Mr Ian Rickuss, MP
Chair
Agriculture, Resources and Environment Committee
Parliament House
George Street
BRISBANE QLD 4000

Dear Mr Rickuss

Thank you for your letter of 18 October 2013 concerning the inquiry of the Agriculture, Resources and Environment Committee (the Committee) into the North Stradbroke Island Protection and Sustainability and Another Act Amendment Bill 2013.

Our nominated departmental officers are:

Mr Rex Meadowcroft, Director, Legislative Support on telephone 3199 7351 or email rex.meadowcroft@dnrm.qld.gov.au or

Ms Samantha Laurie, Manager, Legislative Support on telephone 3199 7339 or email samantha.laurie@dnrm.qld.gov.au.

The following attachments are enclosed for the Committee’s information:

- An Information briefing on the North Stradbroke Island Protection and Sustainability and Another Act Amendment Bill 2013 which includes the background to the Bill, the policy drivers and the policy objectives (Attachment 1).
- A plain English guide in a question and answer format (Attachment 2) which may be of assistance to both the Committee and key interested parties.
- A report entitled – North Stradbroke Island – economic impact of mineral sands mining prepared by the Department of State Development, Infrastructure and Planning. This report provides an economic impact analysis in relation to the extension of mining on North Stradbroke Island until 2035 (Attachment 3).
- A list of departmental officers and position details (Attachment 4) are included for your information.
- No consultation was undertaken on development of the Bill. However, we have provided details of stakeholders that may wish to provide a submission to the Committee (Attachment 5).
I trust this information is of assistance. Should you have any further enquiries, please contact Mr Rex Meadowcroft or Ms Samantha Laurie on 3199 7351 or 3199 7339 respectively.

Yours sincerely

BRETTE HEYWARD
Director-General
Natural Resources and Mines

Att
INFORMATION BRIEFING:

NORTH STRADBROKE ISLAND PROTECTION AND SUSTAINABILITY AND ANOTHER ACT AMENDMENT BILL 2013

Prepared for: Agriculture, Resources and Environment Committee 21 October 2013

Prepared by: The Department of Natural Resources and Mines

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PART 1 – Background

Amendments to the North Stradbroke Island Protection and Sustainability Act 2011

North Stradbroke Island (NSI) is the second largest sand island in the world and is located approximately 40 kilometres from Brisbane.

Australian Consolidated Industries began sand mining on NSI in 1949. In 1966, Consolidated Rutile Limited (CRL) took over the sand mining operations. Sibelco Australia Limited purchased CRL in 2009 (noting that Sibelco was called Unimin at the time of purchase). Unimin changed its name to Sibelco in 2011 and is now the only sand mining company operating on the Island. All mining leases held by Stradbroke Rutile Pty Ltd are owned by Sibelco.

In June 2010\(^1\) the then government made a commitment to phase out sand mining on NSI which included a gradual phase out of mining by 2027 and to increase the national park area from 500 hectares to 22,000 hectares by 2027. The commitment also included facilitating the staged creation of areas that were to be jointly managed by the State and the Traditional Owners of NSI, the Quandamooka People.

In July 2011\(^2\), the Federal Court made two consent determinations recognising the Quandamooka People’s native title rights and interests. The Quandamooka People hold exclusive native title rights in relation to about 2,264 hectares of land. The Federal Court also recognised the Quandamooka People’s non-exclusive native title rights over about 22,639 hectares of onshore areas, and over about 29,505 hectares of offshore areas. The non-exclusive rights recognised include the right to live and be present on the area, conduct ceremonies, to maintain places of importance and areas of significance to the native title holders, and to take, use, share and exchange traditional natural resources and seawater for any non-commercial purpose.

In April 2011 the previous government passed the North Stradbroke Island Protection and Sustainability Act 2011 (NSIPS Act) which phases out mining on NSI by 2025 with NSI’s largest mining operation, Enterprise mine to cease operations in 2019.

The Bill was to achieve its objective of ending mining activities in the NSI Region (North Stradbroke and Peel Islands) by the end of 2019 and ending all mining in the Region by 2025. The NSIPS Act included the following timeframes for the cessation of mining:

- Yarraman mine to end at the end of 2015;
- Enterprise mine end at the end of 2019; and
- Vance mine end on 31 October 2025.

The Act also imposed a restricted mine path at Enterprise mine. The Explanatory Notes from the original Bill state that this was done in order to ensure that future sand mining avoided areas of high conservation.

In December 2011 an Indigenous Land Use Agreement (ILUA) between the State and the Quandamooka People was registered with the National Native Title Tribunal. The specific details of the ILUA are confidential.

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In January 2012, the then Opposition Leader, made an election commitment to deliver a framework to extend mining on NSI to allow sufficient time for the economy of NSI to transition to one that is not dependent on mining. Delivery of this commitment requires legislative amendment to the NSIPS Act.

**Amendments to the Vegetation Management Act 1999**

The Vegetation Management Framework Amendment Act 2013 (VMFAA) was passed by Parliament on 21 May 2013 and contributes to delivering a number of Government commitments including growing a four pillar economy and reducing regulatory burden and red-tape on landholders, business and government.

The VMFAA introduced three new clearing purposes (relevant purposes) for which vegetation clearing can occur. Two of these purposes were for high value agriculture clearing and irrigated high value agriculture clearing. These provisions have not yet commenced. It is anticipated that these provision will commence in late 2013.

High value agriculture clearing includes perennial and annual horticulture and broad-acre cropping. Clearing can occur for the establishment, cultivation and harvesting of dry-land cropping but does not include clearing for grazing or plantation forestry activities. Irrigated high value agriculture clearing includes perennial and annual horticulture and broad-acre cropping supplied with water by artificial means. While clearing for irrigated high value agriculture is permissible for irrigated improved pasture for grazing, it does not include plantation forestry activities.

Section 22A of the Vegetation Management Act 1999 (VMA) outlines the activities that can be applied for under a vegetation clearing permit. However, the VMFAA will amend the VMA to provide for new clearing activities of high value and irrigated high value agriculture. Sections 22DAB and 22DAC of the VMFAA outline the information requirements for high value and irrigated high value agriculture clearing.

Specifically sections 22DAB (2)(d) and (3) require applicants to demonstrate how the adverse impacts of the clearing will be minimised or mitigated. Where the application involves the clearing of endangered or of concern regional ecosystems, the application must identify what actions they propose that will have a significant beneficial impact (SBI) on the biodiversity values of the land. These requirements are unique to the high value and irrigated high value agriculture clearing purposes.

Once an applicant has satisfied the relevant purpose requirements under sections 22DAB and 22DAC, applicants can apply under the Sustainable Planning Act 2009 (SPA) for a development permit. Applications under the SPA are assessed under the State Development Assessment Provisions (SDAP) Module 8: Native vegetation clearing.

