

30 August 2013



Environment
Institute of
Australia and
New Zealand
SOUTH EAST QLD DIVISION

Hon Andrew Powell MP
Minister for Environment and Heritage Protection
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Dear Minister

Submission for the Queensland Plan

I am pleased to attach a copy of the Environment Institute of Australia and New Zealand's (EIANZ) submission relating to the Queensland Plan. The submission has been developed by both Queensland Divisions of the Institute and comprehensively deals with the questions that have formed part of the development of the Queensland Plan.

The EIANZ looks forward to continuing to working with you on the development of this important strategic document.

Please contact me if you have any questions or require any further information.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Jon Womersley', is placed over a white rectangular background.

Jon Womersley FEIANZ

cc. Adam Smith FEIANZ CEnvP



Environment
Institute of
Australia and
New Zealand

“The Queensland Plan”

A Submission by the Environment
Institute of Australia and New
Zealand

AUGUST 2013

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Queensland

Queensland is a state of unique and diverse natural features, modern commerce and industry, a growing population and exciting opportunities.

The Sunshine State's tropical and sub-tropical climate attracts a large number of migrants and tourists, and a key challenge for governments, industry and the community will be the management of this growth in a way that will improve the quality of Queensland's environment for future generations of Queenslanders.

Queensland has had a period of substantial population and economic growth. The Queensland economy draws significant income directly and indirectly from the exploitation of its natural resources through agriculture, grazing, fisheries and mining, and needs to ensure that these activities can be sustained into the future.

Queensland's natural features including its deserts, tropical and sub-tropical rainforests, reef and other wetlands, and undeveloped rivers provide the breeding grounds and nurseries for our fisheries and wildlife; wetlands to clean our water and provide flood defences; vegetation that cleans our air and retains our soils, and the many other ecosystem functions performed by a healthy environment.

These natural environments are the basis of much of Queensland's tourism industry, with iconic reefs, rainforests, beaches and deserts being popular destinations for domestic and international visitors.

Queensland has had a period of turbulent weather over recent years, with a lengthy drought followed by a number of devastating floods and cyclones. Subsequent reconstruction costs have brought into sharper focus the need for sound environmental planning that takes account of the resilience of natural systems, the need to consider future sea levels and the increased likelihood of extreme weather.

Queensland is a state that is heavily dependent on private motor vehicles, and with relatively high energy consumption and greenhouse gas emissions. High energy use (including fuel) is costly, and exposes the economy to higher primary energy price risk and higher risk of environmental impacts, including loss of air quality and the impacts associated with sourcing, generating and distributing energy.

In considering the thirty-year time horizon for the Queensland Plan, it is important to acknowledge what may occur in the world during this period to assist in determining what may influence Queensland's development over this time. In 2012, the CSIRO updated the *Our Future World* report¹, highlighting the following six key global megatrends:

¹ Hajkowicz SA, Cook H, Littleboy A. 2012. *Our Future World: Global megatrends that will change the way we live. The 2012 Revision.* CSIRO,



Figure 1: CSIROs Global Megatrends.

The EIANZ has taken account of these issues in framing its responses to the questions and general comments about the future for Queensland below.

The EIANZ acknowledges that that the questions posed arose from the Mackay community Forum, though notes that there were no specific questions for the community to respond to that speak of the value of the natural environment and the need for the conservation of its diversity. While one question speaks about ensuring “our children inherit a resilient future”, and another speaks about achieving “sustainable landscapes”, both are framed in the context of economic development. The questions posed do not lead to an understanding that the natural environment has intrinsic worth that is neither dependent on nor an obstacle to economic development. In fact, economic development that does not pay attention to the intrinsic value of the natural environment can be at the very root of environmental harm that requires public investment in expensive remediation and rehabilitation activities.

A sustainable Queensland community will value the intrinsic worth of the natural environment and protect its resilience by ensuring that it is conserved and developed in ways that improve and maintain its environmental values and diversity.

The real question in the view of the EIANZ is: “How do we protect and manage the environmental values and diversity of the landscape to ensure its resilience and assure a strong economic future for the community?”

