

Chapter 18

Social



This chapter discusses the potential social impacts associated with the construction and operation of the Gas Import Jetty and Pipeline Project (the Project). This chapter is based on the impact assessment presented in EES Technical Report M: *Social impact assessment*.

18.1 Overview

A social impact assessment is a social research process to identify the potential social effects of planned interventions such as infrastructure developments and assess the likely impact of these effects for individuals and social groups.

Social impacts are distinct from social effects as different individuals and groups experience change differently depending on their circumstances.

The social impact assessment considers directly affected individuals such as landholders of properties traversed by the pipeline alignment, as well as the broader community including residential communities, vulnerable receptors such as children and the elderly, visitors, recreational users and community groups.



Social effects and social impacts

Social effects are defined as an objectively verifiable change to the social profile of a community or the resources it relies on which results from the Project.

Social impacts are defined as the experience (positive or negative) of a social effect by individuals or groups (the social receptors).

18.2 EES evaluation objective

The scoping requirements for the EES set out the following relevant draft evaluation objective:

Social, economic, amenity and land use – To minimise potential adverse social, economic, amenity and land use effects at local and regional scales.

To assess potential social impacts as a result of the Project, a social impact assessment was undertaken.

18.3 Methodology

The approach adopted for the social impact assessment involved the following key tasks:

- a review of relevant Commonwealth, state and local legislation and policy
- a review of primary and secondary data sources including Australian Bureau of Statistics data
- a site inspection along the pipeline alignment and the Crib Point Jetty in January 2019 and March 2019 respectively
- a review of stakeholder and community engagement undertaken by AGL and APA
- interviews with landholders and other interest groups, and attendance at public information sessions
- review of technical reports prepared for the EES and their relevant risk assessments
- assessment of social impacts during construction and operation of the Project
- development of mitigation measures in response to the social impact assessment.

Assessing significance

The significance of identified potential social impacts has been assessed considering the magnitude of social effects likely to generate impacts and the sensitivity of social receptors to these effects:

- Magnitude is an objective consideration. Magnitude is considered in terms of the: intensity of change (that is, how large is the change relative to existing conditions); scale (spatial extent and/or number of social receptors affected); and duration of the change.
- Sensitivity is the subjective experience of social effects by particular receptors. This experience is influenced by how desirable or undesirable a change is from the perspective of the receptor and the ability of the receptors to cope with (or without) the change.

Table 18-1 presents the assessment framework used to determine the rating of impacts for the social impact assessment. It is noted the magnitude of a particular change and the sensitivity of receptors to this change may vary with respect to the factors set out in **Table 18-1**.

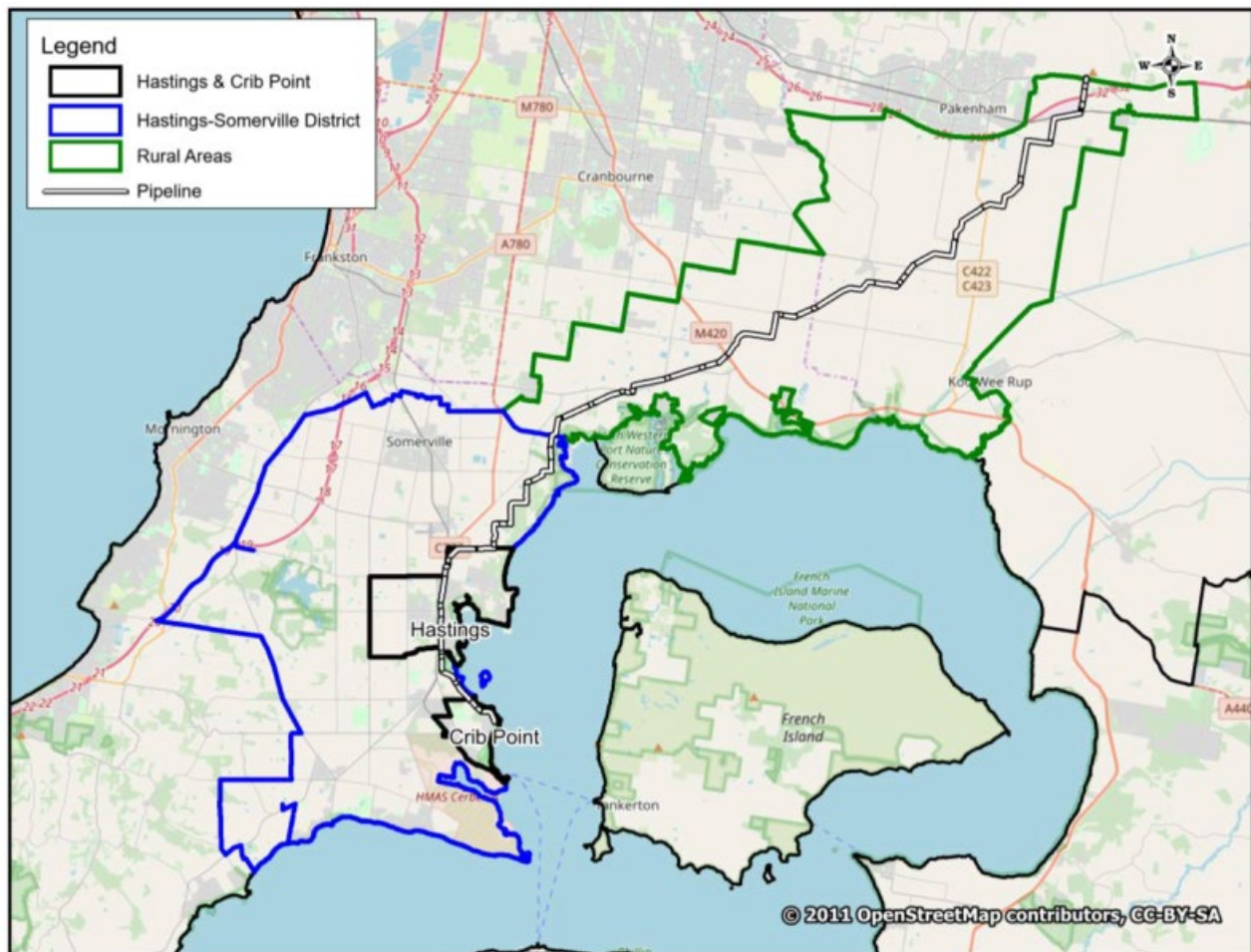
Table 18-1: Assessment framework to determine rating of social impacts

