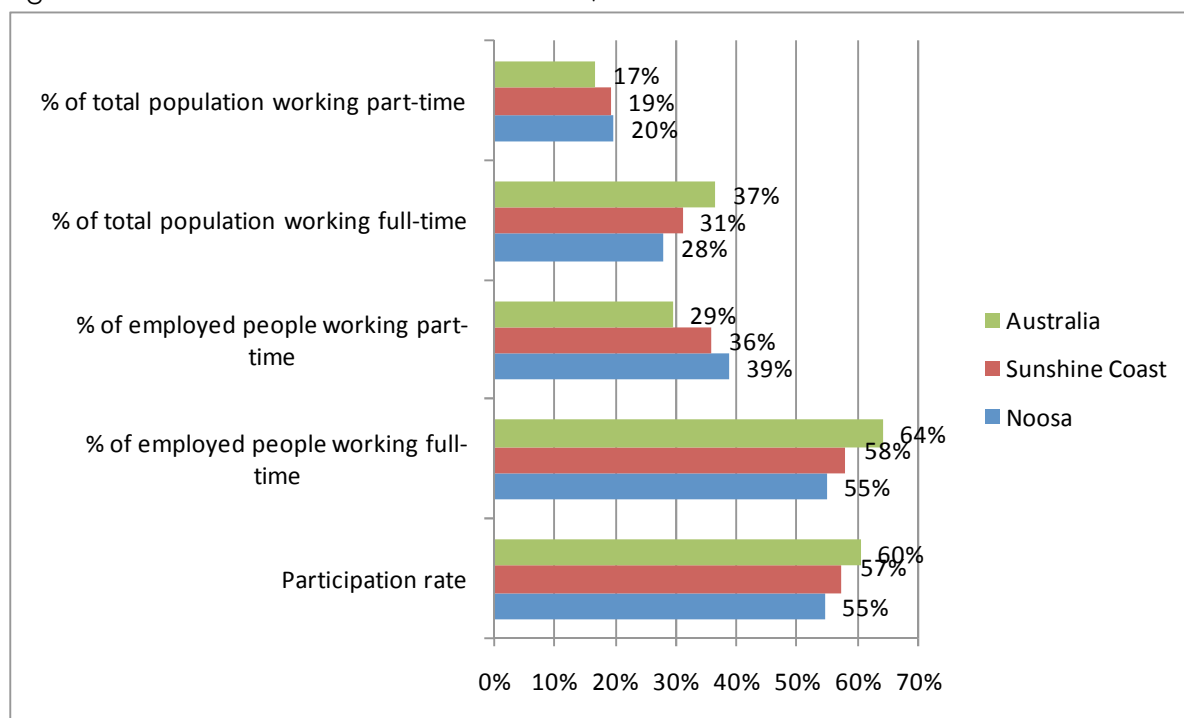
Characteristics of Noosa labour force

A snapshot of how Noosa's labour force characteristics compare with the Sunshine Coast and Australia is shown in Figure 2. In 2006 Noosa had a 54.6% labour force participation rate (percentage of population aged over 15 in the labour force), slightly below that of the Sunshine Coast as a whole at 57.1%. Of those in work, 54.8% of employed Noosa residents worked full-time, slightly below the proportion of 57.8% of employed Sunshine Coast (as a whole) residents who worked full-time. Overall, 38.8% of employed Noosa residents worked part-time, above the 35.9% of working Sunshine Coast residents who worked part-time².

² The balance of 6% of employed residents did not provide information on their work status.

So while Noosa has a higher proportion of part-time workers than the Sunshine Coast or Australia as a whole, these people still counted for just 20% of all residents over 15 (compared with the national equivalent of 17%). The bigger difference is Noosa's full-time workers, with these people making up 28% of the area's population over 15, compared with the national equivalent of 37%. Clearly, while the pattern of employment in Noosa is slightly biased towards part-time work, the bigger differentiator of Noosa's labour force is its lower overall participation rate, with the gap consisting of absent full-time workers.

Figure 2 Labour force characteristics - Noosa, Sunshine Coast and Australia



Source: ABS Census 2006

In 2006 some 22% of Noosa's population had tertiary qualifications— the same proportion as in the Sunshine Coast as a whole, and below the national average of 30%. Noosa had a high proportion of residents with other post-school qualifications, however, with another 51% of residents having a Diploma or equivalent or Certificate, compared with 54% for the Sunshine Coast and 45% nationally.

Some 30% of Noosa workers had higher level occupations (managers or professionals), with another 16% working in trades and technical fields, about the same at that for the Sunshine Coast as a whole (29% and 17% respectively).

In 2006 some 66% of Noosa's employed residents worked in retail, hospitality and other service sectors, about the same as across the Sunshine Coast as a whole. And within the services sector some 7% of all Noosa's employed residents worked in the high value knowledge-based industries of professional and technical services and arts/recreation. This proportion was slightly lower at 6.5% for the Sunshine Coast as a whole.

A broad definition of 'knowledge workers' includes education and health workers, and on this basis just under 12% of jobs in the Sunshine Coast as a whole were in knowledge based industries³. The Sunshine Coast saw a 34% increase in knowledge economy jobs between 2001 and 2006, above the overall rate of jobs increase of 28%, and countering a fall in the number of knowledge industry jobs across Southeast Queensland as a whole in the same period⁴. The SGS Review shows that this increase in knowledge economy jobs based in the Sunshine Coast led to a major reduction in the number of knowledge workers who live in the area but work elsewhere – good news for the diversification of the Sunshine Coast's economy. The SGS Review puts the growth down to two main causes:

- Increases in the number of 'advanced business services' jobs supplied on the Sunshine Coast; and
- Decreases in the outbound commuting of other knowledge-based professions such as education and health.

While SGS did not look for causal factors, it appears as if some diversification of the Sunshine Coast regional economy occurred in the period, adding more regionally-based jobs in these fields.

The Sunshine Coast *Regional Economic Development Strategy* notes three types of jobs (and economic activity) in the region (pp34 and 65)

1. Population-based jobs (68% of all jobs in the Sunshine Coast and 66% of all jobs in Noosa)
 - These are primarily jobs that service the needs of residents – the more the population grows the more the number of these jobs grows. They include sectors like education, retail, household and personal services. In the 2002 strategy *Noosa 2015: A chosen future* these jobs were described as 'the village economy'.
2. Construction (7% of all jobs in the Sunshine Coast and 7.2% of all jobs in Noosa)

³ SGS Sunshine Coast Knowledge Economy Review (2007)

⁴ ibid

- These are jobs that are tied to both population growth (new developments and higher density developments) as well as to renovation/refurbishment of the existing building stock.
3. Exporting sectors (25% of all jobs in the Sunshine Coast and 26.8% of all jobs in Noosa)
- These are jobs that bring income into the area from outside, and are not directly dependent on changes in the surrounding population. Overall some 70% of Sunshine Coast export jobs are in hospitality, retail and property services, and the proportion is likely to be similar for Noosa, highlighting the importance of diversifying Noosa’s economy.

This categorisation is useful in the Biosphere Reserve context as it clarifies the connection between population growth and economic activity. Clearly, most of the jobs in the area (either the Sunshine Coast as a whole or the Biosphere Reserve area) are simply there to service the local resident population. The ‘balancing item’ in the regional economic budget is the jobs that service visitors and customers outside the area – the exporting jobs that bring external income to the region

The Regional Economic Strategy notes that increasing the Sunshine Coast’s population by 300,000 to 475,000⁵ by 2026 means an additional 100,000 – 125,000 jobs divided into:

- 75,000-90,000 in population-based industries which are likely to occur ‘naturally’ if the right planning and business support structures are in place; and
- 27,000-33,000 in exporting industries which will be crucial for the region to maintain a positive net income balance, and which are not always naturally occurring and which are therefore the focus of the Strategy’s initiatives.

As the Sunshine Coast economy matures and population growth slows the Regional Economic Strategy expects Construction to slow and the share of Construction jobs to fall from 7% to 5% with a major emphasis on renovation/refurbishment, while exporting sectors will need to rise from 25% to 27% to compensate. This is not necessarily a direct translation of jobs. Many in the construction industry have come in the past for large jobs and left when these have been completed. Their skill mix is not necessarily that required by the industry mix noted above that will help diversify Noosa’s economy.

⁵ Current Regional Council planning parameters, population forecasts for Noosa are discussed below.

Noosa's service-based economy, and in particular its strengthening knowledge-based service industries, provide a solid platform for the transition to a genuinely environmentally sustainable economy. Service businesses in general, and especially knowledge-based services businesses, have high income and employment multipliers leading to strong positive economic spinoffs as businesses in these sectors grow. Analysis done for Noosa Council in 2004 showed that for every million dollars worth of additional activity in the following industries, there would be more than 10 jobs created in the local economy:

Industry	Employment multiplier
Retail	19.2
Hospitality	17.2
Health % community services	16.8
Cultural & recreational services	13.6
Education	12.9
Personal & other services	11.8
Property & business services	11.0
Agriculture	10.2

Source: AECGroup *Significance and Future Prospects for Selected Industry Sectors in the Noosa Shire Economy*, April 2004

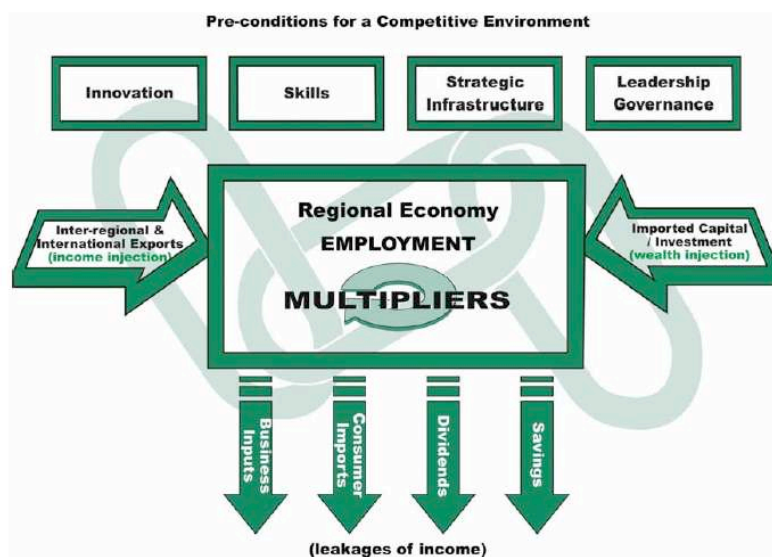
The simple employment multipliers show that per dollar spent or invested, retail and hospitality are good job generators. This was the thinking underpinning the Federal Government's initial stimulus package 'cash splashes' in late 2008 and early 2009. But the Federal Government is aware that these jobs are not necessarily long-term or well paid – hence its shift to local and then regional infrastructure to underpin medium term jobs prospects in Australia during the current economic slowdown.