The current SDAP, which commenced in July 2013, requires all applications to demonstrate how the development will minimise and mitigate the effects of the development and provides for the consideration of clearing in endangered and of concern regional ecosystems.

Amendment of the SDAP is required to incorporate changes as a result of the VMFAA. The amendment will provide for assessment of high value and irrigated high value agriculture, including the considerations for clearing of endangered and of concern regional ecosystems.

The requirement to provide an SBI will be transferred into the SDAP to avoid duplication in the VMA and the SDAP.
PART 2 – Policy Drivers

Amendments to the North Stradbroke Island Protection and Sustainability Act 2011

The North Stradbroke Island Protection and Sustainability and Another Act Amendment Bill 2013 honours the government’s election commitment to deliver a suitable framework for the continuation of sand mining on NSI.

The government considers the timeframes for the cessation of mining provided in the NSIPS Act were short sighted and did not provide enough time for the economy of NSI to move away from a dependency on sand mining.

The current Act provides that mining in general ceases within six years with the final end date for mining being 2025. The previous government assumed that alternative industries, such as nature based recreation, tourism and education, would be established within those six years.

These industries will take longer than six years to generate anywhere near the amount of income that sand mining injects into both the Island and state economy.

Sovereign risk is an important issue that all mining companies take into account prior to making investment decisions about proposed mining activities.

In 2012 the previous Queensland Government, without consultation, legislated a restricted mine path for Sibelco’s Enterprise mine site and cut short the company’s proposed mining activities which represented a serious economic loss to the company. The precedent set by the previous government impacted negatively upon Queensland’s reputation as a state with minimal sovereign risk.

Addressing the sovereign risk issue supports the government’s commitment for a strong future for resources and energy in Queensland with a stable, clear legislative framework for the industry.

The Bill aims to return Sibelco to a position similar to that it would have been in had the NSIPS Act not been introduced and will go some way to restoring Queensland’s reputation for minimal sovereign risk.

To this end, the proposal government considers the most appropriate to implement its election commitment is through amendments to the NSIPS Act which will:

- allow mining operations on Enterprise mine to continue to the end of 2035, with rehabilitation to be completed by 2040;
- remove the restricted mine path and a non-winning condition at the Enterprise mine;
- replace the Environmental Authority with one which has removed the restricted mine path (imposed by the requirement of the NSI Act) and amended to adopt (where suitable) the model mining conditions released by the Department of Environment and Heritage Protection in June 2013; and
- allow Sibelco five years to rehabilitate Yarraman mine (mining operations will still be required to cease by the end of 2015).
Amendments to the Vegetation Management Act 1999

The Department of Natural Resources and Mines established the Vegetation Management Reforms Industry Working Group in 2013 to assist in the policy development and implementation of the vegetation management reforms. The industry working group identified that the VMFAA presented unintended consequences that would significantly constrain the opportunity for landholders to participate in the high value and irrigated high value agriculture clearing reforms, and would duplicate the requirements under the SDAP.

Specifically, it was identified that the SBI requirement would also unfairly impact those applicants who were clearing the last remaining vegetation on their land and had fully developed or cultivated their property, as it did not provide them with the opportunity to provide an SBI on other land.

PART 3 – Policy Objectives

Amendments to the North Stradbroke Island Protection and Sustainability Act 2011

The objectives of the Bill are to amend the NSIPS Act to:

a. enable Sibelco to seek a renewal of mining leases in 2019 at the Enterprise mine until 2035, thereby providing a realistic timeframe in which NSI can transition to other industries such as nature based recreation, tourism and education;

b. remove the restricted mine path and non-winning condition over part of the Enterprise mine and consequently replace the environmental authority. This will reduce the harm done to Queensland’s reputation in relation to sovereign risk and leave environmental matters to the Environmental Protection Act 1994 (Qld) (EP Act); and

c. provide for an opportunity to renew mining leases associated with Yarraman mine and Enterprise mine, until 2020 and 2040 respectively with a non-winning condition for the last 5 years. This will provide the necessary mechanism to allow for rehabilitation of the mine sites.

Continuation of mining and the regional economy

The previous government began to develop a range of measures to cease sand mining operations on NSI and assist the transition of the economy away from sand mining and towards alternative industries such as nature based recreation, tourism and education. The majority of sand mining was to cease by 2019 followed by the closure of the Vance mine in 2025.

In essence, the community of NSI have only six years (from 2013) to find an alternative industry that could generate an income similar to that of sand mining. As such there are concerns that the early cessation of sand mining could adversely impact on the NSI community resulting in unemployment, business closures and reduced demand for local goods and services.

The reality is that the economy of NSI was, and still is, largely dependent on sand mining operations. It is estimated that Sibelco currently injects close to $130 million annually into the State’s economy. The population of the Island is highly dependent on sand mining for employment and income.
Further, the government’s recent amendments to the Nature Conservation Act 1994 (Qld) provides a legislative basis to facilitate the development of tourism (including eco-tourism) operations on NSI. However, land use planning considerations and private sector interest and investment are still needed in order to facilitate the development of tourism and eco-tourism on NSI.

A report entitled – North Stradbroke Island – economic impact of mineral sands mining has been prepared by the Department of State Development, Infrastructure and Planning. This report provides an economic impact analysis in relation to the extension of mining on North Stradbroke Island until 2035.

Some of the key findings include:

- Extending the mining leases from 2019 to 2035 will provide considerable economic benefits to NSI and the state through the increased economic activities in terms of production, value added, royalties and jobs.
- At present, mining is the second largest industry, providing jobs to around 14 per cent of the island’s employment. This is more than 4 times the share of mining employment state-wide.
- By providing largely full-time employment, the importance of mining incomes is likely to be much greater on NSI than simply the 14 per cent share in employment.
- By extending the mining leases for Enterprise mine from 2019 to 2035, the economic gains to NSI and Queensland include extra mineral production of $1.50 billion, value added to the GRP/GSP of $0.95 billion, royalties to the State revenue of around $75.74 million and jobs retained is approximately 107 FTE from 2015 to 2035.

A copy of this report has been provided to the Agriculture, Resources and Environment Committee for their information.

**Environmental Authority**

Under the NSIPS Act, a restricted mine path was legislatively imposed upon Enterprise mine. The original Explanatory Notes state that this was done in order to ensure that future mining avoided areas of high conservation value as much as possible.

The Bill removes the restricted mine path from Enterprise Mine as the protection of the environment is a matter for the Environmental Protection Act 1994, an Act which is specifically designed for that purpose. It is important to note that the environmental assessments originally carried out on Sibelco’s mining leases, prior to the 2011 NSIPS Act, were based upon the larger mining area.

Sibelco’s mining operations are required to be conducted in accordance with an Environmental Authority (EA), issued pursuant to the EP Act. The Bill replaces the current EA. The replacement EA will be attached as a Schedule to the NSIPS Act, rather than under the EP Act. The replacement EA will operate and be administered under the EP Act once it takes effect.