Significance	Experience of change Sensitivity	Adaptive capacity	Intensity	Duration	Extent
Extremely Negative/ Positive	Change is considered unacceptable/ necessary	Receptors have little to no capacity and means to cope with/ without changes	Very large change relative to baseline conditions	Greater than 10 years	Affects parties across a wider area
Negative/ Positive	Change is considered detrimental/highly beneficial	Receptors have limited capacity and means to cope with/ without changes	Large change relative to baseline conditions	3-10 years	Affects parties across a district (such as an Local Government Area)
Moderate Negative/ Positive	Change is considered undesirable/ beneficial	Receptors have some capacity and means to cope with/ without changes	Considerable change relative to baseline conditions	1 to 3 years	Affects many within a local community
Minor Negative/ Positive	Change is considered somewhat acceptable/desirable	Receptors have capacity and means to cope with/ without changes	Noticeable change relative to baseline conditions	3 months to 1 year	Affects discrete sections of a local community
Negligible	Change is neither desired nor resisted by social receptors	Receptors are unaffected	Little to no change relative to baseline conditions	Less than 3 months	Affects a small number of individuals

18.4 Study area

The study area for the social impact assessment is shown in **Figure 18-1**. The social effects of the Project would be concentrated in areas near the Project, including the urban settlements of Crib Point and Hastings, rural and rural residential areas located from Crib Point to near the proposed Pakenham Delivery Facility and the waters of Western Port, particularly near Crib Point. People living and working in and near these areas are the most likely to be affected by the Project.

However, a number of community resources affected by the Project are used by people who live beyond the primary study area and the impacts for affected individuals and social groups have also been assessed to enable consideration of the wider socio-economic effects. Visitors to the region include those who visit Hastings for shopping and business purposes and recreational users who utilise Western Port's beaches, parks, launching ramps and other community facilities. Potential impacts on people who live beyond the primary study area but visit the region would be localised and somewhat similar to those experienced by the local community but likely to be of shorter duration in many cases.



▲ **Figure 18-1:** Social study area

18.5 Existing conditions

Existing conditions including key social receptors and community resources were identified in the study area to provide context for the social impact assessment. This included identifying urban settlements, socio-economic conditions, community resources, community facilities and open space within the study area.

Urban settlements and land uses

The Crib Point Jetty is situated within the declared port waters of the Port of Hastings, within the Hastings-Somerville District. Two urban settlements are near or traversed by the Project: Crib Point and Hastings. The pipeline alignment traverses predominantly rural and rural residential land.

The nearest residential receptors to the Crib Point Jetty are five dwellings within the Low Density Residential Zone approximately 650 to 800 metres to the north-west.

The historic coastal township of Crib Point is located approximately one kilometre south of the Crib Point Jetty. The township is largely residential in character with small dispersed pockets of local commercial, educational, community and recreational facilities. Community facilities in Crib Point include the Crib Point Community House, two primary schools, the Crib Point RSL, sporting fields and associated pavilions.

Hastings is one of three Major Activity Centres located within the Mornington Peninsula Shire and acts as the principal service centre for communities located on the eastern side of the Mornington Peninsula. Commercial areas are located primarily along High Street between the Stony Point rail line and the Hastings foreshore.

The entire pipeline alignment between Crib Point and the delivery point on the Victorian Transmission System (VTS) at Pakenham traverses 156 landholdings of which 114 are held in private ownership or leased by a private individual or business. The BlueScope site to the north of Hastings accounts for 27 separate holdings, of which the alignment passes through 10. The land affected by the pipeline alignment is used in various ways including lifestyle residential accommodation, intensive agriculture, high value equine enterprises, grazing, horse agistment and cropping. Approximately half of the directly affected landholdings accommodate a residential dwelling.