For Noosa too, it is clear that capital investment in retail and accommodation will create jobs, so long as consumers are there to use the facilities that have been built. But the jobs in these industries tend to be low paid and part-time, which is why the employment multipliers are so high. These jobs do not help address the biases already noted in Noosa's labour market which reveal a deficit in full-time jobs, and by extension in well-paid full-time jobs.

In contrast to the direct employment multipliers, the two industries with the highest *flow-on value-added* (contributions to local gross product) were identified as communications

services and health & community services – two highly knowledge-based industries⁶. The following chart shows the connections between the main components of the region's economy and how employment growth can be maximised.

Figure 3 Regional economic links (schematic)



Source: SGS Economics and Planning Pty Ltd

Source: *Sunshine Coast Regional Economic Development Strategy 2004*, SGS Economics and Planning, p9

2.2. Biosphere Reserve area environmental footprint

In considering the Noosa Biosphere Reserve area and its economic context, it is important that the environmental footprint of the area's economy be assessed as a baseline from which to monitor progress.

Benchmarks on key environmental footprint indicators are needed to provide a guide to the Biosphere Reserve area's environmental footprint in 1996, 2009 and (say) 2020 as the population and the economy grow. Indicators and associated performance ratios should be based on a mix of resident numbers, visitor numbers, local business activity and could comprise:

7. Water use

⁶ AEC Group 2004, op cit

8. Energy use
9. Waste generation (waste to landfill, commercial/industrial waste, recyclables)
10. Greenhouse gas emission (split into core components) and could include measures such as transport kilometres divided into private cars, public transport, bikes, on foot
11. Green space, visual amenity
12. Biodiversity

Preparation of indicators and performance ratios along these lines would enable modelling of the economy's environmental footprint in the recent past (based on per capita figures extrapolated back), and would enable modelling of future impacts based on various population and resource use intensity scenarios (incorporating trends in increasing/decreasing efficiency as necessary).

The importance of getting measurement and modelling right has been illustrated clearly by the United Kingdom Sustainable Development Commission in its 2009 report "*Prosperity without growth*". In the report, the Commission points out that much current thinking is based on 'improving efficiency' of resource use. While this is a worthy aim, global population growth will induce huge increases in overall environmental impacts, even if optimistic aims for dramatic increases in resource use efficiency are realised:

"Over the last 25 years global carbon intensity declined by almost a quarter from just over 1 kilogram of carbon dioxide per US dollar of output (kgCO₂/\$) in 1980 to 770 grams of carbon dioxide per US dollar (gCO₂/\$) in 2006. To achieve an average year-on-year reduction in emissions of 4.9% with 0.7% population growth and 1.4% income growth [carbon intensity] has to improve by approximately 4.9 + 0.7 + 1.4 = 7% each year – almost ten times faster than it is doing right now. By 2050 the average carbon content of economic output would need to be less than 40 gCO₂/\$, a 21-fold improvement on the current global average." (Pp 49 and 54)

Ensuring the Biosphere is tracking appropriate metrics is a key to success. Focus on the right measure will not only concentrate effort but will allow us to see the results of our efforts on behalf of the people of Noosa. Having leading indicators as part of the mix is crucial to our ability to scan the horizon and identify potential issues before they impact significantly. Work over the next several years in the Economic Sector Board, with various other sector boards and council will allow us to hone these measures into a set that will be seen as value adding to the region.

The following is an early attempt to identify possible measures and are open to further discussion. Comments have been included on suitable data sources.

Productivity (economy and business)

1. Increase in GDP per capita (hard to measure, will require access to a reliable Biosphere Reserve Area economic model, measuring trends in individual/household incomes are a good alternative)
2. Increase in exports as a proportion of total production (hard to measure except through the Noosa Business Survey)
3. Diversity in employment/business and employment growth (this is a resilience measure, perhaps by proportion of employees or businesses in top 3 industries, or proportions in top 5 growing industries – based on national industry growth trends)
4. Increase in business profitability (relies on Sunshine Coast Business Survey)
5. New business survival rate above state average (can use Australian Business Register to track)
6. Increasing rating of Biosphere Reserve area as a great place to be in business (will need to be tracked through Sunshine Coast Business Survey)
7. Reduction in business waste disposal costs (due to lower volumes sent to landfill)

People

8. Diversity in population (to see that population turnover is not reducing diversity possible to create some quantitative measures and track with Census or school enrolments etc)
9. Percentage of workforce in knowledge industries (Census based)
10. Increase in the level of skills active in the workforce (Census updates can provide monitoring of link between occupations and qualifications)
11. Increase in average individual/household income (individual incomes available through Bureau of Infrastructure, Transport and Regional Economics Taxable Incomes database (approx 2-year lag on data))
12. Decrease in low income earners (Census based, plus Centrelink data)
13. Employment growth at least matching population growth (quarterly Small Area Labour Markets data)
14. Falling unemployment, closing the gap with national/State average (quarterly Small Area Labour Markets data)
15. Full-time and part-time work meeting resident's needs (ie not just tracking proportion of FT and PT jobs, but also what proportion of PT workers want FT work – and vice versa – hard to track locally, ABS only does it nationally and by states)
16. Increasing participation in volunteering (Census can track)
17. Awareness of and participation in Biosphere activities
18. School retention rates, educational attainment and availability of entry-level positions for young people

Planet

19. Reduction in business and household waste to landfill, energy consumption and water consumption (source from Council and utilities)

20. Measures of biodiversity protection

21. Quantity and quality of published research on the Noosa Biosphere

3. Links between population growth and economic growth

3.1. *Pros and cons of population growth*

A core element of the Noosa community's response to the Biosphere Reserve is following through with the commitment to a sustainable development limit ('population capacity'). The sustainable development limit represents the carrying capacity of the 'permanent population' that has been assessed for the Noosa Biosphere Reserve area. The development limit is a powerful concept in the Noosa area as it has been discussed by the community for over a decade, and still has very strong support.

The development limit is a simple concept (though more complex when looked at in detail), and is an image that has captured the community.

In the biosphere economic context it is an ambitious approach which tackles head on the split between the focus on *per capita* environmental impacts that standard economics provides, and the uncomfortable notion that even with these efficiency gains growing populations have ever larger environmental consequences. Even while technological changes are improving resource use efficiencies and minimising marginal economic impacts, the rates of growth of many communities mean that the actual impact of growing communities on the environment is increasing, not decreasing. Maintenance of an overall environmental footprint in a growing population requires that the rate of growth in per capita footprint 'efficiency' equals or exceeds the rate of growth of population. There are no signs of this being achieved in any industrialised economy as yet.

Current economic thinking on this fundamental issue is discussed in the following chapter.

For Noosa, the concept of the region's 'population carrying capacity' is paramount. Noosa's emphasis on this puts the onus on technologies and efficiencies to permit further modest population growth only when they can demonstrate improvements in the region's carrying

capacity. This completely reverses the normal approach, which is to rely on economic growth based on population growth, and then to look for signs that improvements in technologies and efficiencies are offsetting some of the negative environmental consequences.

There is more to this Biosphere Economic Discussion Paper than the development limit, but it is a core element a strong sign of the community's willingness to tackle a contentious problem, and a powerful foundation for future actions. The thinking and research behind the development limit, and its implications for the Discussion Paper, are set out below.

3.2. *The main economic approaches*

The debate around the link between population growth and economic growth and community welfare is one of the longest running in the history of economics. This section introduces some of the main approaches to put the contemporary debate in context.

In recent years, mainstream opinion has shifted increasingly towards a *sustainable development* paradigm, although different commentators provide widely varying interpretations of what sustainability means and how it should be implemented in practice. The ecologically driven approach, for example, argues strongly that continuous (and especially accelerating) physical output growth is not sustainable in the long term. Herman Daly, for example, argued in his book *Beyond Growth* that:

“This change in vision involves replacing the economic norm of quantitative expansion (growth) with that of qualitative improvement (development) as the path of future progress” and “population growth and production growth must not push us beyond the sustainable environmental capacities of resource regeneration and waste absorption.” (1996, pp. 1-3)

This paradigm therefore sees unchecked population growth as a potential *threat* to economic welfare. This concern with population pressures is reminiscent of worries expressed by many of the classical economists of the 19th century (most famously the demographer and political economist Thomas Malthus) who had debated the so-called ‘stationary state’ towards which economies were expected to converge in the long term. Most classical economists thought that this stationary state was something to be dreaded, with the notable exception perhaps of the influential liberal thinker John Stuart Mill, who argued that:

“a stationary condition of capital and population and implies no stationary state of human improvement” and that in fact there would be a higher likelihood of “improving the art of living ... when minds ceased to be so engrossed by the art of getting on” (Daly 1996, p. 3)

A number of enhanced or modified endogenous growth models have been formulated during the past twenty years, and the outlook of these models is generally not as pessimistic as that implied by the classical economists, in the sense that economies are not necessarily expected to end up in a bleak stationary state. The rate of economic growth in the long run need not return to zero, and active policy management can help move economies from possible low-growth steady states (the Malthusian trap) to attainable high-growth steady states.

The new growth models have identified knowledge as a unique factor of production with potentially increasing returns to scale. Knowledge is seen to create benefits for the whole of society. This is because of the public good nature of much of knowledge: the benefits derived from knowledge are often non-trivial and non-excludable. Once a new idea is in the public domain, anyone who can understand it can make use of it. The new growth literature therefore emphasises investment in R&D (which produces new ideas or knowledge) or investment in human capital – education, etc. – which adds to the existing stock of knowledge. It is easy to see why a larger population can potentially have positive effects in this context: more people produce more ideas.

It turns out that whilst the role of population growth is not necessarily as negative in the new growth models as it was in the old growth models, many of the new growth models nevertheless work with a Malthusian assumption about the effects of population growth. Thus, whilst the long run steady state rate of economic growth may turn out to be positive, representing an escape from the Malthusian trap, this steady state is nevertheless usually associated with flat or low population growth.