It is important to note that although the government is committed to the continuation of mining on NSI until 2035, it is also committed to ensuring that environmental harm is minimised. The replacement EA includes a range of measures to ensure that the environment is protected.

For example, buffer zones of up to 100 metres were negotiated to protect some environmentally sensitive areas. However, parts of the proposed project area are mapped up to the boundaries of other environmentally sensitive areas (including a small portion adjacent
to a national park). The government gave careful consideration to and accepted this proposal due to site constraints that could adversely affect the operation if a large buffer was included.

Due to the proximity of operations to some sensitive areas, the government has also included environmental authority conditions designed to protect the surrounding environmental values (e.g. monitoring and reporting against trigger levels and ensuring all measures, plant and equipment are in place to achieve compliance with the conditions of the environmental authority).

The activities that are undertaken in those areas where there are no buffers include: roads and tracks that need to follow the contours of the land; the installation of monitoring bores and piezometers for environmental monitoring purposes; and corridors for power lines and pipes. These activities themselves provide a small buffer between the mining operation and the neighbouring environmentally sensitive areas and are considered to have less impact than the actual mining operation.

The removal of the restricted mine path also led the government to include a condition to identify areas in which land disturbance can occur, areas that must not have any land disturbance (such as buffer zones and category A and B environmentally sensitive areas) and areas where land disturbance can only occur if a management plan is approved by the government. The management plan must identify the environmental values, assess any potential adverse impacts of the mining activity and include details of stakeholder consultation.

The EA also requires an environmental monitoring program, to be submitted to the government each year, to assess any changes in Environmental Values that could be caused by the mining activity. The monitoring plan must include trigger levels and processes for dealing with the exceedance of the trigger levels and an obligation to notify EHP of the trigger level exceedance.

The replacement EA also includes conditions relating to the notification of emergencies, incidents and exceptions. And, a condition which requires the holder of the environmental authority to provide a site investigation report (under the EP Act) for any area that is likely to be contaminated land and carry out the work required by that report to ensure the land is suitable of its final land use.

Renewal of particular mining leases for rehabilitation

Amendments are proposed to the NSIPS Act to allow Sibelco an additional five years at Yarraman and Enterprise mines in order for the company to complete its rehabilitation requirements under the EA before the mining lease is cancelled. The five year extension to the relevant mining leases will be subject to a non-winning condition.

Amendments to the Vegetation Management Act 1999

The amendments will remove (from the VMFAA) the requirement for applicants applying for high value and irrigated high value agricultural clearing permits under new sections 22DAB and 22DAC of the VMA, to demonstrate how they will minimise and mitigate the effects of the proposed clearing, and for providing an SBI under the VMA.

In particular, the omission of sections 22DBA (2)(d) and (3), and 22DAC (1)(e) and (i) will offer the applicant greater flexibility to either provide a SBI or an offset as per the requirements of the SDAP.
In doing so, this will remove the duplication of these provisions within the VMFAA and the SDAP. The duplication of the provisions was an oversight, particularly given the objective of the vegetation management reforms which was to reduce red tape and streamline the vegetation clearing requirements. By removing these provisions from the VMA, it will remove duplication and ensure that applicants only have to address these requirements once under the SPA.

**PART 4 – Consultation**

No public consultation has been undertaken on the Bill.

The Bill implements the government’s decision to “deliver a framework for an orderly ending of the mining leases on North Stradbroke Island, which requires the mining company to remediate to the highest environmental standards and allows the Island proper time to transition to a new economy”.

North Stradbroke Island has been the subject of media scrutiny before, during and after the 2012 State election, and was also again scrutinised by the media during the 2013 Estimates hearings. The government has maintained that it will honour the election commitment to deliver a framework that extends mining on NSI.

In developing the Bill the known concerns of the traditional owners and the community were taken into account.

It is important to note that the Bill will not impact on the ILUA between the State and Quandamooka Yoolooburrabee Aboriginal Corporation and the government is committed to fulfilling its obligations and responsibilities under the ILUA.
North Stradbroke Island
Protection and Sustainability
and Another Act Amendment Bill 2013

Questions and Answers
1. Why is the government committed to extending mining on North Stradbroke Island?

In April 2011 the previous government passed the *North Stradbroke Island Protection and Sustainability Act 2011* (NSIPS Act) which phases out mining on North Stradbroke Island (NSI) by 2025 with NSI’s largest mining operation, Enterprise mine to cease operations in 2019.

The government considers the timeframes for the cessation of mining provided in the NSIPS Act were short sighted and did not provide enough time for the economy of North Stradbroke Island to move away from a dependency on sand mining.

This government remains committed to ending sand mining in a way that gives the NSI economy a realistic timeframe to transition from mining to other industries.

2. Why didn’t the government undertake consultation to extend mining on North Stradbroke Island?

The government’s election commitment was to deliver a framework for the orderly ending of the sand mining leases on NSI, which also requires Sibelco to remediate to the highest environmental standards and allow the island more time to transition to a new economy. This commitment was first made in January 2012 and was widely known going into the 2012 state election. This Bill honours the election commitment.

Limited consultation on the proposal has occurred with QYAC and Sibelco during 2013. The Minister met with QYAC in May of this year to outline the proposal to extend sand mining and to encourage QYAC to enter into discussions separately with Sibelco. The government offered to facilitate any meetings between QYAC and Sibelco. This offer has not been accepted.

3. What benefits does extending sand mining have on the community of North Stradbroke Island and Queensland?

Extending the mining leases from 2019 to 2035 will provide considerable economic benefits to North Stradbroke Island and the state through increased economic activities in terms of production, value added, royalties and jobs, in particular:

- extra mineral production of $1.50 billion;
- value added to the GRP/GSP of $0.95 billion;
- royalties to the State revenue of around $75.74 million; and
- jobs retained is 107 FTE from 2015 to 2035.
4. **What is being done to transition the NSI economy?**

The timeframes pursuant to the *North Stradbroke Island Protection and Sustainability Act 2011* did not provide sufficient time for this to occur. This Bill will provide up to an additional 16 years for NSI to transition to other sustainable industries.

Secondly, the government recently introduced amendments to the *Nature Conservation Act 1994* (NCA) to put in place a framework to allow for ecotourism on National Parks. Until these amendments commenced, it was very difficult for ecotourism operations to be located on national park.

The government is continuing to pursue amendments to the NCA through the newly introduced Nature Conservation and Other Legislation Amendment Bill (No. 2) 2013 which proposes amendments to facilitate ecotourism.

The framework put in place under the NCA will make it easier for operators to establish ecotourism operations on North Stradbroke Island.

5. **How many mining leases are there on NSI?**

There are 19 mining leases on NSI. All of them are held by Sibelco.