Socio-economic conditions

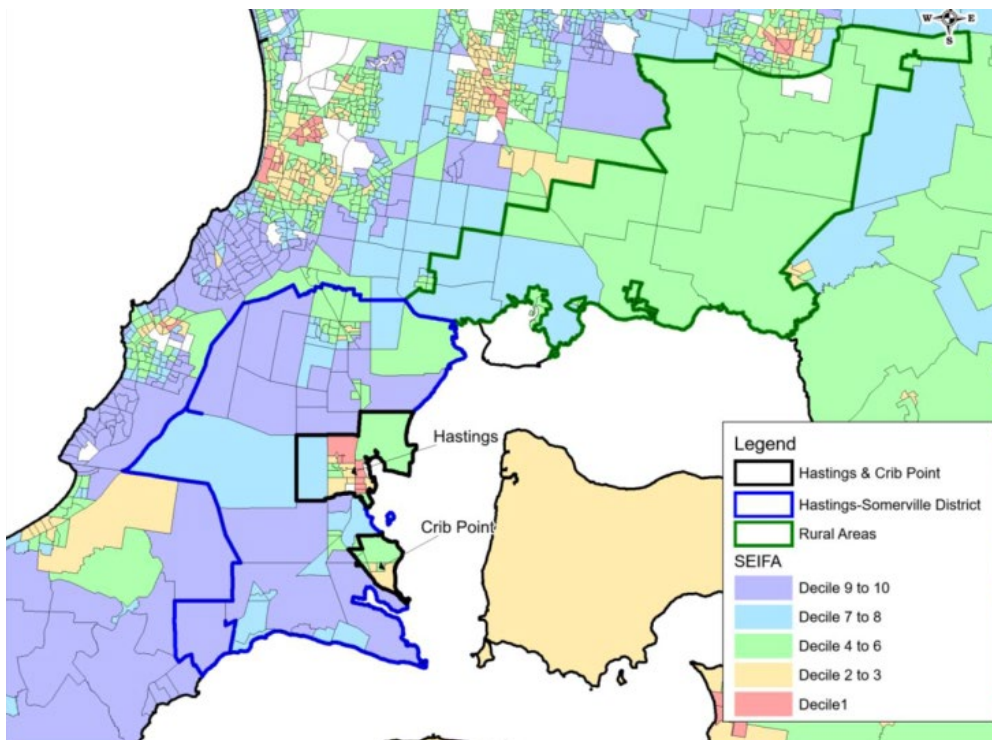
The Mornington Peninsula is a well-known tourist destination boasting a wide variety of attractions such as beaches, wineries and golf courses and accommodating many holiday homes. In contrast, the urban settlements of Crib Point and Hastings accommodate largely permanent populations. In the Hastings urban area, and to a lesser extent Crib Point, there is a notable concentration of socio-economic disadvantage compared with the Hastings-Somerville District, nearby rural areas and Greater Melbourne.

Figure 18-2 shows the socio-economic disadvantage of different areas within the Project Area. Note that the lower the decile rating, the higher the level of socio-economic disadvantage.

Select demographic indicators for these areas show that individual and household incomes in Crib Point and Hastings are lower than observed for the Hastings-Somerville District and Melbourne as a whole. Unemployment rates are higher and educational attainment is generally lower in Crib Point and Hastings compared with the Hastings-Somerville District.

Notwithstanding there are socio-economic challenges in Hastings and to a lesser extent Crib Point, measures of social-wellbeing such as rates of volunteering and the ability of people to obtain support from others in the Hastings-Somerville District are comparable with other areas.

In 2006, Hastings was identified as a 'neighbourhood renewal' area by the Victorian Government. \$2.5 million was allocated to support Neighbourhood Renewal in Hastings to improve housing and increase local employment and recreational opportunities. This funded development of the Hastings Community Hub and redevelopment of the Hastings Leisure Centre.



◀ **Figure 18-2:**
Socio-Economic
Indexes for Areas
(SEIFA) Index of
Disadvantage

Community facilities and open space

Woolleys Beach is located immediately to the north-west of the Crib Point Jetty. The Woolleys Beach section of the foreshore reserve includes two cleared areas (Woolleys Beach North and South) linked by a walking track. Each clearing is fitted with picnic tables and a public barbeque and Woolleys Beach North also provides a public toilet. The reserve is a popular place for walking, swimming and kayaking, with views of the Crib Point Jetty, French Island to the east and Stony Point to the south.

A boat landing is located at the southern clearing of Woolleys Beach and is used to launch smaller boats, while kayaks are occasionally launched from the north and south clearings. Kayakers entering and exiting the water at Woolleys Beach sometimes travel under the Crib Point Jetty on their way to and from Hastings, despite a 100-metre waterside restriction zone existing around the jetty set as a security requirement by the Port of Hastings Development Authority (PoHDA).