Investment in R&D and physical and human capital has therefore taken centre stage as the main determining factor of the rate of economic growth. It would however appear that, with the exception of some new models, both the classical as well as the neoclassical economic growth models – including new endogenous growth models – do not fit easily with basic practical considerations of workforce requirements that small regional economies such as

The Biosphere Reserve area must inevitably address. Regional or local economies may fear that they will run out of workers if their workforce ages too rapidly or if there is net emigration from their areas to other areas. Institutions such as the World Bank have acknowledged this:

“The transition to lower population growth rates can pose problems, too. As growth slows, the average age of the population rises and eventually the proportion of elderly, nonworking people will increase. This puts great pressure on the working-age population and on a country’s pension, health care, and social security systems.” (DEPweb, 2006)

Governments of rich industrialized countries in particular have indeed become increasingly concerned about slow population growth. Some countries, e.g., Hungary, Germany and Japan, have actually witnessed population declines in recent years. Typical responses have included:

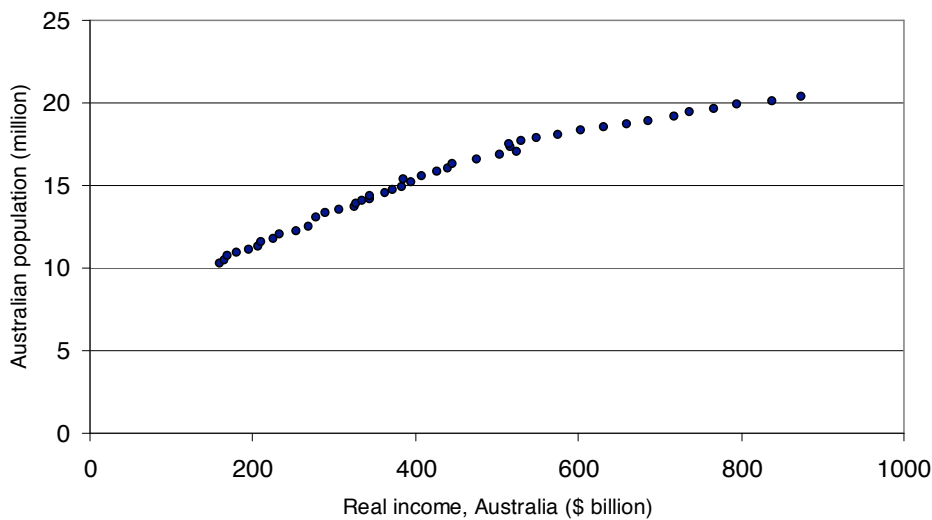
- Giving mothers longer paid maternity leave and giving paternity leave to fathers;
- Generous child benefit payments;
- Raising the age of retirement – this increases the workforce and reduces the amount that has to be spent on pensions;
- Focusing policy on the knowledge economy and innovation systems (encouraging R&D, lifelong learning, etc.).

3.3. Population and economic growth in the Australian context

Some of the above discussion can be neatly summarised and understood by examining Figure 4 and Figure 5 below. Figure 4 shows that if one plots Australia’s population against real (i.e., inflation-adjusted) income, there appears to be a clear positive relationship between the two. In other words, on inspection of this figure a larger population might be straightforwardly linked with a larger real income.

To the naked eye, the relationship would perhaps appear more logarithmic than linear in nature, implying that an increase of a certain proportion in the population would lead to an increase in real income that is not quite of the same proportion.

Figure 4 **Australia's population and real income since 1960**

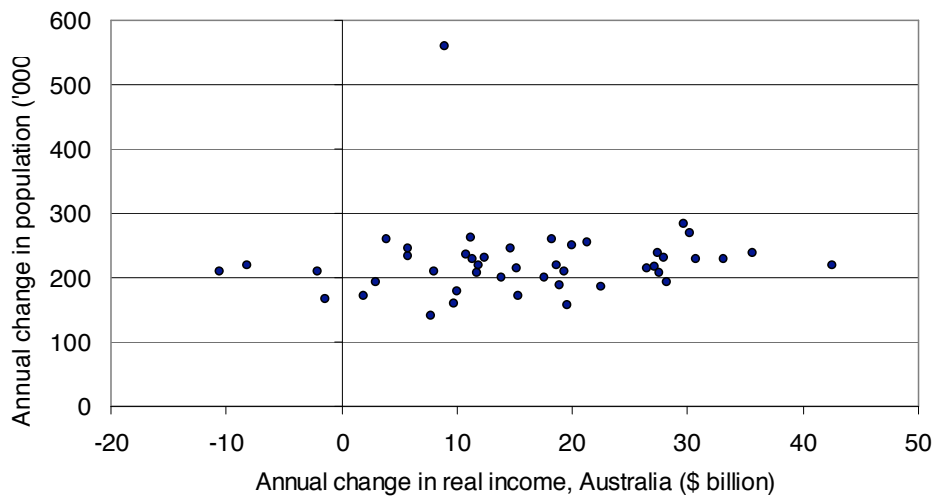


Data source: ABS

Turn now to Figure 5, however, which plots the *change* in the population against the *change* in real income. This is what modern statistical techniques would demand at a very minimum if one wanted to draw conclusions about the causal relationship between one and the other.

Visual inspection of such a cross-plot should show a positive relationship between the two, in other words, if population changed by a large amount, then real income should correspondingly increase by a large amount. An examination of Figure 5, however, reveals that no such straightforward link exists between the two variables. Whilst the Australian population has grown by around 0.2 million in a typical year, annual changes in real income range from drops of \$10 billion to increases of up to \$40 billion.

Figure 5 **Changes in Australia's population and income since 1960**

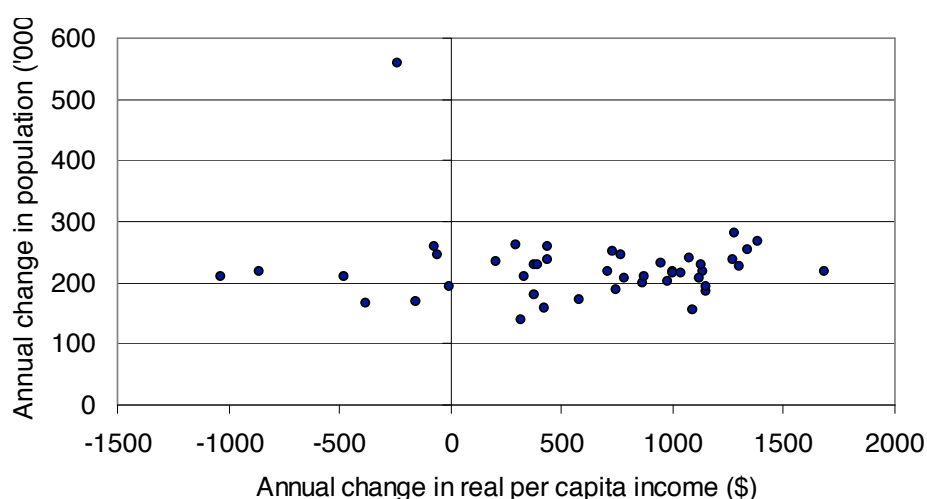


Data source: ABS

Figure 6 finally presents a cross plot of annual changes in the Australian population (as above) with changes in real *per capita* income, in which we see that more of the points on the cross plot have moved to the left of the vertical axis. As it is often per capita income that is of primary interest to policy makers, it is important to note that the link between population growth and per capita income is even weaker than the link between population growth and total income.

It should also be noted that causality may still exist between these variables but that much more rigorous statistical testing would be required to establish such a relationship. On the face of these simple visual inspections, however, one could not be confident that a strong positive causality can be easily established.

Figure 6 **Changes in Australia's population and per capita income since 1960**



Data source: ABS

The implication here for the Noosa Biosphere Reserve is that despite a lot of rhetoric to the contrary, economic theory and national data trends *do not* suggest a strong causal link between population growth and per capita income growth. It may therefore be possible to sustain modest per capita income growth with modest (or low) population growth rates.

3.4. Population and economy issues in regional Australia

Different population and economic growth issues emerge when we look at the local and regional level in Australia, rather than the national level.

A key feature of Australia's post war population growth has been the emphasis on cities, and more recently coastal areas, at the expense of inland Australia. The only areas of inland Australia showing growth in recent years have been mining towns and the so-called 'sponge cities'. The sponge city phenomenon refers to the role that large inland centres like Dubbo, Bendigo and Toowoomba have in drawing population away from surrounding towns and villages – adding to their own population at the expense of these smaller neighbours.

The consequence of this local population drift is dire for the places losing residents, with many smaller towns and villages deeply concerned about their long term viability. This concern leads to drastic measures like the land giveaways on offer from time to time in

regional Victoria and New South Wales – with land raffled off to be given free to a lucky winner to encourage them to move to the town.

In this regional Australian context the connection between population maintenance (let alone population growth) and economic survival is much sharper than the broad economic literature suggests. In 1997 we engaged National Economics to analyse growing and declining regions to look for the ‘population tipping point’. We published the findings in a book in 1998, *Jobs in Our Regions*. The main quantitative finding was that towns over about 8,000 people tended to be on a ‘virtuous circle’ of growth in population and economic output and were on a while lower ones were (or were at risk of) being on a ‘vicious circle’ of decline.

Biosphere Reserve area is well above this tipping point, but the research did confirm that in regional Australia, economic growth is seen as synonymous with population growth. Yet the economic literature clearly shows that, on the national scale at least, it is not the *level* of population growth that it is important, but the *mix* of population in terms of age, skills and ability to value-add to increase per capita incomes.

3.5. Separating economic growth from population growth

The historical fact that per capita income growth has been achieved in many countries and over many decades, and that population growth can at best only partly explain this phenomenon, should reassure Noosa residents that all is not lost when a development limit is reached.

In the light of recent developments in the modelling of economic growth processes which gave rise to the human capital paradigm during the 1990s, we note that the key ingredients to sustainable per capita income growth are now thought to be investment in physical and human capital married with effective R&D and policy implementation to create effective innovation systems and knowledge creation and transmission. As the recent Productivity Commission report on the *Economic Impacts of Migration and Population Growth* makes clear, immigration and consequent population growth only really make an impact on per capita incomes if immigrants bring with them additional skills (i.e., extra human capital), if migrants are more likely to participate in the labour market, or if they tend to work longer hours. The last two factors do not require extra population as the existing, i.e., resident

Australian, population could similarly choose to increase working hours or to participate in the labour market more actively. The fact that they choose not to do so is perhaps simply an indication of the level of the standard of living. The Productivity Commission does note in addition that:

“Some of the economy-wide consequences [of immigration and population growth] lower per capita income, such as capital dilution and a decline in the terms of trade” (2006, p. xxii).

On balance, the Productivity Commission finds that the overall economic effect of immigration “appears to be positive but small” and, as mentioned above, the implication is that population growth is not the key to successful economic development.

Capital deepening is achieved by investing in human capital. The latter is thought increasingly important in the light of the emerging *knowledge economy*. Human capital is generated and accumulated through training and education, lifelong learning, and the effective transferring of skills from older members of the community to younger labour market participants. Productivity gains are ultimately realised through a continuous engagement of the community in effective innovation systems, which also helps ensure that investments in physical capital reflect the evolving nature of the economy. A successful strategy for economic growth in the absence of population growth – which by definition implies higher per capita incomes – must therefore aim to generate the right mix of human capital and match it with the appropriate new (and old) production technologies.

This is easier said than done, and serendipity plays a significant role in achieving the right policy mix, as many future events cannot be anticipated. If the Biosphere Reserve area was to act on the current state of knowledge in the field, however, it would make a concerted effort to ensure that emphasis is placed now on human capital as this can take years to build up, as well as how the local innovation system can leverage on its strengths to build value for the future. Exposing young workers to new technologies, skilling up, etc., can under the right circumstances create an exciting place to work which would ultimately help retain workers in the community.