However, only four mining leases are the subject of active mining:
- ML 1109 at Yarraman Mine,
- ML 1108 at Vance Mine; and
- ML 1117 and ML 1105 at Enterprise Mine.

ML 1120 at the Enterprise Mine lease is not mined at present.

Of the other fourteen non-active mining leases:
- five have had national park declared over them, however rehabilitation on these leases has not finished;
- nine mining leases are in the process of being rehabilitated or are required for road or infrastructure or minerals processing. They are not able to be mined.

6. **Are there any native title implications arising from the extension of mining?**

The government considers the amendments to the *North Stradbroke Island Protection and Sustainability Act 2011* are able to be done in accordance with the *Commonwealth Native Title Act 1991*.

As the Native Title Act is Commonwealth legislation it is not possible for State law to override the obligations in the Native Title Act.
7. Is the government still committed to joint management of NSI national parks?

Yes. The government’s proposal will not impact on any of the national parks on NSI.

The existing national parks, which make up around 50% of NSI, will remain and continue to be jointly managed by Queensland Parks and Wildlife Service and the Quandamooka Yoolooburrabee Aboriginal Corporation pursuant to the Indigenous Management Agreement.

8. How much of NSI is national park now?

Around 50% of NSI is National Park.

It is called the Naree Budjong Djiara National Park. The National Park is managed jointly by Queensland Parks and Wildlife Service and the Quandamooka Yoolooburrabee Aboriginal Corporation pursuant to the Indigenous Management Agreement.

9. How does the proposed new environmental authority compare to the current environmental authority?

Whilst the EA as a whole is being replaced, this has been done to contemporise the EA by removing redundant provisions and including current model conditions that were introduced as a result of green tape reforms in 2012.

The substantive change in the new EA relates to amended conditions as a result of the removal of the restricted mine path at the Enterprise Mine.

The new EA includes conditions regarding the following:

- Disturbance of land only in particular identified areas, excluding for example disturbance of the Ramsar wetlands. EHP gave careful consideration to appropriate buffer zones of up to 100 meters to protect some environmentally sensitive areas and balanced limitations provided by site constraints. The activities that are undertaken in those areas where there are no buffers include: roads and tracks that need to follow the contours of the land; the installation of monitoring bores and piezometers for environmental monitoring purposes; and corridors for power lines and pipes. These activities themselves provide a small buffer between the mining operation and the neighbouring environmentally sensitive areas and are considered to have less impact than the actual mining operation.

- A monitoring program must be conducted and results provided to EHP annually. The monitoring program facilitates assessment of any changes in Environmental Values that could be caused by the mining activity. The monitoring plan must include trigger levels and processes for dealing with the exceedance of the trigger levels and an obligation to notify EHP of the trigger level exceedance.

- Provision of a site investigation report under the EP Act for any area that is likely to be contaminated land and carry out the work required by that report to ensure the land is suitable for its final land use.

- Financial assurance as security for compliance;

- Development and implementation of a risk management system; and

- Notification of emergencies.
10. Will the extension of sand mining damage the unique environment of North Stradbroke Island?

The Environmental Protection Act 1994 exists to regulate environmental impacts arising from mining. In particular, an environmental authority for mining activities contains conditions to protect the environmental values of the surrounding environments.

It is reasonable to expect that a sand mine will have an impact on its immediate environment. However, the new environmental authority is designed to ensure that the impact is constrained to only an approved area and the broad environmental values are protected.

Additionally, EHP will conduct compliance programs to ensure that operations at the sand mine are in compliance with the environmental authority.

Conditions on the environmental authority are imposed to protect environmental values and the environmentally sensitive areas such as the RAMSAR wetlands and National Parks that neighbour the mine.

Additionally, conditions on the environmental authority require the operator to monitor and report on offsite environmental values such as ground and surface water quality to ensure that any potential impacts are identified and acted on early.

11. Why is it necessary to remove some sections from the Vegetation Management Framework Amendment Act 2013?

Removal of sections 22DAB(2)(d) and (3), and 22DAC(1)(e) and (i) will remove duplication between provisions contained in the Vegetation Management Framework Amendment Act 2013 (VMFAA) to determine that an activity is for high value and irrigated high value agriculture clearing, and development assessment provisions contained in the State Development Assessment (SDAP): Module 8: Native Vegetation Clearing under the Sustainable Planning Act 2009. Retention of these provisions within both the VMFAA and the SDAP will result in unintended negative consequences for landholders.

The duplication was an oversight, particularly given the objective of the vegetation management reforms which was to reduce red tape and streamline the vegetation clearing requirements. By removing these provisions from the Vegetation Management Act 1999 (VMA), it will remove duplication and ensure that applicant’s only have to address these requirements once under the Sustainable Planning Act 2009 which is consistent with other clearing purposes in the VMA.

12. How will these requirements be addressed in the SDAP?

The current version of the SDAP Module 8: Native Vegetation Clearing (July 2013) contains a requirement for applicants to demonstrate how they have minimised the impacts of development. It also contains requirements for assessing proposals to clear endangered and of concern regional ecosystems, including the ability to offset the clearing.

Amendment of the SDAP is required to incorporate changes as a result of the vegetation management reforms. The amendment will provide for assessment of high value and irrigated high value agriculture and the consideration of the clearing of endangered and of concern regional ecosystems.
13. Will removal of these provisions reduce environmental protections?

Considerations of the clearing of endangered and of concern vegetation and the requirement to minimise the effect of clearing are currently part of the State Development Assessment Provisions (SDAP) Module 8: Native vegetation clearing and will continue to be so. Removal of these provisions from the VMFAA will provide greater flexibility for applicants as they will provide alternative options to addressing the proposed clearing of endangered and of concern regional ecosystems.

For example, it is proposed that the SDAP will provide applicant’s with the option to provide either an environmental offset or undertake action/s resulting in a significant beneficial impact to biodiversity values delivered within the landscape.

14. Will the provisions within the SDAP be more onerous?

The provisions within the SDAP will not be more onerous than the current standard provisions requiring all applicants to demonstrate how they have minimised the impact of the development, and the requirement to provide an environmental offset for the clearing of endangered and of concern regional ecosystems or provide a significant beneficial impact to biodiversity values delivered within the landscape.
North Stradbroke Island – economic impact of mineral sands mining

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Summary of findings

- Extending the mining leases from 2019 to 2035 will provide considerable economic benefits to North Stradbroke Island and the State through the increased economic activities in terms of production, value added, royalties and jobs.

- The median age of island’s resident is at 47, which is much older than the median age of 36 for the State. Working age population (persons aged between 15 and 64) accounted for 62 per cent of the NSI total population, which is lower than the Queensland average of 67 per cent.

- By 2031, almost one third of the NSI population will be 65 or older, while the respective share in Queensland will be around one fifth.

- The low labour force participation rate (55 versus 63 per cent for the state) is likely to reflect both the lack of opportunities for finding a job, and also the higher median age of the North Stradbroke Island’s residents than in the rest of the state.