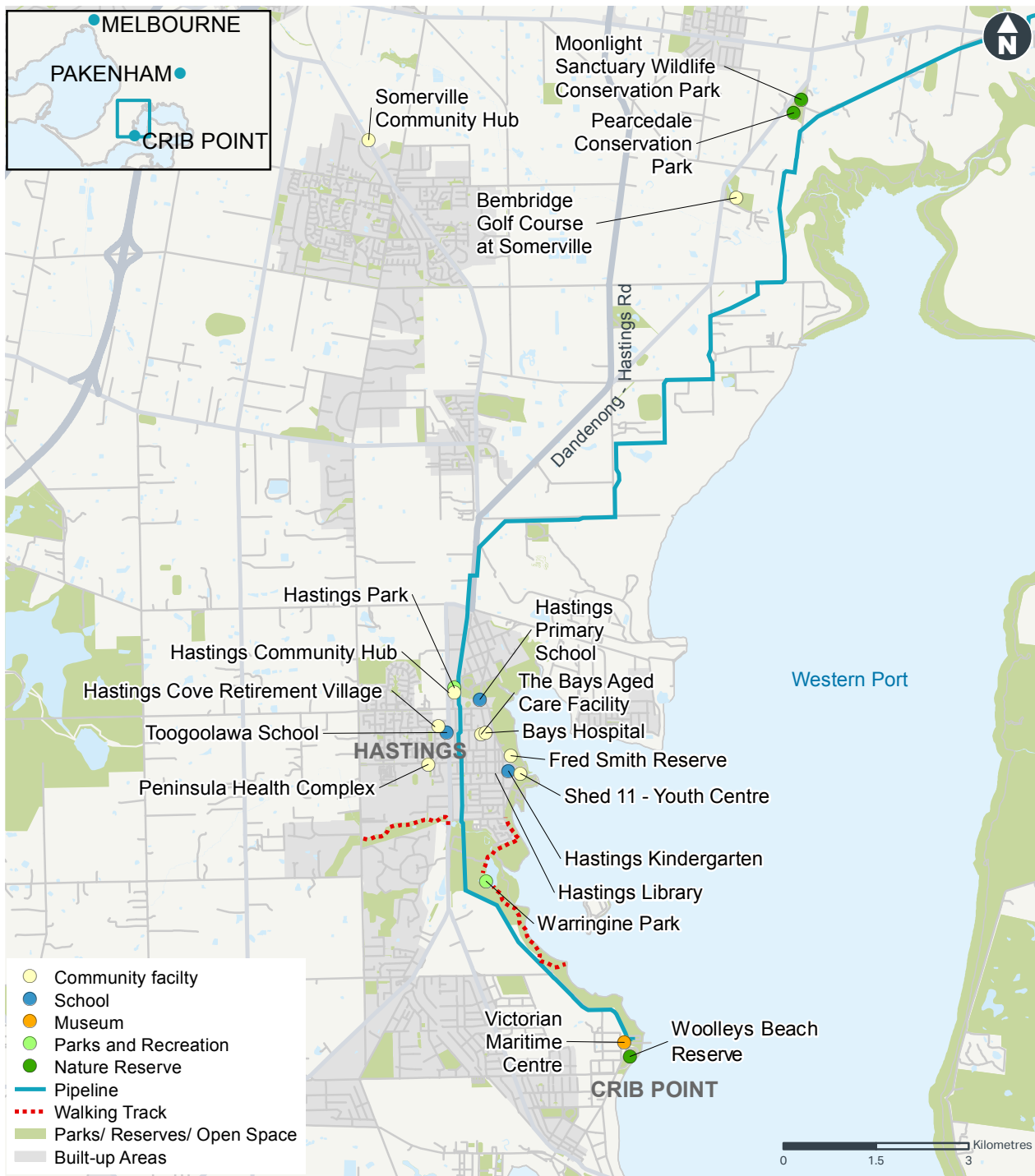
To the north of the Crib Point Jetty, in close proximity to Woolleys Beach, there are two groynes which are popular locations for fishing. The groynes are typically accessed via an unofficial track which passes through land managed by PoHDA. The groynes can be accessed by tracks on public land approximately 100 metres to the north.

Warringine Park is a remnant bushland reserve located south of the Hastings urban area. The park is traversed by existing underground pipelines and bordered by the Stony Point rail line. Visitors primarily experience the park through the Bittern Coastal Wetlands Walk or the Ted Harris Walk.

Community facilities in Hastings include the Hastings Library, Hastings Kindergarten, Hastings Community Hub, Shed 11 Youth Centre and Fred Smith Reserve. There are numerous other community facilities scattered throughout the Hastings urban area including the Peninsula Health Complex and Bays Hospital, the Bays Aged Care Facility, as well as schools such as Hastings Primary School and Toogoolawa School, and parks and sporting fields such as Hastings Park.

Community facilities within 500 metres of the Project Area within non-urban areas include the Victorian Maritime Centre opposite the Crib Point Jetty, Bembridge Golf Course at Somerville and the Pearcedale Conservation Park and Moonlit Sanctuary Wildlife Conservation Park at Pearcedale.

Figure 18-3 shows the location of community facilities and open spaces.



▲ **Figure 18-3:** Community facilities and open spaces

Community resources

The natural environment of Western Port is of intrinsic value and interest to many in the community, consistent with, and informed by, the designation of the Western Port Ramsar site as a wetland of international significance and the UNESCO Mornington Peninsula and Western Port Biosphere Reserve.

Western Port contains the Port of Hastings which is one of four major working commercial trading ports operating in Victoria. Port of Hastings' main trade groups include import/export of oil, liquid petroleum gas (LPG), steel and unleaded petrol (ULP). The port supports refining/fractionation plants, gas and oil storage and load-out facilities at Stony Point Jetty and depot, Crib Point Jetty, Long Island Point liquid berth and BlueScope steel wharves. Since 2000, the number of commercial vessels visiting the Port of Hastings has varied from 100 vessels in the 2012/13 financial year up to 262 ships in the 2002/03 financial year. In recent years, there has been approximately 150 ships during a financial year received in the Port of Hastings.

Commercial vessels using the Port of Hastings share Western Port with a variety of recreational vessels. There are various public boat ramps and jetties which allow for berthing, two marinas and several private yacht clubs within Western Port. Approximately 200,000 recreation vessels are launched in Western Port each year, with approximately 40,000 launched from Hastings.

Fishing is the most common reason for boating in Western Port and fishing trips represent a high proportion of all trips initiated from Hastings and Stony Point. Kayaking is also a popular activity in Western Port.

Formal yacht races are run by the Westernport Yacht Club on alternating weekends. The Westernport Yacht Club currently works around commercial shipping in the channel and occasionally uses the break water structures at the Crib Point Jetty as a place of refuge in bad weather.

The environmental, commercial and recreational values of Western Port currently coexist in relative harmony. However, there is a tension between the aspirations of different sections of the community with regards to Western Port and the balance between preserving and enhancing the bay's environmental values and natural landscape setting, and utilisation of existing port infrastructure to facilitate economic activity.

Figure 18-4 shows the various community resources in the study area.



▲ Figure 18-4: Community resources

18.6 Project benefits

The Project would provide Victoria with an alternative and flexible supply of natural gas from existing and new liquefied natural gas (LNG) projects in Australia and around the world and has the potential to supply up to 160 petajoules (PJ) of natural gas per annum.