These are the themes which form the core of the Biosphere Reserve Economic Strategies agenda. The tools outlined in Section 3, below, point towards actions at the local level that can advance these themes.

3.6. Will restricting growth weaken the community?

Growth controls have been used internationally to manage development at a local level. The objectives of these measures include limiting sprawl, preserving agricultural or green spaces, and limiting population growth. Expected impacts of slower growth fall on real estate prices and on the activity (and employment) levels of construction businesses. Work commissioned by the Economic Sector Board shows that there is considerable debate in the literature, especially from US-based authors, over the value of growth management and control and the impacts of these programs.

The literature indicates that growth controls are seen to have social, economic and environmental benefits as development doesn't outstrip services, concentrated supply is more economical, and sprawl is reduced. But critics take the view that market forces should dictate the size and shape of settlement, that land use planning artificially inflates land pricing, and that restrictions imposed increase the cost of housing and reduce natural locations of retail and commercial activity.

Growth control criticisms relate to affordable housing, elitism and development imbalance. The cost of housing argument is largely based on a supply demand theory – as supply of developable land or building permits is restricted, house prices increase. Several writers go on to argue that implementing growth control policies in one location or on one development type (eg housing) just moves the problem elsewhere, that is to surrounding locations or creates an imbalance with another land use.

Interestingly, the literature shows disagreement on the link between growth control and house prices. US based research has shown that house prices are based on market demand and broader state policies, not just land constraints, and that price increases can be found in communities both with and without growth management and control. Australia's Productivity Commission 2004 inquiry into first home ownership reached a similar conclusion, that "the dominant source of the widespread escalation in prices has been a general surge in demand", driven by low interest rates, solid economic growth, ongoing immigration and smaller households, rather than a shortage of land supply.

US commentators argue that house prices in places with growth controls often reflect the more desirable living and working conditions, for example through having a better supply of services, better employment opportunities, higher quality housing, or preserved open space.

Further, several authors point out that growth control policies generally specifically cater for the inclusion of affordable housing, for example through requiring it as a condition of development or excluding affordable housing from development caps.

3.7. Noosa building activity levels

Analysis completed in 2007 reviewed building activity data to estimate how much building activity was a consequence of population growth, and how much was related to servicing the existing population. The analysis found that:

- The inflation-adjusted value of Building Approvals (BAs) has been quite cyclical, but averaged \$120 million (in constant 1990 dollars) over the last decade to 2006 – equivalent to \$179 million in 2006 dollars.
- While the *value* of BAs grew gradually, the *volume* of developments approved fell:
 - Confirming that Noosa’s building costs rose in inflation adjusted terms, and that residential developments were generally moving up market; and
 - That the scene is already set for lower population growth rates over the next few years (as fewer buildings have been approved).

The analysis sought to determine building activity benchmarks over the decade to 2006, based on comparing building activity levels against the growing population. The analysis averaged building activity value levels against population levels to determine trends in activity that might be independent of new building. The analysis found that:

- The annual value of multi-unit and commercial development fluctuated widely from year to year, and the value averaged around \$1,500 *per existing Noosa resident* over the last decade.
- The value and volume of renovation work has grown slowly, averaging around \$700 *per existing Noosa resident* over the last four years.
- If these benchmarks continue to be valid into the near future, then on the area’s current population base the value of commercial and renovation work is likely to continue at a level of around \$80 million per annum (in 2006 dollars) as the development limit is approached and reached.

The analysis has some important implications for the impact of the development limit on the Biosphere Reserve area’s construction industry

- The scale of building work in the Noosa Biosphere Reserve area has slowed somewhat from the peak in the mid 1990s, and as a result slower population growth is expected in the next few years (as less large-scale construction is in the pipeline compared to the scale at the mid 1990s peak).
 - If this ‘natural’ slowing continues, then the development limit will be reached with a whimper not a bang.

- Recent trends are that the value of construction work is climbing, so that as the development limit starts to bite the *value* of new building will still be high, even though the *volume* of new work will drop off
 - Again softening the immediate impact of the development limit.
- Average values from 1996 to 2006 were \$738 *per resident* for commercial building and \$582 *per resident* for residential building. Projecting this average across a capped population of around 60,000 means a construction industry (excluding new dwellings) servicing residents worth around \$80 million per annum (in 2006 dollars). This compares with the decade average value of some \$179 million per annum.

This analysis suggests that there will be an underlying value of ongoing building work in the Biosphere Reserve area large enough to sustain a sizeable construction sector in Noosa as the development limit is approached and reached. That said, the estimate of ongoing construction value of around \$80 million per annum is around half the decade average value, suggesting there would be a major impact from the development limit on the Biosphere Reserve area's construction businesses if the development limit was sudden and unexpected.

Fortunately, the development limit is unlikely to be either sudden or unexpected. As noted above, there are many signs of a 'natural' slowing in the volume of construction work, though not the value of this work. Also, the development limit is a well known feature of the Noosa Biosphere Reserve area, and we can expect that few local construction businesses will be unaware of it. And furthermore, it is important to remember that considerable growth is forecast over the next 25 years in residential and commercial developments in the central and southern parts of the Sunshine Coast. It is likely that many of Noosa's construction businesses will increasingly service that growth as construction work in Noosa itself slows.

The implications for the Biosphere Reserve Economic Discussion Paper are threefold:

1. Firstly, the potential for the development limit to narrow the diversity of Noosa residents needs to be addressed in order to maintain a vibrant labour force;
2. Secondly, the development limit itself will not bring a change in real estate prices – much more important is the vitality and desirability of the Biosphere Reserve's environment and economy; and
3. Thirdly, even with a halt on greenfields development, the Noosa Biosphere Reserve area is likely to sustain a sizeable construction industry – around 1/2 current work volumes (inflation adjusted) if the ongoing value of work from the capped number of residents (\$80 million in 2006) continues. Coupled with the expectation of ongoing greenfields construction in nearby areas of the Sunshine Coast, the impact of the development limit on the construction industry is likely to be smaller rather than larger.

3.8. Population modelling and tracking towards limits of urban development

Following extensive research and planning related to the Noosa Biosphere Reserve area's carrying capacity, the 1997 Noosa Council Strategic Plan identified a development limit of 56,500 persons. This potential population total is based on:

- The environmental capacity of land to support development, including land capability and land use zonings ;
- Available and planned infrastructure; and
- Community preferences for particular localities.

The development limit can be defined as the maximum number of residents in the Biosphere Reserve area if all available land was built on in accordance with the Planning Scheme and was occupied at current occupancy rates.

The 2006 Noosa Planning Scheme identifies a "*sustainable resident population carrying capacity of around 62,031 people*". It anticipates that this would increase by around 20,000 people during peak visitor periods. The former Noosa Shire recognised that strict adherence to the Planning Scheme is necessary to ensure the population capacity is not exceeded, though the development limit itself is not on population numbers, but on the number of dwellings in the area.

Noosa's population growth rate peaked at 11% per annum in 1989, driving up the average for the years 1986 to 2001 to around 7% per annum. Noosa's population growth rate has fallen to around 1.6% per annum in the last 4-5 years. On current trends it is likely that all greenfield land will be developed by 2016, but infill will continue to allow for gradual increases in population for a further 10 years or so. This means that population growth will continue slowly until around 2026 when it is likely to reach 58,000-60,000. This timing outlook is quite different to the high growth years when it was expected that maximum development levels would be reached with a bang and around 2012-14.

These population trends are consistent with those offered by the State Government's Planning Information and Forecasting Unit, and are also consistent with the Southeast Queensland Regional Plan as it proposes no new areas for development or higher density residential use in Noosa.

3.9. Recent population trends

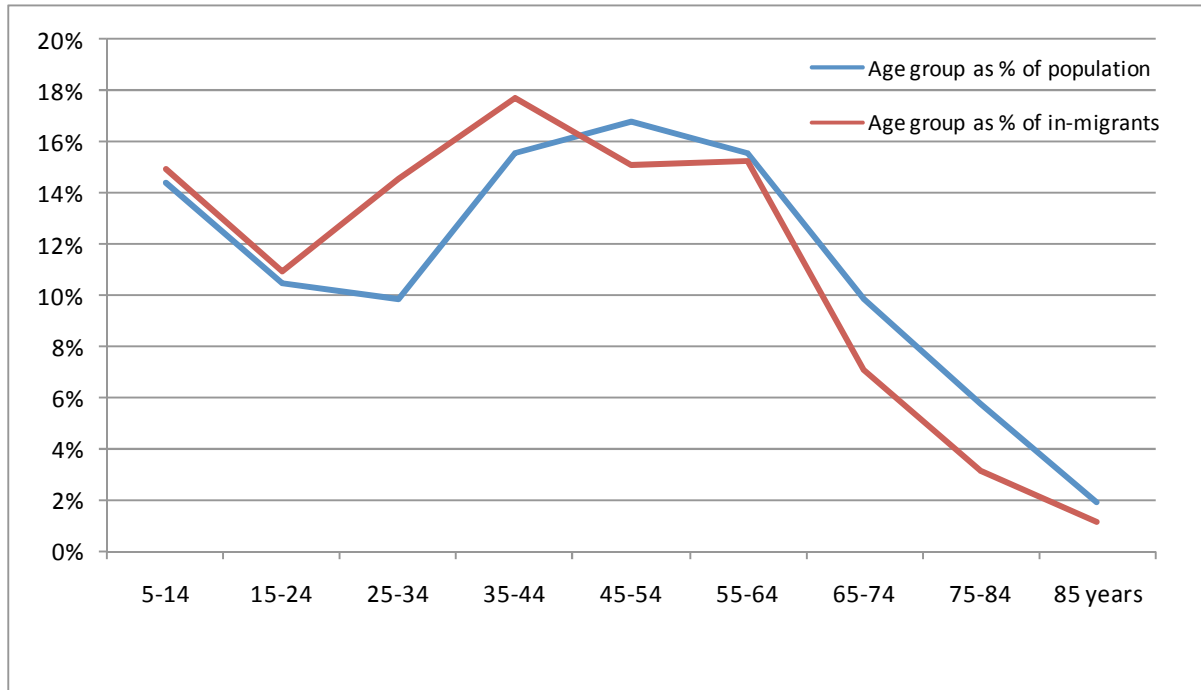
The latest official estimate of the population of the former Noosa Local Government Area was 50,647 as at 30 June 2008⁷. Over the five years to this date the area's population grew by an average 1.6% per annum. This five-year growth rate was half that of the Sunshine Coast overall (3.2%pa) and well below that for Queensland as a whole (2.4%pa).