The Six Questions

The planning process for the Queensland Plan proposes six initial questions:

1. In the context of living in the community, how do we move our focus from me to we?

This question asks us to consider our community mindedness and the concept of thinking and acting in Queensland's collective interest.

As a community, we need to care for *the commons*, through greater awareness, more participation, more volunteering, more social activity and allowing people the time to create and innovate. To do so, we need to make participation more attractive and easier. We need to have people think about the collective good and their impact on others – such as the common benefit in many activities such as energy efficiency, sustainable agriculture and transport, and not polluting the environment. Recognising our individual role and the impact we have through our own individual consumptive behaviour and resource allocation decisions on the well being of other individuals as well as communities and the environment.

For example, we would observe that a shift had occurred from “me to we” if Queensland commuters considered their individual contribution to traffic congestion, and made choices about their own travel behaviour that would reduce congestion, rather than looking to government to commit further funds to increasing the capacity of infrastructure.

2. How do we create and foster an education culture that teaches skills and values to meet global challenges and optimise regional strengths?

This question asks us to consider our priorities in education, and how we ensure that our formal and informal education systems are equipped to meet the challenges of the future.

We need to encourage all students, from an early age, to understand the critical value of long-term planning and the principles of ecological sustainability – particularly the need to be economically innovative to ensure that resources can be widely distributed amongst a growing global population over and beyond the thirty-year Queensland Plan period. Our education system will need to teach and encourage innovation and resilience to ensure that Queensland industry and its economy are able to adapt to regional and global markets, in ways that make them less resource-intensive with higher value-adding opportunities.

This is particularly relevant given the six global megatrends as outlined above. Members of the community will need to have transferrable skills, flexibility and the ability to innovate, enabling people to stay in the workforce longer, and tap into the rich understanding of our more experienced workers.

Of particular relevance to the EIANZ is the need to ensure that the educational curriculum addresses content that will equip all members of the community to meet the environmental and resource challenges of the future, including the need to adapt our global civilisation to the effects of climate change, and ways to retain our valuable natural features, ecosystems and species whilst accommodating global growth.

The EIANZ, like many other professional associations and industry bodies, encourages its members to seek professional certification and undertake continuing professional development, which keeps members' skills and knowledge up-to-date. In particular, the EIANZ provides continuing professional development in a range of topics, such as Climate Change Adaptation and is considering expanding the specialist categories of Certified Environmental Practitioners (CEnvPs) to recognise practitioners with specific skills in climate change disciplines.

3. How do we empower and educate individuals, communities and institutions to embrace responsibility for an active and healthy lifestyle?

Active and healthy lifestyles are important as they lead to greater happiness, reduced stress, less ill health and therefore, less health expenditure and greater productivity, particularly given the Forever Young trend outlined above. They include everything from healthy eating to gaining sufficient exercise at the community level.

There is a very strong link between urban form and active lifestyles. Neighbourhoods where people have many of their facilities and/or requirements within safe walking or cycling distances, with options that are convenient, safe and efficient, have reduced car use.

If Queenslanders are to be active and healthy as part of their routine, neighbourhoods need to be designed and retro-fitted for them to walk and cycle with a purpose. Walking and cycling in the neighbourhood need to be an important part of a trip to school, the shops, work. The accommodation of walking and cycling as an important land use consideration, is about more than just providing leisure walkways.

Low-density suburbs where residents do not have these conveniences within close proximity require people to find additional time for exercise, which may be difficult after time is lost to commuting and travel for other activities.

There are also the indirect benefits of active and healthy lifestyles that involve walking and cycling, such as reduced air pollution, reduced traffic congestion.

Children and families could be encouraged to participate in more local festivals and activities. Schools and work places should continue, and expand programs to encourage active transport and healthy lifestyles.

4. How do we structure our economy to ensure our children inherit a resilient future?

The EIANZ would like to see all Queenslanders engaged in a discussion about long-term sustainable economic development, reaching beyond the next generation. Rather than determining the minimum standard for the economy and environment for our children to inherit, we should aspire to providing to the next generation an environment and economy in better condition than when the current generations assumed responsibility for it.