The Project would contribute the following benefits to Victoria:

- provide gas supply certainty and security for Victorian gas customers in a climate where gas shortfalls are projected for south-eastern Australia states due to declining gas production from the Gippsland and Otway Basin, and to customers from other states that rely on Victoria's gas supply
- place downward pressure on gas prices for residential customers as well as vulnerable industrial and commercial customers, many of whom are large generators of employment
- provide a flexible source of gas for gas power generation so that customers have secure and stable electricity supply as the National Electricity Market transitions to accommodate an increasing penetration of renewables.

Local accommodation would be sourced for construction workers from pre-existing accommodation in the towns and suburbs of Somerville, Hastings, Stony Point, Frankston, Cranbourne, Pakenham, Beaconsfield, Dromana, Rosebud, Safety Beach and Mornington. This would support local businesses and minimise the impact of construction traffic, where applicable.

While most positions would be filled by a specialised workforce, the Project also has the potential to create employment for local workers during construction and operation.

In addition, AGL has made a commitment to a Community Fund of \$7.5 million to be managed by a panel of community-based representatives if the Project proceeds. This fund would be established as a mechanism for sharing some of the benefits of the Project with the local community, particularly the townships of Crib Point and Hastings.

See **Chapter 2 Project rationale** for further details about the Project benefits.

18.7 Construction impacts

Social impacts may arise from alterations to access and amenity during the construction of the Gas Import Jetty Works and Pipeline Works. Subject to the staging of construction for the Gas Import Jetty Works and the Pipeline Works, construction for the entire Project is expected to take approximately 18 to 27 months.

Access and amenity impacts such as noise, dust and traffic due to construction works would be managed in accordance with an Environmental Management Plan (a Construction Management Plan for the Pipeline Works) and consultation with the local community and other potentially affected stakeholders would be managed in accordance with a Stakeholder Engagement Management Strategy for each set of works. These management plans would be required under the Pipeline Licence for the Pipeline Works, and under the Incorporated Document for the Gas Import Jetty Works.

Gas Import Jetty Works

Construction activity associated with the Gas Import Jetty Works is anticipated to generate noise, create visual impacts from locations with a clear line of sight to the Project and temporarily increase traffic on nearby roads such as the Esplanade and Woolleys Road. Disruptions to existing lifestyles and activities resulting from altered amenity would be localised to the area around Crib Point Jetty that is currently used for port-related purposes and would be temporary.

The residents of a small number of dwellings near the Gas Import Jetty Works area consider they have a high level of visual and acoustic amenity. The nearest of these houses is approximately 650 metres from the Gas Import Jetty Works, buffered by vegetation. At this distance, construction noise has been assessed in this EES as not exceeding recommended construction noise levels at these dwellings except for the occasional activity that may need to continue into the evening. Noise modelling predictions indicate that construction of the Gas Import Jetty Works would not exceed the day noise criteria (75 dB(A)). The 45 dB(A) criteria may be exceeded during the evening at nearby residences and public open spaces under exceptional circumstances if works cannot cease by 6 pm due to the type of work activity, such as concrete pours. There may be some minor disturbance for these residents, although acoustic and visual amenity at these dwellings would generally not be affected.

The use and enjoyment of Woolleys Beach and the HMAS Otama lookout may be affected due to increased noise during construction which may temporarily reduce the appeal of visiting the area during the Project's construction phase.

At times the construction noise levels are predicted to exceed the recommended levels for outdoor public places and may diminish the appeal of Woolleys Beach North as a passive recreational area and gathering place. Users of Woolleys Beach North may migrate to Woolleys Beach South or other beaches in the area during this time. The facilities available at Woolleys Beach South are comparable with Woolleys Beach North in most respects, although without public toilet facilities.

There may be periods where construction noise and traffic would affect amenity at the Victorian Maritime Centre. The public operating hours of the Maritime Centre are limited to 10 am to 3 pm on Saturday and Sunday. Construction activity for the Gas Import Jetty Works is proposed to take place on Saturday's between 6 am and 3.30 pm so would overlap with the Maritime Centre opening hours during the construction period.

Boating participants may choose to temporarily avoid the vicinity of the Crib Point Jetty during construction and may use other parts of Western Port. Existing restrictions to accessing PoHDA waters and land would be actively enforced for kayakers and fishers for safety reasons and to meet regulatory requirements. The existing (unauthorised) kayaking route between Hastings and Woolleys Beach under the jetty would be severed. Kayaking activity may migrate to other parts of Western Port and/or the nature and purpose of kayaking trips launched at Woolleys Beach may change. This effect would carry through to the operation of the Gas Import Jetty Works. This outcome would also occur if the waterside restriction zone was actively enforced for other reasons.

Pipeline Works

The pipeline alignment has undergone 11 material revisions since the Project's conception. In many instances, these changes have been a direct result of consultation and negotiation with landholders and other stakeholders (see **Table 26-8 of Chapter 26 Stakeholder engagement**). A trenchless drilling methodology has been adopted 39 times throughout the pipeline alignment to avoid surface disturbance in response to environmental values, community concerns and specific landholder issues. Alignment changes have resulted in trenchless construction techniques (HDD or shallow boring) increasing to approximately nine kilometres which is significant for a project of this nature.

Construction impacts associated with the Pipeline Works would involve the occupation of private land and may cause temporary access restrictions and some amenity impacts on community resources (noise, dust, traffic). It is expected that disruptions would extend over an indicative period of 18 to 24 months, although given the linear nature of the Pipeline Works, the impacts would be localised and progressively move along the pipeline alignment so particular receptors would experience changes to amenity and access for a short part of this period.