- Accommodation and food services is the largest employer on the island providing jobs to 18 per cent of the total employed. This is more than twice the respective share of this industry across Queensland, which is at 7 per cent.

- This high share of accommodation and food services in the total is reflected in the high share of part-time jobs (40 per cent) in the total jobs on NSI. Across Queensland, 30 per cent jobs are part-time jobs.

- The large share of part-time jobs is the likely cause of median weekly personal incomes being considerably lower than that across Queensland. At the range of $454 (Dunwich) to $537 (Point Lookout), median weekly incomes are considerably lower than the Queensland figure of $587.

- At present, mining is the second largest industry, providing jobs to around 14 per cent of North Stradbroke Island’s employment. This is more than 4 times the share of mining employment state-wide.

- By providing largely the full-time employment, the importance of mining incomes is likely to be much higher than the 14 per cent share in employment.

- By extending the mining leases for Enterprise Mine from 2019 to 2035, the economic gains to NSI and Queensland include extra mineral production of $1.50 billion, value added to the GRP/GSP of $0.95 billion, royalties to the State revenue of around $75.74 million and jobs retained is 107 FTE from 2015 to 2035.
1. Introduction and Background

Introduction

The Department of Natural Resources and Mines (DNRM) requested Economic and Commercial Analysis (ECA) team in Economic & Regional Development Division of Department of State Development, Infrastructure and Planning to undertake an economic impact analysis of extending mining in North Stradbroke Island (NSI) until 2035, including a regional profile of NSI.

Section 2 provides an overview of the socio-economic profile of NSI and covers the estimated resident and populations projections, industry, employment and labour force statistics relevant to NSI using the most recent 2011 census data.

Section 3 provides the economic analysis of the possible scenarios related to the cessation of sand mining in NSI. Also included in this section is the methodology, assumptions, limitations and key results.

Background

The extension of sand mining on NSI involves legislative amendment to the North Stradbroke Island Protection and Sustainability Act 2011 (NSIPS Act). SIBELCO Australia Limited (SIBELCO) is the only active sand mining company on NSI. There are 3 mines currently operated by SIBELCO in NSI: (i) Yarraman Mine; (ii) Vance Mine; and (iii) Enterprise Mine.

The current NSIPS Act provides the timeframes for the phase-out of mining, specifically the following:

- Yarraman Mine ceases in 2015
- Vance Mine ceases in 2025
- Enterprise Mine ceases in 2019

The proposed legislative amendment to the NSIPS Act would have the following effect:

- Enterprise Mine continues until 2035.
2. Socio-economic Profile Overview

Most data used in this statistical profile is sourced from the 2011 Census of Population and Housing\(^1\). The Census data is the source for most of statistics at the locality level of geography. The NSI localities include Amity Point, Dunwich, Point Lookout, and the very sparsely populated remaining area of North Stradbroke Island. Other data used in the report covers the larger Redland Shire (Balance) Statistical Local Area which includes other islands in the Redland Bay, such as Lamb Island and Russel Island. To derive business counts by industry for the region, we used the area described as Redland Islands, and identified as the region SA2/301021010.

The following Table 1 presents socio economic indicators for the region.

<table>
<thead>
<tr>
<th>Table 1 North Stradbrooke Island, Socio Economic Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demography</strong></td>
</tr>
<tr>
<td>Population (persons)</td>
</tr>
<tr>
<td>Median age (years)</td>
</tr>
<tr>
<td><strong>Labour force</strong></td>
</tr>
<tr>
<td>Working age population (age 15-64)</td>
</tr>
<tr>
<td>Working age population (% of total pop.)</td>
</tr>
<tr>
<td>Labour force (persons)</td>
</tr>
<tr>
<td>Participation rate (%)</td>
</tr>
<tr>
<td>Employment (persons)</td>
</tr>
<tr>
<td>Unemployment (persons)</td>
</tr>
<tr>
<td>Unemployment rate (%)</td>
</tr>
<tr>
<td><strong>Top 5 industries (% of all employed)</strong></td>
</tr>
<tr>
<td>Accommodation and food services</td>
</tr>
<tr>
<td>Mining</td>
</tr>
<tr>
<td>Health care and social assistance</td>
</tr>
<tr>
<td>Retail trade</td>
</tr>
<tr>
<td>Construction</td>
</tr>
<tr>
<td><strong>Median personal income ($/week)</strong></td>
</tr>
</tbody>
</table>

---

\(^1\) Sources of data: ABS, 2011 Census of Population and Housing, Basic Community Profile; ABS 8165.0, Counts of Australian Businesses, including Entries and Exits, various editions; Qld Government Statistician, Projected population (medium series) by SLA, 2012;
Demography

At the time of the 2011 Census of Population and Housing, the total population count of North Stradbroke Island was 2,031 persons or just 15 persons more than at the previous census in 2006. The median age of island’s resident was at around 47, which is much older than the median age of 36 for the State.

Estimated resident population and age structure

Working age population, that is the persons aged between 15 and 64, accounted for 62 per cent of the NSI total population, which is lower than the Queensland average of 67 per cent, while 19 per cent of the population of NSI was aged 65 and over, compared with 13 per cent state-wide (Table 2). This suggests a considerably older population of the Island, when compared to Queensland’s average.

Table 2  Population and age structure, 2011

<table>
<thead>
<tr>
<th>Age groups</th>
<th>North Stradbrooke Island</th>
<th>Queensland</th>
<th>Current</th>
<th>Projected Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
<td>Persons</td>
<td>Males</td>
</tr>
<tr>
<td>Youth (0-14)</td>
<td>197</td>
<td>175</td>
<td>372</td>
<td>20%</td>
</tr>
<tr>
<td>Working age population (15-64)</td>
<td>649</td>
<td>615</td>
<td>1,264</td>
<td>62%</td>
</tr>
<tr>
<td>Aged (65+)</td>
<td>194</td>
<td>201</td>
<td>395</td>
<td>19%</td>
</tr>
<tr>
<td>Total</td>
<td>1,040</td>
<td>991</td>
<td>2,031</td>
<td>100%</td>
</tr>
</tbody>
</table>

Projected population – age structure

The population projections for North Stradbroke Island have not been modelled by the Queensland Government Statistician, so the larger geographic level of Statistical Local Area, (Redland (C) Balance) is used to estimate the changes in age structure of the population. (Table 3)

Table 3  Projected Population, Age Structure in 2011 and 2031

<table>
<thead>
<tr>
<th>Age groups</th>
<th>North Stradbrooke Island</th>
<th>Queensland</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2011</td>
<td>2031</td>
</tr>
<tr>
<td>Youth (0-14)</td>
<td>18%</td>
<td>15%</td>
</tr>
<tr>
<td>Working age population (15-64)</td>
<td>62%</td>
<td>53%</td>
</tr>
<tr>
<td>Aged (65+)</td>
<td>19%</td>
<td>32%</td>
</tr>
</tbody>
</table>
Between 2011 and 2031, the share of working age population of North Stradbroke Island is projected to decline from 62 to 53 per cent of the total. By 2031, persons aged 65 and over will account for 32 per cent of the island's population, compared with a 20% share of this age group in the total population of Queensland.