Future generations should expect that our current generations manage the environment and economy to ensure that we and future generations will:

- have clean air, water, quality natural landscapes, security of food, energy, water, and shelter
- be able to experience natural landscapes and see wildlife like we have, with the intrinsic environmental values improving

- not be burdened with the cost of rehabilitation or remediation of environments as a result of activities that have primarily benefited the current generations of individuals.

The vision and strategies for Queensland over thirty years should be structured accordingly.

5. How do we strengthen our economic future and achieve sustainable landscapes?

This is a key area for the EIANZ. Sustainable Landscapes are those that retain their ecological functions, and are significant enough in scale to be resilient to occasional natural disasters and other impacts, whilst allowing sufficient productivity. At the landscape scale, there are areas that will need to be retained in their natural state along with some areas that will be tolerant to some level of impact.

Resources are finite and better stewardship of them will insulate the Queensland economy from commodity price shocks and security of supply issues. The decoupling of economic progress from resource constraints is one of the greatest challenges of the 21st century. It can be achieved through the adoption of a circular economic framework – one in which the industrial, agricultural and mineral production system are restorative by their design and operation.

There are a number of significant opportunities to achieve a stronger future with sustainable landscapes:

- Recognise and account for the value of ecosystem services and implement measures by which landowners can benefit from retaining and improving the environmental values of the landscapes for which they are responsible
- Value resources in the long term, and recognise the value of natural environments and features and their benefits to the state, both directly (ecosystem services) and indirect such as value to the tourism industry. In this regard, give high priority to actions that will arrest and reverse the decline in the Great Barrier Reef and Wet Tropical and Sub-tropical Rainforests, and present these and other iconic Queensland landscapes to the world
- Understand the true long-term cost benefit analysis in cases where drawing income from resource extraction or other economic activities will have an impact on the environmental values of the site and surrounding areas
- Develop and review plans, and invest in the improvement of riverine management and water quality throughout Queensland.
- Encourage and incentivise business and the community to take a greater interest in the importance of sustainable landscapes to their community and business
- Recognise that pollution reduction, environmental management, eco-efficiency and business sustainability as well as having environmental benefits, is about the productivity and resilience of businesses.
- Recognise that circular rather than linear economies are less dependent on raw materials, more eco-efficient, and more resilient. As such, encourage the development of industrial ecology networks to support businesses that seek to reduce the use of resources through resource recovery and new business models.

Queensland governments can lead the development of initiatives that underpin a circular economy by establishing a task force to review the opportunities for business to expand the production of green commodities, services, products, investment vehicles and markets which value and protect our natural environment.

6. How do we attract and retain the brightest minds and ideas where they are most needed and capitalise on global opportunities?

Queensland's universities are remarkable incubators of knowledge and leading practice. The establishment of the Sustainable Minerals Institute at the University of Queensland is a prime example. If we are to attract and retain the best and brightest minds, Queensland must provide opportunities for the development and application of intellectual capital. The best and brightest minds from around the world will be attracted to a strong and emerging industry.

Encouraging the industries of the future to develop and locate in Queensland, while recognising that this will take time, and that the industries that Queensland may wish to be renowned for may be industries that are yet to emerge is a key strategy. There is clearly strong global growth in clean technology spending, an area in which Queensland has significant competitive advantage, such as in:

- water efficiency
- flood modelling, mapping and mitigation
- high quality food and fibre crop production
- low impact grazing
- ecotourism in sensitive marine and terrestrial environments.

The Queensland Plan should advocate early commercialisation programs, including not just funding, but programs that provide support for the developers of new technologies and business models such as mentoring, coaching, technology nurseries. These programs tend to have long lead times, and may not have immediate direct tangible outcomes, but will over the life of the Plan, put Queensland business in a strong position to prosper from the pressures of significant population growth, finite resources and the need to maintain and improve our environment over time.

Encourage innovation by providing a range of support services and incentives for industries such as:

- Energy, water, waste efficiency, renewables, and their enabling technologies;
- Extraction of resources from waste streams;
- Remote and isolated power solutions.