Construction of the pipeline would require temporary occupation of the 156 landholdings. Given the varied use of the affected properties, it is anticipated there would be a substantial variation in relation to the implications on the owner's use and enjoyment of the property, depending on the proportion of the overall landholding impacted by the 30-metre-wide construction zone (and ultimate 15-metre-wide operational easement).

Many private landowners reside on the affected properties along the pipeline alignment and would experience temporary reductions to residential amenity in addition to impacts relating to land occupation. Continued dealings with AGL and APA and their contractors during the construction process may be stressful and taxing on personal time and energy for some landowners. Some restructuring and/or temporary relocation of commercial operations would be required in a minor number of cases, placing strain on the time and energies of those affected. The compensation process under the *Pipelines Act 2005* for pipeline projects provides for compensation to affected parties where appropriate for any severance, disturbance and for the easement value.

In rural areas, landholders and residents living in close proximity to the construction front may experience reduced amenity such as construction noise and dust from open trenching works. Works would occur at each affected landholding over a three to four-month period, consisting of 11 discrete construction stages of one to three days, with approximately one week in between each construction stage.



Project noise criteria

The adopted Project noise criteria was derived using EPA Victoria publication 1254 – Noise control guidelines, which recommends the need for construction sites to develop suitable noise reduction measures and to undertake community consultation based on certain time periods of the day.

In built up areas such as Hastings, construction stages would be completed simultaneously. Overall construction impacts through Hastings would be felt for nine to 10 months. Where horizontal direction drilling (HDD) is used, it is expected that each section would take approximately six weeks, subject to ground conditions.

In Hastings, 200 residences may be exposed to construction noise which exceeds the Project noise criteria. In most cases, this noise would occur during daytime working hours and would last up to 10 days for any one receptor. Unavoidable night-time construction within Hastings and north of the Hastings township would exceed the Project noise criteria at certain HDD section entry and exit points (approximately one to five dwellings at each). These exceedances are expected to last at Hastings for one to three weeks at each section, and one to two weeks to the north of the Hastings township.

It is noted the pipeline alignment has been moved from the Frankston–Flinders Road corridor between Reid Parade and Hodgins Roads within Hastings which would significantly reduce amenity impacts to the Hastings community during construction. While construction noise is anticipated to exceed Project noise criteria, it was considered to have less disruption to the community compared with the original pipeline alignment on Frankston–Flinders Road. For example, traffic disruption and impacts on businesses on Frankston–Flinders Road would be greatly reduced (see **Chapter 19 Business**).

Community facilities and public open spaces near open cut trenching and HDD entry and exit points may experience noise levels above the Project noise criteria, specifically in the school grounds of the Hastings Primary School and the Toogoolawa School.

Residents at the Hastings Cove Retirement Village and Bays Aged Care Facility may also be intermittently affected by elevated noise levels during construction. Residents at this sensitive receptor could be more susceptible to temporary noise from construction works than the general population as a result of lifestyle patterns.

Community use of the Bittern Coastal Walk and Ted Harris Walk located within Warringine Park may also be temporarily affected by construction noise. Consultation with operators and/or users of community facilities (including aged care facilities and schools) and open spaces would be undertaken to determine the most appropriate timing of construction activities to minimise disturbances.

Construction impact summary

Table 18-2 summarises the potential construction impacts of greatest significance (rating of moderate or greater in accordance with **Table 18-1**) which are the focus of the mitigation measures outlined in **Section 18.9** of this chapter.

Table 18-2: Summary of the main potential construction impacts (adverse and beneficial)

Potential construction impact	Significance rating
Gas Import Jetty Works	
Changes to amenity may temporarily displace social and recreational uses from Woolleys Beach and nearby areas.	Moderate Negative
Changes to amenity may temporarily interfere with the use and enjoyment of the Victorian Maritime Centre.	
Pipeline Works	
The occupation of private land may place a burden on the time and energy of affected land owner/occupiers and may be a source of stress for some.	Moderate Negative
Residential amenity may be temporarily compromised for a number of people, the majority of whom live in Hastings. Construction noise in particular may cause nuisance for residents and in some cases potentially disturb sleep.	
Construction noise may temporarily discourage use of Warringine Park, displacing social and recreational uses.	
Construction noise and altered traffic conditions may interfere with the use and enjoyment of the Hastings township for nine to 10 months and may cause a degree of irritation for residents and visitors.	
Changes to amenity may temporarily interfere with the use and enjoyment of the Victorian Maritime Centre.	
Residents living within the Hastings Cove Retirement Village and the Bays Aged Care Facility would be temporarily exposed to elevated construction noise and this may affect the wellbeing of the residents.	Moderate Negative to Negative
Students and employees of the Hastings Primary School and the Toogoolawa School would be temporarily exposed to elevated construction noise which has the potential to interfere with teaching and student learning.	
Gas Import Jetty Works and Pipeline Works	
The proposed community fund is well resourced and designed to ensure appropriate targeting of resources, and so would facilitate delivery of significant beneficial social outcomes.	Positive

18.8 Operation impacts

As with social impacts during construction, the operation of the Project would result in changes to amenity and access. The operational changes would be ongoing and last over the course of the Project life compared with the temporary nature of construction impacts.

Gas Import Jetty Works

As with construction, the distance between residential dwellings and the Gas Import Jetty Works reduces the potential for amenity impacts to occur.