This population aging process, which is also affecting the State’s population, will be much faster on North Stradbroke Island than across the State. This means that by 2031, the population age gap between the island and the state will be much wider than it is at present. In 2031, almost one third of the NSI population will be 65 or older, while the respective share in Queensland will be around one fifth.
Labour market

At the time of the 2011 Census, there were 848 employed persons residing on the North Stradbroke Island, while 61 residents were unemployed and looking for job. The top three employing industries, by share of employment, were accommodation and food services (18 per cent), mining (14 per cent), and health care and social assistance (12 per cent).

Employment, participation and unemployment

Among the employed, 462 were full-time employees, while 337 were employed as part-time workers (Table 4).

Table 4  Labour Force, by status

<table>
<thead>
<tr>
<th></th>
<th>North Stradbroke Island</th>
<th>Queensland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed, worked:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time(a)</td>
<td>462</td>
<td>1,302,955</td>
</tr>
<tr>
<td>Part-time</td>
<td>337</td>
<td>611,299</td>
</tr>
<tr>
<td>Employed, away from work(b)</td>
<td>33</td>
<td>80,394</td>
</tr>
<tr>
<td>Hours worked not stated</td>
<td>16</td>
<td>44,630</td>
</tr>
<tr>
<td>Total</td>
<td>848</td>
<td>2,039,278</td>
</tr>
<tr>
<td>Unemployed, looking for:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time work</td>
<td>34</td>
<td>82,017</td>
</tr>
<tr>
<td>Part-time work</td>
<td>27</td>
<td>49,780</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>131,797</td>
</tr>
<tr>
<td>Total labour force</td>
<td>909</td>
<td>2,171,075</td>
</tr>
<tr>
<td>Not in the labour force</td>
<td>617</td>
<td>1,079,302</td>
</tr>
<tr>
<td>Labour force status not stated</td>
<td>125</td>
<td>206,498</td>
</tr>
<tr>
<td>Total</td>
<td>1,651</td>
<td>3,456,875</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>6.7%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Participation rate</td>
<td>55%</td>
<td>63%</td>
</tr>
</tbody>
</table>

The unemployed rate on the island, at 6.7 per cent, was somewhat higher than the Queensland average of 6.1 per cent. However, the lower work force participation rate (55 per cent versus 63 per cent for the state) moderated the unemployment statistics. This lower participation rate is likely to reflect the lack of job opportunities and the higher median age of the North Stradbroke Island’s residents.
Part-time jobs on the island account for 40 per cent of all jobs, which is much higher than the share of 30 per cent state-wide.

**Top industries by employment**

At the time of the 2011 Census, accommodation and food services was the largest, by numbers of persons employed, industry on the island providing employment to 154 persons, or 18 per cent of the total employed. This is more than twice the respective share in Queensland, which is at 7 per cent. There were 115 persons living on North Stradbroke Island and employed in mining, which accounted for around 14 per cent of the total island’s employment. This is more than 4 times the 3 per cent share of mining employment state-wide (Table 5).

**Table 5**  
**Top 5 industries by employment, 2011**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Persons</th>
<th>Shares of totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NSI</td>
<td>Redland (C)</td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td>154</td>
<td>3,618</td>
</tr>
<tr>
<td>Mining</td>
<td>115</td>
<td>775</td>
</tr>
<tr>
<td>Health care and social assistance</td>
<td>102</td>
<td>7,945</td>
</tr>
<tr>
<td>Retail trade</td>
<td>80</td>
<td>7,722</td>
</tr>
<tr>
<td>Construction</td>
<td>78</td>
<td>7,509</td>
</tr>
<tr>
<td><strong>NSI Top 5</strong></td>
<td>529</td>
<td>27,569</td>
</tr>
<tr>
<td><strong>Total employment</strong></td>
<td>850</td>
<td>67,958</td>
</tr>
</tbody>
</table>

The high percentage of people employed in accommodation and food services reflects island’s ongoing reliance on tourism as an important source of income, while the mineral sand mining industry remains the second largest employer to the small local population. The impact of relatively small population of just over 2,000 on the island’s industry structure is reflected in a lower share of employment in retail (9 per cent), compared with both the local government are and the state (11 per cent). This is despite perceived importance of tourism to the NSI’s economy.

**Mining industry**

Mining continues to be the second largest employer for the island’s residents, with the total number of 115 persons declaring employment in mining, in 2011. This is only 5 persons less than during the 2006 Census.
Other Selected Population Characteristics

Median age of a person across localities of NSI is considerably higher than that for Queensland, with Dunwich the only locality with the median age at 39 being the only locality in the island which is below the age of 40. The median age at Amity Point is 53, while at point Lookout it is 48. The median age of person in Queensland is 36 (Table 7).

Table 6 Selected characteristics (medians), by NSI locality

|                                      | Amity Point | Dunwich | Point Lookout | Queensland |
|--------------------------------------|-------------|---------|               |            |
| Median age of persons                | 53          | 39      | 48            | 36          |
| Median total personal income ($/weekly) | 518        | 454     | 537           | 587         |
| Median total family income ($/weekly)  | 1,021       | 1,118   | 1,125         | 1,453       |
| Median total household income ($/weekly) | 840        | 893     | 859           | 1,235       |
| Median mortgage repayment ($/monthly) | 1,517       | 1,800   | 1,300         | 1,850       |
| Median rent ($/weekly)                | 220         | 190     | 260           | 300         |

At the time of the 2011 Census, median total weekly personal incomes were in the range of $454 (Dunwich) and $537 (Point Lookout), which was considerably lower than the Queensland median figure of $587.

A median total family income is also lower across all localities than that for Queensland, and so are median total household incomes. However, the costs of housing on the island are also considerably lower when compared with the State. This is evident from lower median monthly mortgage repayments (except for Dunwich) and lower median weekly rent.
Business Counts by Industry

Table 8 presents the business counts by industry in the Redland Islands region. North Stradbroke Island is by far the largest island in the region and only one with a significant population and employing business. Please note that that some industries, for reasons of confidentiality, may not contain actual data, if the number of businesses in industry is lower than three.