The 2006 Census provides some insight into the mobility of Noosa's population. Overall, some 43% of those who were Noosa residents in 2006 lived at the same address in 2001, while another 10.4% had lived at a different address within the LGA in 2001. Between 2001 and 2006 some 16,700 people (38.5% of the area's usual residents in 2006) moved into the area from other places. With the Census count of usual residents only increasing by 10% (4,209 people) in that period, it is clear that 12,500 people who had been usual residents left in that period.

While the age profile of people in the Noosa area is weighted somewhat to older age groups, analysis of the age characteristics of people moving into the area shows that around half are aged under 45 years old. The following chart (Figure 7) compares the age profile of Noosa LGA 'usual residents' (blue line) with the age profile of those who moved into the LGA between 2001 and 2006 (red line).

⁷ ABS *Regional Population Growth, Australia*, (Cat No 3218.0) 23 April 2009

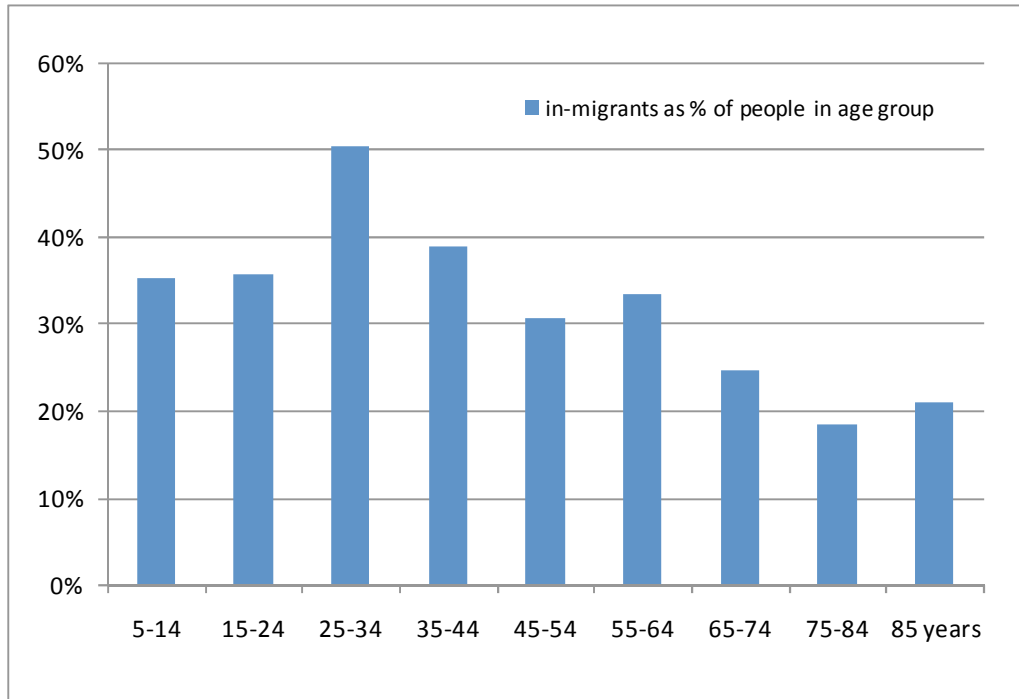
Figure 7 Age mix of recent in-migrants and all residents



Source: ABS Census 2006

The chart shows that while the pre-retiree age group (55-64) constituted over 15% of in-migrants over the period, overall in-migrants were younger than long-term residents with 18% 35-44 and smaller percentages over 65. The chart below (Figure 8) shows the churn in each age group – the number in each age group that arrived between 2001 and 2006 as a percentage of the number of 2006 residents in that age group. The chart shows high churn in younger age groups, especially, indicating that while many people in these age groups arrived over the period, many also left.

Figure 8 In-migrants (2001-2006) as percentage of usual residents age group



Source: ABS Census 2006

One of the keys to maintaining Noosa's population (and labour market) diversity in a period of slower population growth is to understand why there is such high turnover in these younger age groups, and introduce initiatives to reduce the outflow.

Further information on the characteristics of those moving to the area can be extracted from the 2006 Census. This information would enable assessment of perceptions such as that Noosa becoming a haven only for retirees, and give an insight into the likely directions the demographic character of the area will be pulled in the next decade.

4. An Economy within a Biosphere Reserve

This Discussion Paper aims to stimulate discussion on how to help the economy around the Biosphere Reserve be more sustainable – helping the Sunshine Coast become a community prospering in harmony with the environment. This Discussion Paper does not aim to reduce the Biosphere Reserve area’s economic impact by restricting its economic activity – it acknowledges that a sustainable community will expect continuing economic prosperity and a measure of economic growth.

As noted earlier, it is unfortunate that there is little discussion in the discipline of economics of the impacts of growth on environment. The lack of attention is based on the faith embedded in economic theory that technological changes will continue to reduce the impact of economic growth on environmental assets. Growth is thought to be limitless, as increasing wealth, effective markets and accompanying technological changes are expected to more than compensate for the increasing ecological footprint of a larger economy.

This faith has been challenged eloquently by leading economists like Jeffrey Sachs and others. In his 2008 book *Common-wealth, economics for a crowded planet*, Sachs highlights the breadth of global environmental destruction from atmospheric carbon dioxide to fisheries and arid lands agriculture and makes the case for decisive international action before the world’s population exceeds 9 billion by mid-century. Only with lower rates of population growth in poor economies and significant improvements in environmental technologies, Sachs argues, can the world look forward to seeing out the rest of this century

On market forces providing solutions, Sachs writes:

“The world’s current ecological, demographic, and economic trajectory is unsustainable, meaning that if we continue with “business as usual” we will hit social and ecological crises with calamitous results”. (p 5)

And of the usual faith that technological changes and markets will make everything alright:

“Market forces alone cannot solve these problems. First, market forces alone will not guarantee that the world’s scientists and engineers direct their efforts to [sustainable technologies]. Many important technologies will have huge social benefit for

sustainable development but will not produce private-market profitability, so private business won't invest in research and development to discover and deploy them. Second, even when sustainable technologies have been discovered and developed, market forces alone may not guarantee their widespread adoption. We often need special incentives, in addition to market forces, to spur adoption of sustainable technologies. Third, market forces alone do not guarantee an appropriate pattern of population change within a single country or at the global level. Population policies of various sorts are needed to supplement free-market forces. Fourth, market forces do not guarantee that all parts of the world can meet their basic needs, much less get on a path of convergent growth. Markets leave one billion or more people behind, and the numbers could rise tragically in the future unless we take collective action."
(p 32)

While serious discussion of the links between economic growth and ecological integrity is still quite rare, policy responses are also rare and limited to the international or national-scale broad concepts supported by economists like Sachs. Some current approaches include the global movement to reduce greenhouse gas emissions, transnational agreements on managing fish stocks, and efforts by organisations like the United Nations to lift agricultural productivity and efficiency in the poorest developing regions as a grass roots way of improving ecological integrity by ending very short term resource exploitation practices.

Below the international stage, there are very few examples of regional and local level responses to these challenges. This is partly because the tools are limited, as ecological challenges of biodiversity, water availability, energy use and pollution are rarely tied to one region or local area. Yet local action is crucial as the nation is made of many localities, and residents are increasingly demanding things they can do. UNESCO in its acceptance of Noosa into the family of Biosphere reserves has indicated that it holds great hope that we will be successful in delivering a template of how this can be done to the world.

At the regional or local level, the challenge to 'de-couple' economic growth from environmental impact is a big one. One of few well-developed approaches was started by the UK Sustainable Development Commission as recently as early 2008. The Commission's approach highlights the scale of the challenge:

"SDC's project on **Redefining Prosperity** aims to map out the relationships between these three aims – growth, sustainability, wellbeing – and ask what issues are raised. Do we have to choose between these aims? Can we combine them? What sorts of policies or approaches would we need to have?

These questions go to the heart of what sustainable development is about. Does it mean sustainability plus economic growth? Or is it about finding a compromise or balance between some sustainability and some growth? Or does development mean something different from growth? Does it mean progress towards increasing wellbeing? And is it possible at all to define and promote wellbeing?"

The Commission addressed the challenge with a four-part investigation in 2008:

1. **Visions of prosperity** looked at different views put forward about what prosperity means.
2. **Economy Lite** looked at the idea of decoupling – separating economic growth from the damaging environmental impacts it normally has. Can that link be broken, with cleaner, more efficient technologies?
3. **Confronting Structure** was about taking the arguments against continuing growth seriously and thinking through the consequences.
4. **Wellbeing Policy** looked at the evidence about what contributes to people's wellbeing, and asked - what follows?

An overarching report *Prosperity without growth* (referred to in various parts of this Discussion Paper) was published earlier in 2009.

The Noosa Biosphere Reserve Economic Directions Discussion Paper addresses the second and third components in its focusing on enabling economic growth that does not bring the environmental damage that is usually a by-product, and considers ways to mitigate the negative effects of lower rates of growth on the Biosphere Reserve area.

4.1. *Solid foundations in Noosa*

The development limit (commonly referred to as the 'population cap') was conceived as a readily-understood public commitment to development and population outcomes that are manageable, ecologically sustainable and within the financial capacity of the Noosa community. Capping growth and development in the Noosa Biosphere Reserve area is the foundation of the commitment to enable future generations to determine their own destinies, control the area's ecological footprint and protect the ecological integrity of the area.

The Economic Sector Board recognises that the development limit is the foundation of a sustainable (quadruple bottom line) future for the Noosa Biosphere Reserve area – a future that encompasses environmental and economic sustainability alongside social and cultural vibrancy. The Board shares an understanding that a healthy environment is as essential on its own merits as it is for our human species – especially for future generations.

This Economic Directions Discussion Paper recognises the economic impacts of slowing population growth. As population growth slows it is very likely that construction and development industry income from new building work will fall. Replacement and renovation work will continue to grow while the development limit is approached, and after, but Noosa's

economy must continue to diversify into high value, low environmental impact knowledge based industries. Our businesses will need to be innovative, and quick to adapt to emerging trends and responding to new challenges. Slower population growth in a growing economy will mean increasing capacity for higher per capita expenditure on key components of economic infrastructure like roads, public transport etc.

The Economic Sector Board acknowledges that the foundations for this greater focus on a higher value economy are already in place, with growth trends in home-based businesses, wellness, creative industries and recreation. This Discussion Paper recommends activities to work on infrastructure and strategic programs to provide an environment of growth for businesses compatible with sustainability – such as those in lifestyle, technology, environmental services, alternative energy, energy efficiency, smart design, eco tourism and human services including conferences. Diversity will need to be stimulated and assisted with strategies going forward as business pressures increase (such as the availability of staff under a development limit).

Tourism is and will continue to be a vital part of the area's economy, and the aging population will bring other growth opportunities for some businesses. This Discussion Paper recognises that promotion will be important to stimulate knowledge and take-up of these opportunities to help minimise negative repercussions from restructuring towards a lower environmental impact economy. It will be important for the Noosa Biosphere Reserve area to be recognised as being at the leading edge in providing health/wellbeing and medical facilities for all ages – especially older residents.