Residents who occupy the five residences located to the north-west of the facility along The Esplanade have expressed concern the Project would reduce their residential amenity primarily as a result of noise and lighting. Noise levels at the closest residences have been modelled for a range of operating scenarios which include operation of the FSRU, arrival or departure of an LNG carrier and nitrogen injection occurring at the Crib Point Receiving Facility (see **Chapter 13 Noise and vibration**). While operating noise levels can be mitigated so that a high level of acoustic amenity is maintained, an additional light source into a mainly dark setting would be visible, most notably from one residence closest to the Crib Point Jetty. This resident has expressed a high level of sensitivity to lighting associated with the existing operations at Berth 1 of the Jetty when a United Petroleum vessel is moored.

Noise combined with visual changes may alter the pattern of use of Woolleys Beach Reserve, including the groynes to the north which are used for fishing. Activities may migrate south to Woolleys Beach South and/or be displaced to other locations.

In addition, the operation of the Gas Import Jetty Works would result in a very small increase in the risk of injury or death as a result of an accident. For example, the risk of a fatality at Woolleys Beach North as a result of the operation of the Project has been estimated to be approximately three fatalities per million years, which is notably lower than the relevant standard for open space areas (10 fatalities per million years). While some community members may hold concerns about safety during the operation of the Gas Import Jetty Works, actual risk is very low and community concerns may be alleviated over time as the result of ongoing safe operation and maintenance of the facility (see **Chapter 16 Safety, hazard and risk**).

During operation, potential changes to bio-physical processes in Western Port may have social impacts for the users of this community resource. Technical assessment of the potential impacts on the Western Port's marine ecology concludes the changes to the marine environment would be localised and would not have significant implications for the Western Port ecosystem. However, the studies undertaken to date may not satisfy all expressed concerns in relation to the capacity to accurately model and understand the effects of the Project. Concerns by some in the community about the Project and its potential environmental impacts may be held until the Project can demonstrate a safe and effective operating history.

Pipeline Works

Overall, very minimal impact to occupation of private land, access and amenity is expected from the pipeline's operation once construction is complete.

After construction, the affected land and buildings would be remediated and reinstated. There would be negligible to minor implications for ongoing use and enjoyment of the affected properties by existing landowners.

There would be some noise and minor change to landscape expected relating to the Pakenham Delivery Facility located between the Pakenham East rail depot and the Princes Freeway.

The Pakenham Delivery Facility would be situated on rural land outside of the Melbourne Urban Growth boundary and adjacent to the Pakenham East rail depot on land currently owned by the Public Transport Development Authority. While the Pakenham Delivery Facility would emit some noise and change the visual appearance of the local landscape, noise levels would not exceed project objectives and adjacent land is being developed to accommodate major transport infrastructure, limiting the effect of the facility on local amenity.

There is a potential risk (albeit very low) to human health and safety during the pipeline's operation for users of private land and public areas near the pipeline alignment. However, actual risks are very low and concerns may be alleviated over time as the result of ongoing safe operation and maintenance of the pipeline.

Operational impact summary

Table 18-3 summarises the potential operational impacts of greatest significance (rating of moderate or greater in accordance with **Table 18-1**) which are the focus of the mitigation measures outlined in **Section 18.3** of this chapter.

Table 18-3: Summary of the main potential operational impacts

Potential operation impact	Significance rating
Gas Import Jetty Works	
Changes to amenity permanently alter the pattern of use of the Woolleys Beach Reserve during the life of the Project. Some existing activity may migrate southward to Woolleys Beach South and/or be displaced to other locations.	Negative
Residual concerns about the potential of the Project to impact negatively on Western Port's ecosystem may cause worry and stress and/or motivate active opposition to the Project.	Minor – Moderate Negative
The works would introduce a permanent light source into a mainly dark setting. The light would be noticeable from a small number of dwellings, specifically one dwelling in particular. The affected dwellings may no longer meet the amenity expectation of their occupants.	
Gas Import Jetty Works and Pipeline Works	
The proposed community fund is well resourced and designed to ensure appropriate targeting of resources, and therefore would facilitate delivery of significant beneficial social outcomes during the operating life of the Project.	Positive

18.9 Mitigation measures

Table 18-4 outlines the mitigation measures developed to manage social impacts during construction and operation of the Project. Specific mitigation measures have been developed to address social impacts as part of other technical reports prepared for the EES. The following chapters describe specific mitigation measures regarding noise and dust emissions, and lighting/glow during construction and operation of the Project:

- **Chapter 12** Air quality
- **Chapter 13** Noise and vibration
- **Chapter 14** Landscape and visual.

Table 18-4: Mitigation measures – social

Mitigation measure ID	Mitigation measure	Works area	Project phase
MM-SO01	Consultative mechanism for information and enquiries A consultative mechanism will be developed:	Gas Import Jetty Works/ Pipeline Works	Construction and operation
	<ul style="list-style-type: none"> • to make the results of environmental monitoring available to the community • to make information relating to potential risks to human health and safety available to the public as required (see MM-SE01) • for residents to make enquiries, lodge complaints, etc during construction (see MM-SE02). 		
MM-SO02	Consultation on recreational activity at Woolleys Beach The Crib Point Stony Point Committee of Management Inc. and the community will be consulted with to identify a suitable foreshore location and propose additional recreational infrastructure, to accommodate activity displaced from Woolleys Beach North.	Gas Import Jetty Works	Operation
MM-SO03	Consultation with directly affected landholders Consultation with directly affected landholders will be undertaken to ensure impacts associated with the construction and operational phases of the Pipeline Works are minimised and/or that compensation is appropriate considering site-specific impacts.	Pipeline Works	Construction and operation