Table 7  **Business counts by industry, Redland Islands, 2011**

<table>
<thead>
<tr>
<th>Industry</th>
<th>No of businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - Agriculture, forestry and fishing</td>
<td>31</td>
</tr>
<tr>
<td>B - Mining</td>
<td>0</td>
</tr>
<tr>
<td>C - Manufacturing</td>
<td>15</td>
</tr>
<tr>
<td>D - Electricity, gas, water and waste services</td>
<td>6</td>
</tr>
<tr>
<td>E - Construction</td>
<td>129</td>
</tr>
<tr>
<td>F - Wholesale trade</td>
<td>10</td>
</tr>
<tr>
<td>G - Retail trade</td>
<td>56</td>
</tr>
<tr>
<td>H - Accommodation and food services</td>
<td>41</td>
</tr>
<tr>
<td>I - Transport, postal and warehousing</td>
<td>37</td>
</tr>
<tr>
<td>J - Information media and telecommunications</td>
<td>4</td>
</tr>
<tr>
<td>K - Financial and insurance services</td>
<td>28</td>
</tr>
<tr>
<td>L - Rental, hiring and real estate services</td>
<td>56</td>
</tr>
<tr>
<td>M - Professional, scientific and technical services</td>
<td>47</td>
</tr>
<tr>
<td>N - Administrative and support services</td>
<td>28</td>
</tr>
<tr>
<td>O - Public administration and safety</td>
<td>0</td>
</tr>
<tr>
<td>P - Education and training</td>
<td>9</td>
</tr>
<tr>
<td>Q - Health care and social assistance</td>
<td>3</td>
</tr>
<tr>
<td>R - Arts and recreation services</td>
<td>11</td>
</tr>
<tr>
<td>S - Other services</td>
<td>10</td>
</tr>
<tr>
<td>Not classified</td>
<td>13</td>
</tr>
<tr>
<td>Total Non employing</td>
<td>334</td>
</tr>
<tr>
<td>Total Employing 1-4</td>
<td>129</td>
</tr>
<tr>
<td>Total Employing 5-19</td>
<td>56</td>
</tr>
<tr>
<td>Total Employing 20-199</td>
<td>15</td>
</tr>
<tr>
<td>Total Employing 200+</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>534</td>
</tr>
</tbody>
</table>
3. Economic Impact Analysis

North Stradbroke Island Protection and Sustainability Act 2011 (NSIPS) Act commenced on 14 April 2011 to implement the government’s policy to end sand mining by prohibiting the renewal of certain existing mining leases and prohibiting the grant of new mining interests on NSI in order to transition the economy of NSI away from mining towards nature based recreation, tourism and education. The NSIPS Act provides the timeframes for the phase-out of mining, specifically:

- Yarraman Mine to close in 2015
- Enterprise Mine to close in 2019
- All mining to cease with the closure of the Vance Mine in 2025.

The present government remains committed to ending sand mining on NSI, but in a realistic timeframe that allows the growth and development of alternative industries. The options considered were to retain the status quo and allow the majority of mining activity to cease on NSI by 2019 or amend the NSIPS Act to extend mining on NSI from 2019 until 2035.

Methodology and Assumptions

Data for this analysis has been supplied by SIBELCO, the mine owner and operator in the NSI, and by the Department of Natural Resources and Mines (DNRM).

The methodology involved trend projections based on the last three years of available data on production volumes, value added and value of the production. The future production, value of sales and value added were projected using the historical trends.

The estimation was conducted using two options, with the second option involved two scenarios as recommended by DNRM. All the assumptions (such as production value and levels) are based on the DNRM recommendations as presented above.

For the purpose of this analysis it has been assumed that any capital works (infrastructure) or upgrading the current infrastructure or capital replacement will be the responsibility of the Mine operator.

DNRM indicated that the regulatory and mining inspection expenditure (cost) to the Government will be revenue neutral (revenues from fees and charges will off-set the expenditure).

The incremental impact is estimated by deducting the outcome under the ‘Do Nothing’ scenario (Option 1) from the option 2A and 2B scenarios.

- Under Option 1, the incremental economic benefits lost (Option 2 - Scenario 2A minus Option1) is the “opportunity cost or the future benefit lost”.
• Under Option 2/Scenario 2A, the lost opportunity (under Option 1) will be restored. Therefore the potential economic loss under Option 1 is the same as the incremental gain or benefit under Option 2/Scenario 2A.

• Under Option 2/Scenario 2B the incremental and potential economic impacts are derived by deducting Option 1 benefits from Option 2/Scenario 2B benefits.

**Derived Parameters**

The following parameters have been derived using historical data and then used in the analysis:

• The derived parameter for Value Added is 63.53 per cent of the total value of production (value added / total value of production)

• Option 2/Scenario 2A assumes a one-step reduction of sales revenue by 37 per cent in 2015, as per DNRM advice

• Option 2/Scenario 2B assumes a progressive reduction of 3.07 per year from 2015 onwards to reach a cumulative reduction in sales revenue of 37 per cent by 2035, as per DNRM advice

• Direct employment parameter of 0.7126064 is derived by using historical production and employment data (i.e. employment (FTE) / value of production)

• Indirect employment parameter of 0.1754108 is derived again using historical data (i.e. indirect employment (FTE)/ total value of production).

Further details of options and scenarios are provided below.

**Limitations**

• The analysis could not capture the multiplier effects and the pass-on effects on the supply chain industries because of lack of data.

• The economic and environmental costs are not readily available and therefore the analysis assumed that the economic costs are already funded.

**Options**

Based on advice from the Department of Natural Resources and Mining (DNRM), ECA has assumed that a significant one-off drop in production and the associated value of output from NSI mining operations, from as early as 2015. This option is considered in addition to the alternative option to a more gradual decline in production. A full and total cessation of sand mining by 2025, as stipulated by the NSIPS Act 2011, forms the baseline option for the analysis.

A study of an economic impact of the NSIPS Act on the region and the State has been commissioned by SIBELCO from Synergies Economic Consulting in 2010. The study
was more recently updated by Synergies in 2013\(^2\). As suggested by DNRM, the findings of this study were adopted as a status quo or baseline option in the following analysis.

**Options and Scenarios**

An economic impact analysis was conducted by the Economic and Commercial Analysis (ECA) unit, Economic and Regional Development, DSDIP to examine the following options:

**Option 1 - Status Quo**

NSIPS Act provides the framework for the cessation of mining on NSI at the Enterprise Mine in 2019, the Vance Mine by 2025 and the Yarraman Mine in 2015.

**Option 2 - Extension of Sand Mining to 2035**

The proposed amendment to the NSIPS Act will extend mining at the Enterprise Mine (one of the mines on NSI) from 2019 to 2035. Mining will be concentrated at the existing mine site, mostly on already disturbed land and in areas of low ecological significance. There are two scenarios examined under Option 2, in terms of production volumes and value:

- **Option 2- Scenario A**

  In this scenario, there will be a sudden reduction in production volumes by 54 per cent, and the value of products sold by 37 per cent in 2015. From 2015 the reduced production levels will stay constant until 2035.

- **Option 2- Scenario B**

  In this scenario, there will be a gradual reduction in production volumes and value from 2015 to 2035. By 2035, the volume of production is assumed to fall by 54 per cent, while the value of production will be 37 per cent lower than in 2015.