Queensland industry, government and academia will need to identify strengths and the niches that Queensland is good at: A good example is where Spain and the USA have the large-scale deployment advantage in Solar Thermal generation, but there are material and operational aspects that Australia's ingenuity could solve such as detailed engineering design and material's science.

Our people should be encouraged to engage in ongoing professional development to keep their skills contemporary. As previously outlined, the EIANZ encourages its members to participate in continuous development, and has established the CEnvP scheme to recognise excellence in the environmental profession.

Vision for Queensland

The EIANZ and its members have a long term vision that Queensland:

- Is prosperous, having developed a circular economic framework that balances the demands for new resources and activities designed for the protection and renewal of the environment
- Is resilient to the increased frequency and intensity of changing climatic conditions
- Has a healthy and clean natural and man made environment
- Retains enough productive and quality agricultural land to feed Queensland's growing population and generate income from exports
- Recognises the economic value of our natural features, and accounts for the value of the services the environment provides
- Increases the value of our businesses, by providing added value to our natural resources
- Has preserved its unique environments and its wildlife for the enjoyment of future generations, including in particular the Great Barrier Reef, the Tropical and Sub-tropical Rainforests, our National Parks and other nature conservation areas, and our wild and pristine rivers and landscapes
- Is successfully making a transition to energy sources that are more localised and have a lesser impact on the environment, taking advantage of our natural abundance of solar resources
- Generates less waste, and recycles more
- Is known for innovation in energy, water and waste efficiency, with households and business adopting and developing leading clean technologies
- Has world leading policies and regulation stimulating ongoing adaptation to the unavoidable consequences of climate change
- Is actively engaged as a community in activities to achieve all the above

Strategies and Actions

What strategies and actions would EIANZ like to see?

To engage our Queensland community in the protection and renewal of the Queensland Environment by:

- Maintaining a strong and visible presence of government as the custodian, manager and interpreter of Queensland's public lands through the Queensland National Parks and Wildlife Service
- Maintaining a strong and effective presence of government as the environmental regulator and the setter of good practice standards for environmental management
- Providing support for volunteering as a means for citizen contributions to environmental conservation and more resilient and supportive communities
- Ensuring that there are effective academic centres of excellence and not-for-profit organisations that undertake world class research, educate and engage the public in environmental management and renewal
- Providing annual community roundtables at which Queenslanders can contribute to, and participate in discussions relating to environmental management and renewal

- Expanding the warehousing of data and its accessibility so that all Queenslanders can have the ongoing benefit of the information that is collected and analysed as part of the environmental assessment process and through that about their local environment
- Ensuring that Queensland's system of land-use planning provides strategic, regional and local guidance and performance standards designed to protect and enhance community resilience and environmental values

To ensure our Queensland community has clean air and water by:

- Recognising the role we all play in having clean air and water and work to reduce any activities that don't improve or maintain our air and quality
- Moving to low-pollution and pollution-free energy sources
- Reducing the dependence of industry on air dispersion as a means for dealing with gaseous emissions from industrial processes
- Encourage less car dependency, with greater public transport use, but importantly more active transport, with the added benefit of improving health and productivity
- As purchasers of goods and services, seeking out suppliers who strive to minimise emissions to air and water
- Continue to monitor the water quality of our waterways
- Encourage greater innovation to reduce the need for and environmental impact of industrial and residential water use

To ensure that Queensland's native flora and fauna can thrive in the wild by:

- Ensuring that Queensland has a comprehensive, adequate and representative system of protected areas with interconnecting landscape corridors
- Leaving many of our natural areas untouched to maintain their intrinsic values and not rating our natural areas by human-related measures such as visitation rates, which may put them at risk
- Having selected areas that are high use and have appropriate infrastructure to protect areas from over use
- Protecting high value conservation areas with buffer areas that may have lesser environmental values
- Providing resources to effectively and efficiently manage and present protected areas in consultation with neighbours and other stakeholders
- Identifying further areas to be acquired for inclusion in the protected area estate
- Providing financial incentives to landholders to retain and enhance waterways and vegetation, recognising the value of these areas to landscape resilience and the provision of ecosystem services