The Economic Sector Board recognises the links between demographic diversity, education opportunities, creativity and a robust local economy. Accordingly, as Noosa's population growth slows, potential impacts may arise from more restricted labour pools, less diversity in tourists, changed local business and service needs, and the need to attract and retain young people. A high priority is to ensure the educational opportunities in the area continue to broaden. A particular concern is to stop the development limit contributing to labour shortages – across a range of skill and occupational groupings. There is also a potential problem of high staff turnover as people may move to the area and then find out they can't afford to live here.

It is inevitable that a growing proportion of Noosa's workforce (especially people employed in retail and tourism) will be travelling from elsewhere on the Sunshine Coast. . This travel is on

a daily basis and so has greater implications for the carbon footprint of the Biosphere than the travel category below which would be intermittent travel on an as needs basis as much of this work is done virtually. In addition, a growing number of business people based in The Biosphere Reserve area will need to travel to Maroochydore/Caloundra, Brisbane and interstate to visit customers who are purchasing knowledge intensive services and products. In this context it is crucial that intra Sunshine Coast public and private transport infrastructure continues to improve.

Fortunately, the Biosphere Reserve area has a strong history of initiatives that are working to both enhance economic prosperity while improving environmental integrity. Some of the recent and current initiatives which demonstrate Noosa's passion and ability to deliver biosphere-type initiatives are summarised below.

1. The aspiration to be declared a Biosphere Reserve itself

The former Noosa Council and its community made the decision to progress the development of a Biosphere Reserve in Noosa Shire on the basis that the goals and objectives of Biosphere Reserves are consistent and supportive of the direction that the Noosa community has chosen to take in its development over the last 30+ years. In short, the principles that are fostered by Biosphere Reserves program are key principles that the Noosa community is already working towards incorporating in its development.

2. Sunshine Coast Creative Alliance

This program supports the growth of high value – low environmental impact industries and recognises the areas lifestyle characteristics ability to attract and retain knowledge industries and knowledge workers. The program identifies creativity as a driving force of economic growth where workers with capacity for innovation and entrepreneurial endeavour (the creative classes) are considered to be an essential element in building a successful knowledge-based economy. Practical program initiatives support and provide mechanism to showcase creative talent in the region, connect the Sunshine Coast creative community with other creative communities regionally, nationally and internationally and to connect creative's with others in their value chain to encourage collaborations, promotion, commercialisation and distribution.

3. Connecting the Coast

The Sunshine Coast Regional Council's Connecting the Coast program delivers high speed broadband infrastructure and data centre capacity to the region in partnership with

the Federal Governments National Broadband Rollout, and private sector partners. The Noosa / Cooroy project includes:

- High speed broadband from the QR fibre-optic trunk cable at Cooroy;
- A Data Centre facility next to the Cooroy Butter Factory,
- Wireless transmission to the wider Cooroy area and the northern end of the Sunshine Coast including Tewantin – Noosa Heads,
- Direct cable connection to key business and community users, the new branch library at Cooroy, the Nandroya industrial site, a new industrial development at Carpenter's Lane, Cooroy Hospital and Noosa District High School,
- Increased uptake and effective use of next generation broadband infrastructure
- A platform for the Sunshine Coast Regional Council to participate in future Federal Government broadband roll out.

4. Sustainable Town Centres

The Sustainable Town Centres program provides a framework that supports the development of sustainable town centres and retail / commercial precincts using a balanced scorecard approach: economic, environment, social, cultural; transparent and accountable governance; collaboration, engagement and place making principles to:

- Strengthen, diversify the business mix and increase the market position of local town centres and retail / commercial precincts.
- Nurture Villiage Economies
- Build resilient local main streets and town centres.
- Build capacity within the retail / commercial business community to drive growth and sustainable development of their precinct.
- Increase employment opportunities.
- Provide skill and personal development and training opportunities for local commercial / retail businesses.
- Identify and leverage the unique characteristics of individual town centres and retail / commercial precincts.
- Collaboratively develop local area plans that guide and enable future development.
- Improve infrastructure, built environment and streetscape of retail / commercial precincts.
- Encourage investment in retail / commercial precincts,
- Increase community wellbeing incorporating elements of safety, engagement and participation.
- Align precinct expectations with planning scheme.
- Facilitate the reduction of environmental footprint of precincts.
- Encourage networking and import replacement, through improved local supply chains.

6. Eco-Biz

The ecoBiz program is signature program delivered in partnership with the EPA to Sunshine Coast business and industry. ecoBiz assists businesses identify efficiencies in waste, water and energy for financial and environmental benefits. ecoBiz facilitators help business to assess, plan actions, implement actions and assess results. The program

has a number of tools including rebates, case studies, fact sheets and newsletters. 20 businesses are currently enrolled in the Noosa program.

7. Living Smart

The Living Smart Program delivers 3 program components that help consumers to look at energy use, waste production, water consumption and transport and make small changes to their lifestyle which can save money as well as help the planet; provides a one-stop “sustainable living” information portal of environmental products and services; and Awards which celebrate, showcase, and reward community and industry actions in sustainable building design and land use.

7. Travel Smart

Travel Smart is a voluntary travel behaviour change program, which promotes and encourages sustainable transport such as walking, cycling, public transport, and car-pooling. Landscaping, architecture and planning for the needs of people in public spaces are all elements of the vision that present exciting and original ideas that are often innovative and ultimately perform. Four key programs deliver benefits in: reduced traffic congestion and parking problems, reduction in greenhouse gas emissions, air and noise pollution, reduced stress and increased health, happiness and fitness for individuals, potential cost savings for individuals and workplaces, setting a positive example and challenging other communities to promote sustainable transport, more people walking and cycling creates a sense of community as it provides greater opportunities for social interaction.

8. Sustainable Tourism Plan 2006-2015

Tourism Noosa’s activities are guided by the 10 year Sustainable Tourism Plan and the vision to be “An innovative tourism industry working with our community to achieve interdependent economic, social and environmental sustainability in Noosa”.

The following principles which underpin the Sustainable Tourism Plan:

- Consultation, openness and inclusivity for a shared vision
- Destination management approach
- Commitment to emerging best practice in sustainable tourism.

Within the plan, sustainable tourism means:

- Meeting the needs of the local community
- Attracting appropriate visitors and satisfying their demands
- Safeguarding Noosa’s resource base – the environmental, economic and social needs of the community

9. Sunshine Coast Housing Affordability Task Force

The Housing Affordability Task Force was formed in September 2008 by the Sunshine Coast Regional Council and acknowledges the importance of housing and housing affordability within the region, and also proposes a range of solutions. The Housing Affordability Task Force brings together a range of professionals including the development industry, social housing providers, Council and community leaders and seeks to identify and develop approaches that improve the ability to offer affordable and appropriate housing to Sunshine Coast residents; both now and well into the future.

10 The Sunshine Coast Regional Council Sustainability Advisory Panel

This recently formed Panel, brings together Council members and external representatives and partners in informal engagement to deliberate on key policy issues and informs Council's decision making processes across the broad environmental policy issues. The Panel provides a mechanism to foster the exchange of ideas, lessons learnt and leading edge thinking and:

- Facilitate discussions on matters related to environmental policy, emerging issues and ecological sustainability
- Review progress on Council's policy and strategy development
- Provide a forum to peer review policy and strategy documentation, when required
- Draw on the skills and expertise of recognised leaders and specialists to keep abreast of latest environmental developments and innovation
- Raise an awareness of current issues, program and projects and ensure they reflect community, business and industry views.

4.2. *Boards / community commitments*

The Economic Sector Board believes that over the 10 – 20 year timetable for stabilising the area's population and transitioning to a truly sustainable economy, the rate of change in the world we live in will continue to accelerate. In times of rapid change, the Board believes that four watchwords are crucial:

- Anticipation
- Openness
- Creativity and
- Flexibility.

The Board believes that the key to successful planning for Noosa's future rests on the community's ability to anticipate change (both internal and external), a process that requires clever scanning of local conditions and external influences, and then uses the outcomes of

this scanning to adapt and innovate. The Board hopes that through the Biosphere Reserve the community will be able to gather and focus its own resources, and channel the Regional Council's resources, to build an exemplary system for scanning, anticipating, adapting and responding to the changes expected.

The Board recognises that community governance helps ensure broad input into the scanning and anticipation processes, as well as enhancing the creativity and flexibility of consequent adaptations. The Board is deeply committed to incorporating community governance and input into decision-making, and welcomes the commitment the Council has shown in this area.

5. Toolbox – supporting an environmentally sustainable regional economy

Internationally there are no clearly documented examples of a region or local government area using practical initiatives, structures, policies and programs to address the challenge of ecologically sustainable economic growth. UNESCO holds great hope for what the Noosa Biosphere can achieve. The Noosa Biosphere is very much a pioneer in this aspiration in a global sense, and it is likely that there will be considerable interest in coming years in its approach and experiences in supporting a genuinely ecologically sustainable economy. Success will generate even more opportunities for the region.

The Noosa Biosphere Reserve economic approach is based on:

- Slower population growth as a key plank in reducing overall environmental impacts
- Facilitating growth of new industries which favours high value-low environmental impact activities - and which reduce reliance on population increases to bring economic prosperity
- Improving the environmental (and economic) efficiencies of all businesses in the area
- Creative local tools to enhance the stock of natural capital in the Biosphere Reserve

5.1. Local Actions

Several external factors will impact on the Noosa Biosphere Reserve area's ability to maintain and improve this balance between economy and environment:

- The Noosa Biosphere Reserve area is part of the fast-growing Sunshine Coast region. The region is expected to continue to show high levels of population and jobs growth, as reflected in the South East Queensland Regional Plan and the Sunshine Coast Regional Economic Development Strategy, and this will cushion Noosa's demography and economy as its population approaches the development limit.

The Noosa area is anticipating reaching its greenfields development limit within the next decade, and infill development will continue to underpin low rates of population growth through to around 2026. But Noosa's population growth rates have been well below the Sunshine Coast average in recent years, and the importance of people's daily movements in and out of Noosa within the Sunshine Coast Region will grow.

Neighbouring areas will become more significant places of work for Noosa residents, and will also provide a wider choice of housing for workers within Noosa. As distances between settlements reduce, there will also be a greater sharing of community, cultural, recreational and entertainment facilities.

- The aging of Australia's population overall is likely to drive faster growth in the number of Noosa residents over 65 than in other age groups. This is likely to bring social and economic challenges as some needs and services grow while others shrink. A particular concern is the availability of affordable housing to maintain a diversity of aging residents, and flexible work and learning opportunities to enable residents to achieve their own goals in participation in work, volunteering and learning.
- Climate change and energy prices are likely to influence the travel patterns and mix of visitors to the Noosa Biosphere Reserve area. A truly multidisciplinary issue, climate change may well change Noosa's weather patterns, and rising sea levels and temperatures could dramatically change the nature and ecology of the Biosphere Reserve area's beaches and inland waterways. Rising energy prices are likely to change travel and tourism patterns, perhaps making Noosa accessible to only wealthier travellers. Economic growth in some of Australia's key domestic and overseas tourism markets is very likely to bring continuing shifts in the mix of visitors, their regions and countries of origin and their holiday expectations, over the same timetable as the development limit itself.