**Findings**

The results of economic impact analysis, including the value of production, production value added, government revenue from mining royalties, and employment, are described below, and summarised in Table 8 below.

**Results**

**Option 1 – Status Quo/Baseline**

Under this Baseline Option, the assumption is that Enterprise Mine will close in 2019.

\(^2\) Synergies Economic Consulting, Impact of ceasing sand mining on North Stradbroke Island, 2010 and 2013
Under this option the estimated losses to the economy of Queensland are:

- A cumulative loss of mineral production to the extent of $1.50 billion (a net present value (NPV) of $0.36 billion at 8 per cent), compared to the situation where mining activity continued unabated until 2035.
- A cumulative loss of value added to the Queensland economy is expected to be $0.95 billion (a NPV of $0.23 billion at 8 per cent).
- A cumulative loss of royalties to the Queensland State revenue is expected to be around $75.74 million (a NPV of $18.55 million at 8 per cent).
- The number of jobs losses is expected to be 162 full-time equivalents (FTEs) from 2019 onwards.

**Option 2/Scenario A**

If the mining leases are extended for Enterprise Mine from 2019 to 2035 and notwithstanding the sudden reduction of value of production by 37 per cent from 2015, the impacts to the economy of Queensland are:

- A cumulative increase of mineral production to the extent of $1.50 billion (a NPV of $0.36 billion at 8 per cent) is expected to be generated by 2035.
- A cumulative gain in terms of value added to the Queensland economy is expected to be $0.95 billion (a NPV of $0.23 billion at 8 per cent).
- A cumulative increase in royalties paid to the Queensland State revenue of around $75.74 million (a NPV of $18.55 million at 8 per cent).
- The number of jobs retained is expected to be 107 FTEs from 2015 to 2035.

**Option 2/Scenario B**

If the mining leases are extended for Enterprise Mine from 2019 to 2035, but the production and revenue will get progressively reduced, volumes by 54 per cent and the value of production by 37 per cent by 2035, then the impacts to the Queensland economy are:

- A cumulative increase of mineral production to the extent of $2.14 billion (a NPV of $0.69 billion at 8 per cent) is expected to be generated by 2035.
- A cumulative gain in terms of value added to the Queensland economy is expected to be $1.36 billion (a NPV of $0.44 billion at 8 per cent).
- A cumulative increase in royalties paid to the Queensland State revenue is around $107.8 million (a NPV of $35.16 million at 8 per cent).
- The number of jobs retained is expected to be about 132 FTE from 2015 to 2035.
### Economic Impacts of extending the mining leases at NSI till 2035

<table>
<thead>
<tr>
<th>Details</th>
<th>Option 1</th>
<th>Option 2 A</th>
<th>Option 2 B</th>
<th>Incremental Option 2 A over Option 1</th>
<th>Incremental Option 2 B over Option 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value of Production and Value Added (M $)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total value Production</td>
<td>1094.57</td>
<td>2778.39</td>
<td>3419.63</td>
<td>1501.39</td>
<td>2142.63</td>
</tr>
<tr>
<td>NPV of Total Production @ 8% discount</td>
<td>949.79</td>
<td>1312.32</td>
<td>1644.47</td>
<td>362.52</td>
<td>694.68</td>
</tr>
<tr>
<td>Value added</td>
<td>811.28</td>
<td>1765.11</td>
<td>2172.49</td>
<td>953.83</td>
<td>1361.21</td>
</tr>
<tr>
<td>NPV of Value added at 8% discount</td>
<td>603.40</td>
<td>833.71</td>
<td>1044.73</td>
<td>230.31</td>
<td>441.33</td>
</tr>
<tr>
<td><strong>Royalties (M $)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Royalties</td>
<td>63.21</td>
<td>136.95</td>
<td>171.01</td>
<td>75.74</td>
<td>107.80</td>
</tr>
<tr>
<td>NPV of royalties at 8% discount</td>
<td>47.03</td>
<td>65.58</td>
<td>82.19</td>
<td>18.55</td>
<td>35.16</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment Stradbroke (persons)</td>
<td>130</td>
<td>86</td>
<td>106</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Employment SE Qld (persons)</td>
<td>32</td>
<td>21</td>
<td>28</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Total employment in QLD</td>
<td>162</td>
<td>107</td>
<td>132</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

1. Under Option 1 the FTE employment will be 0 after year 2019 (as all the mines will be closed)
2. The incremental economic benefits under Option 2/Scenario 2 A over Option 1 is the “opportunity cost” of Option 1.
3. The flow-on effects such as forward and backward linked industries and services (Supply chain) are not included.
4. NA Not applicable
4. Conclusions

Discussion of Findings

- Given other regulatory requirements are satisfactory, and extending the mining leases from 2019 to 2035 will potentially increase the economic activities in terms of production, value added and jobs.

- The median age of island’s resident is at 47, which is much older than the median age of 36 for the State. Working age population (persons aged between 15 and 64) accounted for 62 per cent of the NSI total population, which is lower than the Queensland average of 67 per cent.

- By 2031, almost one third of the NSI population will be 65 or older, while the respective share in Queensland will be around one fifth.

- The low labour force participation rate (55 versus 63 per cent for the state) is likely to reflect both the lack of opportunities for finding a job, and also the higher median age of the North Stradbroke Island’s residents than in the rest of the state.

- Accommodation and food services was the largest, by numbers of persons employed, industry on the island providing employment to 18 per cent of the total employed. This is more than twice the respective share across Queensland, which is at 7 per cent.

- This high share of accommodation and food services in the total is reflected in the high share of part-time jobs (40 per cent) in the total employed living on NSI. Across Queensland, 30 per cent jobs are part-time jobs.

- This large share of part-time jobs is the likely cause of median personal incomes being considerably lower than that across Queensland. At the time of the 2011 Census, median weekly personal incomes were in the range of $454 (Dunwich) to $537 (Point Lookout), which was considerably lower than the Queensland figure of $587.

- At present, mining is the second largest industry, providing jobs to around 14 per cent of the island’s employment. This is more than 4 times the share of mining employment state-wide.

- By extending the mining leases for Enterprise Mine from 2019 to 2035, the cumulative incremental economic gains to the economy of NSI / Queensland include mineral production by $1.50 billion (with a NPV of $0.36 billion), value added to the GRP/GSP of $0.95 billion (with a NPV of $0.23 billion at 8%), royalties to the State revenue of around $75.74 million (a NPV of $18.55 million) and jobs retained is 107 FTE from 2015 to 2035.
Public Oral Briefing
Departmental officers

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<th>Name</th>
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<td>Mr Neil Bray</td>
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<td>Mr Damon Cheyne</td>
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<td>Mr Cameron Costello</td>
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<td>Councillor Karen Williams</td>
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