Mitigation measure ID	Mitigation measure	Works area	Project phase
MM-SO04	Source local workers Workers, supplies and services during construction and operation will be sourced from the local area as appropriate.	Gas Import Jetty Works/ Pipeline Works	Construction and operation
MM-SO05	Community fund Detailed arrangements for the community fund will be resolved in partnership with relevant community stakeholders. In particular, there will be community led involvement in how the fund will be set-up, managed and spent.	Gas Import Jetty Works/ Pipeline Works	Construction and operation
MM-SE01	Stakeholder Engagement Management Strategy A Stakeholder Engagement Management Strategy will be prepared to facilitate ongoing consultation between the proponent and the community (including relevant Councils, government authorities, adjoining affected landowners and businesses and other community groups directly impacted by the Project). The Stakeholder Engagement Management Strategy will be a requirement of the EMP for the Gas Import Jetty Works. For the Pipeline Works, the Stakeholder Engagement Management Strategy will be consistent with the Consultation Plan being prepared for the Pipeline Licence. The Stakeholder Engagement Management Strategy will: <ul style="list-style-type: none"> identify people and organisations to be consulted during the design and work phases set out procedures and mechanisms for the regular distribution of accessible information about or relevant to the Project identify opportunities to provide information regularly about construction activities, schedules and milestones detail the measures for advising the community in advance of upcoming works (where necessary) set out procedures and mechanisms for consulting with relevant council(s) and government authorities/agencies set out procedures and mechanisms: <ul style="list-style-type: none"> through which the community can discuss or provide feedback to the Proponent, through which the Proponent will respond to enquiries or feedback from the community, and to resolve any issues and mediate any disputes that may arise in relation to environmental management and delivery of the Project. <p>The Stakeholder Engagement Management Strategy will be implemented for the duration of the construction works and for 12 months following completion of construction.</p>	Gas Import Jetty Works/ Pipeline Works	Design, Construction and operation
MM-SE02	Complaints management system A complaints management system (such as a dedicated project point of contact, a hotline or email) will be put in place that documents: <ul style="list-style-type: none"> name of persons receiving complaint. name of person making the complaint. date and time of complaint. nature of the complaint. actions taken to rectify actions to minimise risk of reoccurrence name of person(s) responsible for undertaking the required actions communication of response to the complaint. 	Gas Import Jetty Works/ Pipeline Works	Construction and operation

18.10 Conclusion

The social impact assessment has identified the risks and potential social impacts of the construction and operation of the Project.

When considering whether the changes as a result of the Project are reasonable, it is noted some members within the community may consider that intensification of industrial activity and/or port related activity is inconsistent with preservation of the area's environmental and aesthetic values. Furthermore, the accustomed level of amenity experienced at the port since the closure of the BP refinery in 1985 generally reflects a current low level of utilisation of existing port infrastructure and industrial land at Crib Point.

Many in the community fear the Project may impact negatively on bio-physical processes in Western Port and consider these impacts offensive. However, the technical assessment of the Project's implications for the Western Port's ecosystem indicate that significant impact would be unlikely to arise.

Potential construction impacts from the Pipeline Works are generally considered to be moderate and negative. Open trenching and HDD construction methods have the potential to affect the amenity of nearby areas as a result of noise and dust. Schools and aged cared facilities have been identified to experience construction noise above the Project noise objectives. A number of private landholdings would be traversed by the pipeline alignment, although the impacts related to each affected landholder would last for a short period given the linear progression of construction along the alignment. Some landowners may find the negotiation process challenging and stressful. The compensation process allows landowners to claim compensation for lost market value, disturbance, severance and loss of special value.

The Gas Import Jetty construction works would alter acoustic and visual characteristics at Woolleys Beach, the Victorian Maritime Centre and nearby areas and may result in a temporary displacement of social and recreational uses.

During operation of the Gas Import Jetty Works, the Project would make use of the existing commercial shipping channel and marine infrastructure within the Port of Hastings to import LNG. While commercial shipping and other port related/industrial activities are an existing use of the Crib Point Jetty and within a designated port, these uses are not necessarily considered by some to be compatible with the use of adjacent areas for social activity and active and passive recreation.

There is a potential for a change to the pattern of use at the Woolleys Beach Reserve with a potential shift to a greater use of Woolleys Beach South Reserve. The operational noise levels from the Gas Import Jetty Works can be mitigated so that a high level of acoustic amenity is maintained for nearby residences.

It is considered no significant impacts would occur during the Project's operation in relation to the Pipeline Works on the basis the pipeline would be entirely underground. Some noise and minor change to landscape is expected in relation to the Pakenham Delivery Facility, although in the context of the adjacent Pakenham East rail depot and Princes Highway, these effects would be minor.

The proposed pipeline alignment has undergone 11 material revisions since Project conception as a result of consultation and negotiation with landholders and other stakeholders as a basis for minimising the social and environmental impact of the Project. A trenchless pipeline installation method (HDD or shallow boring) has been adopted 39 times along the 57-kilometre pipeline length to offset impacts and concerns. In addition, implementation of the potential and mitigation measures discussed (and referred to) in this chapter and EES Technical Report M: *Social impact assessment* would further minimise and/or manage the social impact resulting from construction and operation of the Project.

The Project would provide Victoria with an alternative and flexible supply of natural gas from existing and new LNG projects in Australia and around the world and has the potential to supply up to 160 PJ of natural gas per annum. In addition, the proposed community fund is seen as a beneficial potential impact for communities such as Hastings and Crib Point in relation to making large contributions towards the funding of social programs.

It is considered the potential social effects have been minimised at a local and regional scale.

In response to the social, economic, amenity and land use draft evaluation objective, social impacts associated with the Project have been assessed and mitigation measures have been identified to reduce or minimise these impacts.