Clearly, many of the big picture ecological, climate and economic issues are beyond the capability of any one local area to resolve on their own, and in many fields local authorities do not have the jurisdiction to act.

Nevertheless, the Noosa Biosphere Reserve area will be thinking global and acting locally, playing a leadership role in setting the bar high for its local ambitions and contributions.

The Economic Sector Board recognises the interlinking of economics with other related issues, as environmental sustainability is a cross-discipline challenge. The Biosphere

Reserve Economic Directions Discussion Paper recognises the cross-discipline aspects and incorporates actions in related fields designed to minimise the impact of economic activities going on in the biosphere.

5.2. *Five economic foundations for action*

There are five main economic principles which the Noosa Biosphere Reserve area can act on to nurture the economic foundation for its sustainable future. These principles are the foundation elements of separating economic prosperity from environmental impact.

Comparative advantage

- Maintain and enhance the comparative advantages of the Biosphere Reserve regional economy – clarifying with business and the community what are seen as the most valuable (and valued) comparative advantages and ensuring these are at least maintained and preferably enhanced.

Productivity

- Increase the diversity of workforce education, skilling and opportunities
- Ensure availability of capital for technological improvements by actively fostering and promoting sources and ‘investment readiness’

Value-adding

- Activation of technological improvements, clustering, innovation and entrepreneurship (as per *Sunshine Coast Knowledge Economy Strategy* and *Regional Economic Development Strategy*) – taking these high level strategy documents to actionable levels to realise tangible outcomes

Exports

- Balance consumer and business imports with exports
 - Tourism is crucial – accounts for some 20% of Noosa’s GRP and probably for the lion’s share of its exports
 - Exports of low environmental impact high value added advanced manufactures and services are equally crucial
- Import replacement

- Look to replace imports where local production is competitive – includes scope for greater local food production

Environmental impacts

- Minimise environmental impact of economic activities – enhance resource use efficiency (energy, water, waste)
- Maintain and enhance stock of natural capital

6. Actions

A suite of actions that flow from these five core principles are set out below.

The actions have been grouped according to the organisations and individuals best placed to act and benefit. But these groupings are not exclusive, as the Economic Sector Board's approach recognises that partnerships across traditional 'silos' are crucial. Key partnerships have been nominated in parentheses where appropriate.

The actions compiled here reflect the Economic Sector Board's role as a 'ginger group' encouraging the region to pursue cutting edge ideas. It is not expected that all actions be adopted, and conversely there are many other actions underway as part of a current modest explosion in community-led initiatives that could also be useful models for the Biosphere Reserve area to consider.

The Economic Sector Board looks forward to robust discussion of directions and actions, and hopes to play a catalytic role in these discussions.

Business

These actions have been framed to help businesses in Noosa and across the entire Sunshine Coast quickly come to grips with the potential presented by the granting of Biosphere status and leverage the marketing advantage it delivers. The opportunity is ripe for businesses who recognise that the benefits of sustainability come from the substance, not the spin, and to use the Biosphere as a vehicle to engage with the community and as a tool to attract good staff.

Comparative advantage

- Explore potential for all biosphere tourism operators to become carbon neutral [initially through purchased offsets]. This has the potential to provide a major marketing boost for the region as well as promote the biosphere concept of sustainability.
- Use Biosphere status [both Noosa and Great Sandy] to grow ecotourism in the region
- Encourage ongoing redevelopment and competitiveness of ageing tourism accommodation stock – refreshed supply needs to be kept up and stock should not all be turned over to residential uses. Excessive re-use of tourist accommodation for residential purposes would both threaten tourism industry and employment opportunities

and put great pressure on infrastructure if the permanent population significantly exceeds the population capacity. (With Council)

- Promote the aims and aspirations of the biosphere to visitors and locals alike
- Develop new opportunities including those in eco tourism, food production, environment services, low impact manufacturing and knowledge and creative intensive fields
- Spread the word to business colleagues beyond the biosphere. Work with Council and others to attract more sustainable businesses to the region
- Take advantage of opportunities to work with regional education providers to utilise existing programs and to develop new initiatives
- Work with the Economic and Biosphere boards on a simple accreditation scheme that will allow access to marketing advantages of the Noosa Biosphere logo
- Participate actively in Biosphere awards and other activities to leverage the marketing opportunities Biosphere status provides to good businesses

Productivity

- Work with policy makers on activities that will engage all four target types of businesses:
 - a) New businesses in easily understood biosphere-relevant fields
 - b) Existing businesses in similar biosphere-relevant fields like clean, green, (environmental) knowledge based industries
 - c) Existing businesses in high value–low environmental impact fields other than those that might be traditionally viewed as biosphere related e.g. direct environmental services
 - d) All other businesses – scope for innovative, creative and fun strategies to help the biosphere impact positively on all businesses and business to impact positively on the biosphere thus laying a foundation for economic prosperity which does not undermine the integrity of the biosphere
- Mitigate potential labour shortages by attracting workers from outside the Biosphere Reserve area and demanding improved public transport services to allow for more sustainable commuting practices. Better regional (Sunshine Coast & SEQ) infrastructure networks (including fast rail) need to be continuously evaluated. (with Council and community)

Value-adding

- Work with council on business attraction strategies focussed on accelerating the growth of high value knowledge based business activity. These businesses will also be export focussed but locally committed.
- Recognition of the importance of engaging lower value higher impact businesses/industries to constantly improve in line with Biosphere values. (with Council and Ec Board)
- Promote opportunities for businesses to work in partnership with other businesses, education providers, government the community to advance interests of the biosphere and the broader region
- Strengthen regional/hinterland tourism to increase capital flows to region and secure economic as well as environmental values of hinterland (with Council)

- Promote and develop the region’s high quality food production to generate further progress towards regional sustainability as well as generating a robust new tourism sector. (with Council, community and educators/researchers)
- Promote creative, growing and niche industries – for example arts residency programs, knowledge-based industries, vegetation management, food production (fruit tree crops may provide similar carbon offset benefits as timber), eco-tourism, and wellness. (with Council)
- Continue to develop and market creative industries to local and international mobile workforces. (with Council)

Exports

- Support export-promotion initiatives and services by linking to the export advisory and export skills services provided by Trade Queensland, Austrade’s Queensland operations and the Australian Tourism Export Council’s Export Ready Program.
- Look for import-replacement opportunities – where competitive local alternatives exist or can exist
- Explore opportunities to partner with owners of hinterland lifestyle properties to ensure they remain productive
- Ensure value from bio-prospecting is captured locally

Minimising impact

- Environmental sustainability to be a key Biosphere Reserve region tourism selling point – targeting low impact business and corporate events, events which strengthen the environment. This extends to eco savvy tourists as well as specific biosphere study trips. Explore further opportunities for partnerships between the tourism and education sectors.(with Biosphere Board and educators/researchers)
- Opportunities to take advantage of Federal incentives to establish a new renewable energy sector in the region. Biosphere status and local engagement could result in additional funding opportunities
- Introduce business energy efficiency measures (locally implementable – like the social enterprises in Melbourne offering services like home/business audit and replacement of low efficiency appliances and lights with high efficiency alternatives – Mooreland Energy Foundation (solar bulk buy, household and business energy efficiency programs), Kildonan Uniting Care energy efficiency audits), and oil vulnerability audits
- Business water use efficiency measures (tanks, allowable industry uses and locations of these) and availability of recycled water for commercial purposes;
- Taking advantage of systems available to collect and recycle a wide range of business waste products to pursue a ‘zero business waste’ goal

Educators and researchers

Comparative advantage

- Audit, acknowledge and promote local and regional research and education strengths – especially relating to regional sustainability

- Work with business and the community to understand skills gaps and design capacity building interventions to plug them. [It is very likely that these programs will have applicability well beyond the Noosa Biosphere].
- Develop and implement plans to see Noosa positioned as the world centre of biosphere research [representatives of UNESCO have highlighted this opportunity.]
- Undertake a systems mapping project for the biosphere to determine how actions in one sector impact on another – essential to an understanding of leverage points and an excellent first step in ensuring that decision making reflects a quadruple bottom line / balanced scorecard approach
- Work with business and the community to measure the environmental footprint of the region and individual businesses. Use this baseline to drive improvement and to monitor performance. [This work is crucial ammunition to stay ahead of the game as other regions seek to promote their sustainability credentials]
- Develop key performance measures across all sectors of the economy
- Provide easy to use sustainability tools to business and the community
- Explore hosting an annual conference (eg Aust Davos Connection) to promote learning, use it to reward winners and best practice. Involve schools, and have a ‘trades hall’ for fledgling businesses. Explore funding opportunities with the Federal Government and others.

Productivity

- Providing local education opportunities that are aligned with employment and social needs – especially in the face of concerns that an age imbalance in the population will flow through to lower school enrolments and reduction of education infrastructure when expansion in this area is necessary for growth in knowledge-based industries.
- Incorporate Biosphere education material into local school curricula
- Link vocational training with employment strategies to bring a better match between the skills in development in the training pipeline and the needs of businesses. This is especially important in leading ‘green collar jobs’ like solar and water saving technology development, and skilled evaluation and installation of measures to improve energy, water and waste efficiency. Community demand for these services is growing, and government support is slowly expanding, and capable skills will be a bottleneck on progress without careful forward planning.

Value-adding

- Training and accreditation of business footprint analysis skills on the Sunshine Coast. Eco Biz may be able to be expanded further with a pool of qualified and accredited people able to offer a wider range of business efficiency assessments. Closer links with TAFE need to be explored to build skills at the practical end.
- Develop education material for wide consumption
- Drive the research agenda in conjunction with Biosphere boards, business and the community to ensure that research is directed to the most value adding areas and the results of that research are quickly disseminated and actioned

Exports

- Promote and use regional assets like the Innovation Centre Sunshine Coast to build capacity of local businesses and achieve export success
- Seek opportunities to bring more education providers into the region

Minimising impact

- Develop leading edge inter-disciplinary research excellence
- Educators and researchers in the region need to look at working with Biosphere Board on enhancing research capability in the region that applies to Biosphere Reserve. This involves using the Biosphere Reserve as a platform for new research projects, setting a broad road map for the high priority research topics needing attention, and ensuring that the outcomes of research are packaged and disseminated to stimulate implementation.