To ensure Queensland's important areas and sites are retained by:

- Ensuring that our untouched, wilderness areas are protected from developments and recreation types that might threaten their environmental values
- Prioritising the protection and restoration to good health of the Great Barrier Reef, Tropical and Sub-tropical Rainforests

To ensure that we can have economic development that retains Queensland's unique and important environmental qualities by:

- Having adequate policies and programs in place for the protection and conservation of environmental values

- Expanding schemes that reward landowners for enhancing important natural features such as waterways and mature vegetation
- Considering opportunities to ensure that Queensland’s vegetation clearing does not increase to historic rates

To ensure appropriate, evidence-based processes are in place to protect the environment by:

- Applying the precautionary principle where evidence does not clearly support a particular proposal
- Encouraging a more participative environmental impact assessment process
- Focusing not only on regulation, but engaging the community in ways to encourage environmental outcomes, including in setting objectives
- Further developing consistent land–use planning through the Queensland Planning Provisions, that responds to new technologies and new processes that protect the environment

To ensure we are placing less waste in the ground by:

- Building on Queensland’s growing participation in recycling, to reduce the total volume of waste and recycling, including the volume of waste to landfill
- Work with businesses to increase reuse of materials and resource recovery
- Provide incentives and programs to assist businesses to increase their materials productivity

Implementation

How does the Queensland Community, and the Queensland Government put these strategies into action, and when?

- Develop processes designed to achieve a balance between development and protection of the environment to be able to meet the challenges of the future as outlined above, recognising that good environmental regulation is important to our way of life and our longevity as a prosperous state. It is therefore important to cease the use of the term ‘Green Tape’ which reduces the perception of legitimacy of good environmental regulation
- Continue a range of mechanisms to protect more valuable habitats and species, including voluntary and measures and acquisition, including corridors between existing areas of landscape with important environmental values

The EIANZ also recognises that there are national and international influences and stakeholders that are important in delivering the Vision for Queensland, and who should be engaged in developing the Queensland Plan.

The EIANZ is keen to assist the Queensland Government in further developing this important initiative, as an organisation that:

- Has a strong member base committed to the above vision for Queensland
- Is committed to a high standard of knowledge and professionalism amongst members with training and accreditation
- Has structures in place to assist with certain aspects of the development of the plan, including two Queensland divisions with expert members

Environment Institute of Australia and New Zealand

The Environment Institute of Australia and New Zealand has a key role within the Australian and New Zealand communities as a major contributor to the formulation of effective and responsible policies in the broad field of environmental management. The practical consequence of the Institute's involvement in environmental management reform processes is a long-term improvement in the quality of environmental management. This must, in turn, lead to a better protected and managed global environment as Institute members pursue their endeavors and apply their skills to local environments.

The Institute was formed to meet the needs of environmental practitioners. It is a non-profit, politically independent professional association. Founded in 1987, the Institute is multi-disciplinary in membership and provides scope and opportunity for professional and academic interchanges across all sectors of the diverse environmental industry.

The EIANZ has approximately 2500 members in Australia and New Zealand and two Queensland Divisions, South East Queensland (SEQ) and Far North Queensland (FNQ). The Queensland membership represents over 35% of the Institute's membership. EIANZ members include rangers, town planners, climate scientists, consultants, managers and students.

The EIANZ submission was discussed and formulated via regular meetings of the Climate Change Special Interest Section and drafts of the submission were circulated to the SEQ and FNQ committees for discussion and endorsement. A wide group of environmental professionals have contributed to this submission.

The Institute invests heavily in providing relevant quality training and professional development to ensure that its members have contemporary skills. The Institute accredits members as Certified Environmental Professionals through its CEnvP program, recognising particular skills in Environmental Impact Assessment and Ecology.

The Institute and its members are keen stakeholders in Queensland's future and welcome the opportunity to further participate in the development of the Queensland Plan.