Community

Comparative advantage

- Respond to opportunities to proactively engage in the work of Noosa Biosphere; spread the word; provide input, ideas and time
- Work as a unified community to ensure that the best aspects of Noosa are maintained and enhanced
- Be Biosphere ambassadors and advocates
- Build on the area's reputation for 'setting the bar high' and use collaborative approaches to driving world-leading local sustainability practices – going well beyond the status quo and its associated sectional/silo mindsets.
- Support Biosphere accredited businesses
- Promote the importance of diversity in population, and ensure community support services exist to support new residents.

Productivity

- Encouraging and seeking opportunities for older community members to continue to contribute to the workforce and community (with Council).

Value-adding

- Push for excellence in local goods and service provision – 'demanding customers' are a key to strong regional clusters and production capability.

Exports

- Look for opportunities to promote regional products and services
- Look for import replacement opportunities – where comparable local alternatives exist

Minimising impact

- Strengthen community support for local initiatives to turn ideas into actions – being proactive in minimising our own individual footprints: carbon, oil, water, waste etc
- Explore community support for a carbon offset scheme linking the area’s urban footprint to regional reforestation – using the principles of carbon trading to support re-planting of suitable hinterland areas. (with Council and business)

Council

Comparative advantage

- Actively support the sustainable development limit [population capacity] of the Biosphere Reserve area, while promoting the concept and its origins, rationale and benefits.
- Ensure effective, sustainable economic development strategies are in place
- Work with the community to paint a very clear picture of what “sustainability” means for the Sunshine Coast
- Maintain Noosa’s attractive lifestyle, but look for a spread of ‘lively’ village atmospheres – consistent with the Retail Strategy. Protect the natural and built environment and the village atmosphere and economies. Maintain the diversity of local communities and promote the region on the basis that it brings all the advantages of a city without the downside
- Maximise the value of UNESCO’s endorsement of the region when pursuing the vision of the Sunshine Coast being Australia’s most sustainable region
- Use the region’s comparative advantages to attract the right businesses to the region. Actively engage in a targeted business attraction program.
- Monitor and promote a sustainable balance of commercial land availability as the Biosphere Reserve area’s residential population grows. Work to ensure that development proposals do not close off our capacity to deliver a vibrant economy for the region.
- Ensure that infrastructure is brought on line in a timely fashion and that infrastructure decisions are “future proofed”.
- Ensure that quadruple bottom line / balanced scorecard thinking is at the core of all decision making
- Continue implementation of the Noosa Community Transport Strategy for improved public transport services within the Biosphere Reserve area and between local government areas to meet wider community, employment and tourism needs.
- Expedite implementation of the Noosa Integrated Local Transport Plan, and sustain and enhance TravelSmart Noosa and other similar transport behavioural change programs.

Productivity

- Ensure that the *Sunshine Coast Local Growth Management Position Paper* translates to local growth management approaches in the Biosphere Reserve area consistent with the paramount aim of sustainability
- Provision of facilities and opportunities for youth. (with community & business)

- Recognise the role of home-based business professionals but ensure the commercial landscape is diverse and incorporates a healthy mix of small, medium and large scale enterprises
- Continue improving telecommunications / IT infrastructure

Value-adding

- Support knowledge-based industries, and existing activities to strengthen their significance like the Creative Alliance. Review recent work on the industries to develop a 'needs assessment', and fill any gaps that remain to understand what the top priority needs are. Look at what actions might be most effective in strengthening this sector, ie is lack of town centre accommodation a major impediment or not?
- Seek to map the Coast's innovation system overall to identify blocks, gaps and points where intervention would yield the best results. What does the system currently look like, where are the gaps and crossover points (nodal points)? What does the innovation pathway look like on the Sunshine Coast – from knowledge creation to innovation and commercialisation? And what are the geographical aspects to the system on the Coast?
- Explore potential for expanding Living Smart. It currently has a residential focus but relates to business, and sellers of energy efficient products etc can advertise so it helps commercial outcomes. Enhances channels to market and potential networks
- Explore scope for the Regional Council to consider a rate cut for businesses with high environmental performance levels? Or could there be a waiver of the environmental levy (if certain actions are taken or standards met)?

Exports

- Continue support for the tourism industry while also supporting measures to promote greater industry diversification, including developing an export strategy for cultural product and creative industries. (with business, Ec Board and Biosphere Board)
- The knowledge and primary industry sectors offer significant potential. Other existing industries can benefit from activities to promote the Biosphere.(with business, Ec Board and Biosphere Board)

Minimising impact

- Ensure that the planning scheme in the Biosphere Reserve area actively incorporates sustainability elements – maximising low energy and low water construction and waste minimisation, minimising needs for car-based transport etc. Many international examples of quantum leaps in urban sustainability are emerging, and a first step is to conduct a 'state of the discipline' review to determine which aspects of these best suit the Sunshine Coast's unique environment.
- Follow through on 'zero waste' aspirations and implement economically viable measure to enhance business resource (waste) recovery and use/sale/disposal. Explore scope for greater local handling of locally-generated waste to create income and enhance environmental productivity
- Expand Ecobiz – as the scheme is already well-established extension service which sells the economic (business bottom line) outcomes.

- Explore the relevance and value of bio-banking as a tool to promote regional sustainability. As a start, understand learnings that are emerging from experiences in other Australian states and any Queensland Government intentions. (with economic and biosphere boards)
- Explore other tools to build the stock of natural capital (not run it down) such as the Tasmanian approach of inviting landowners to offer portions of their land for reserves, in exchange for partial funding for management and maintenance – with land offered assessed against competitive criteria relating to biodiversity and ecological value.
- Consider local implications of national/international carbon trading schemes and assist business and the community to transition to a lower carbon future. What advantages exist for Noosa? What are the costs?
- Ensure that Rural Futures policies maximise the role of hinterland areas– in terms of production, value-adding (including tourism), biodiversity and carbon sequestration.

Economic Sector Board

Comparative advantage

- Monitor and promote excellent work that is already occurring on the Sunshine Coast and beyond. Steer effort towards those areas of perceived highest value.
- Translate big picture ideas into everyday actions, including packaging simple tools for business and the Biosphere
- Create linkages between players that support the objectives of the Noosa Biosphere Plan of Management and the SCRC Corporate Plan.
- Confirm the region’s comparative advantages in consultation with business and the broader community.
- Determine the footprint baseline – key indicators and suitable benchmarks used to monitor and evaluate performance (with council, sector boards and Biosphere Board)
- Ensure that economic development strategies are based on sustainability principles and enhance the overall value of the Biosphere
- Support development of an ‘environmental impact filter’ to assess impacts of growth in key industries (important in the past and the future) like:
 - Business services including environmental services (eg alternative energy, energy efficiency), technology and smart design
 - Knowledge-base, creative and lifestyle industries
 - Primary production and processing
 - Construction
 - Manufacturing
 - Retail
 - Tourism (incl events – low impact events, reducing impact of visitors, eco tourism, conferences and other human services)

Productivity

- Provide opportunities for businesses to share ideas with other local organisations and education providers to ensure new research / learning is disseminated quickly
- Monitor the traction gained from strategies adopted across the coast. Watch for initiatives not delivering to full potential and provide assistance / direction.
- Ensure that scarce resources are directed to greatest effect
- Provide sound commercial input to SCRC and Noosa Biosphere Limited
- Ensure that decisions are made with quadruple bottom line thinking at the forefront

Value-adding

- Provide expertise to Noosa Biosphere Limited in achieving a sustainable source of independent funding
- Research and propose innovate approaches to stimulating greater value adding in region
- Provide high quality input into issues being debated in council or biosphere forums
- Encourage the stretching of ideas, a 'ginger group' pushing the envelope by keeping in touch with leading global ideas and actions
- Work with business on a simple accreditation scheme and Biosphere business awards

Exports

- Monitor patterns of regional exports and highlight new successes stories. Celebrate and share that success as a means of attracting more sustainable business to the region

Minimising impact

- Work with the ER&D board and others to ensure measures are in place to monitor key areas of interest including the environmental impact of Noosa's economy
- Research world leading examples of sustainable (impact minimising) economies
- Provide an economic perspective / rationale for decision making
- Explore and share links to compatible funding with business and the community

Biosphere Board

Comparative advantage

- Establish a clear and compelling vision of the Noosa Biosphere to assist the community to reach its full potential
- Actively engage with the community to harness the enormous goodwill and support for the Biosphere concept
- Ensure that Noosa Biosphere Limited successfully adds value to the region and becomes the pre-eminent authority on the biosphere.
- Establish monitoring systems to track progress

- Establish independent sources of funding to promote Biosphere objectives
- Endorse relevant organisations who have similar aspirations for the Biosphere
- Work with UNESCO to hold international biosphere conferences in Noosa. Start with small working groups but position Noosa for a major Man and the Biosphere conference
- Establish enduring links with other Biospheres and like-minded communities to share ideas

Value-adding

- Link education and research activities in the Biosphere Reserve area (and the broader Sunshine Coast) to include streams directly relevant to the biosphere (with educators & researchers)
- Explore the potential to create a new Biosphere based education industry (with educators & researchers)
- Provide regular opportunities for the community to engage with world experts at public forums

Productivity

- Celebrate local achievements and innovations via Annual Biosphere Awards (for Citizens, Businesses, Artists, Volunteers, Youth, Seniors etc). These have potential to engage the community and further promote the Biosphere and its values without competing with other awards in the region, state or nation (with Council).

Exports

- Pursue opportunities to disseminate ecological knowledge gained through leading edge Biosphere Reserve management systems
- Aspire to having UNESCO's biosphere research functions based in Noosa. Make Noosa an integral part of the world biosphere community.

Minimising impact

- Work with the community, business and policy makers to minimise the impact of Biosphere Reserve activities – i.e. commitment to more than offset any local impacts by adding back to the Reserve's biodiversity and integrity

7. Conclusion

This document has been prepared by the Economic Sector Board to stimulate thinking and discussion across the community, business and Sunshine Coast Regional Council.

In preparing the discussion paper, the Economic Sector Board seeks to open a robust discussion across the community about how to help the economy prosper without causing increasing environmental damage. The Board seeks to contribute to the task of taking the Regional Council's vision ***“To be Australia's most sustainable region – vibrant, green and diverse”*** and turning it into a package of actions with community support. Similarly, the Board seeks to make the Biosphere Program's aim of 'people living in harmony with nature' a reality for the Noosa community.

The discussion paper draws on global experiences to highlight how much of a new approach this is, and in addressing these complex and inter-related issues the Noosa Biosphere community is in many ways at the forefront of global experiences in local sustainable economic development.

It is clear that there are strong foundations in the Noosa Biosphere community for addressing a challenge of this scale. In the past Noosa has thrived because of the way it has been able to draw from and build on diverse views to create something unique. Community consultation and involvement has been a key to this success.

The Board looks forward to continuing to drive an agenda of open discussion and action across the Sunshine Coast – engaging Council, business and the community in a progressive approach to developing a sustainable local and regional economy.