

CHAIN VALLEY COLLIERY CONSOLIDATION PROJECT

Community Information Sheet

ISSUE #2
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Purpose

This Information Sheet provides a summary of the key findings of the environmental and social studies that have been undertaken to inform the preparation of the Environmental Impact Statement (EIS) for the Consolidation Project. These studies are underway and will be published as part of the EIS that will be lodged with DPIE in October 2021.

Delta Coal invite you to be involved in providing input into the assessment of the proposed Consolidation Project through the Social Impact Assessment (SIA) and community engagement program.

Introduction

Delta Coal owns and operates Chain Valley Colliery (CVC) and Mannering Colliery (MC). The pit top facilities are located within the suburbs of Mannering Park and Doyalson North with approved mining areas within both the Lake Macquarie and Central Coast Local Government Areas (LGA) in NSW.

Both CVC and MC are underground coal mines which commenced operation in the early 1960s with approved mining areas under Lake Macquarie and adjoining land areas. CVC has previously extracted coal from the Wallarah, Great Northern and Fassifern Seams while MC has mined coal from the Great Northern and the Fassifern Seams. Delta Coal operates CVC and MC as an integrated operation with access to the underground mining area by employees predominately occurring via the CVC pit top. Both operations are currently approved to carry out mining operations to 31 December 2027.

The two operations currently operate under separate development consents and environment protection licences.

Delta Coal is seeking to consolidate the existing operations of CVC and MC under one approval (referred to as the Project) and extend the life of approved operations to the end of 2029 which aligns with the nominal closure date of the Vales Point Power Station (VPPS).

In addition to providing for the consolidation of the existing CVC and MC approvals, the Project would enable the continuation of mining within existing approved areas. The Project also includes an extension of mining into the Great Northern Seam to the east of the former CVC Great Northern Seam workings referred to as the Eastern Mining Area (Figure 1).

Consistent with existing requirements in the CVC and MC approvals, mining in the proposed Eastern Mining Area, under land, will be undertaken in a manner that has negligible subsidence impacts (maximum 20 mm). The continued extraction of coal resources under Lake Macquarie would be undertaken consistent with subsidence limits applicable to the existing CVC operations. All approved and proposed mining areas are within existing CVC and MC mining lease areas.

The ability to bring coal to the surface at either CVC or MC will be retained, retaining the existing CVC extraction rate of 1.5 million tonnes per annum (Mtpa) and a production rate of 2.8 Mtpa at MC. An overall combined annual run of mine extraction limit will be capped at 2.8 Mtpa (a reduction from the currently approved combined extraction rate of 3.2 Mtpa).

An overview of the key aspects of the Project are shown on **Figure 1** and outlined in **Table 1**.

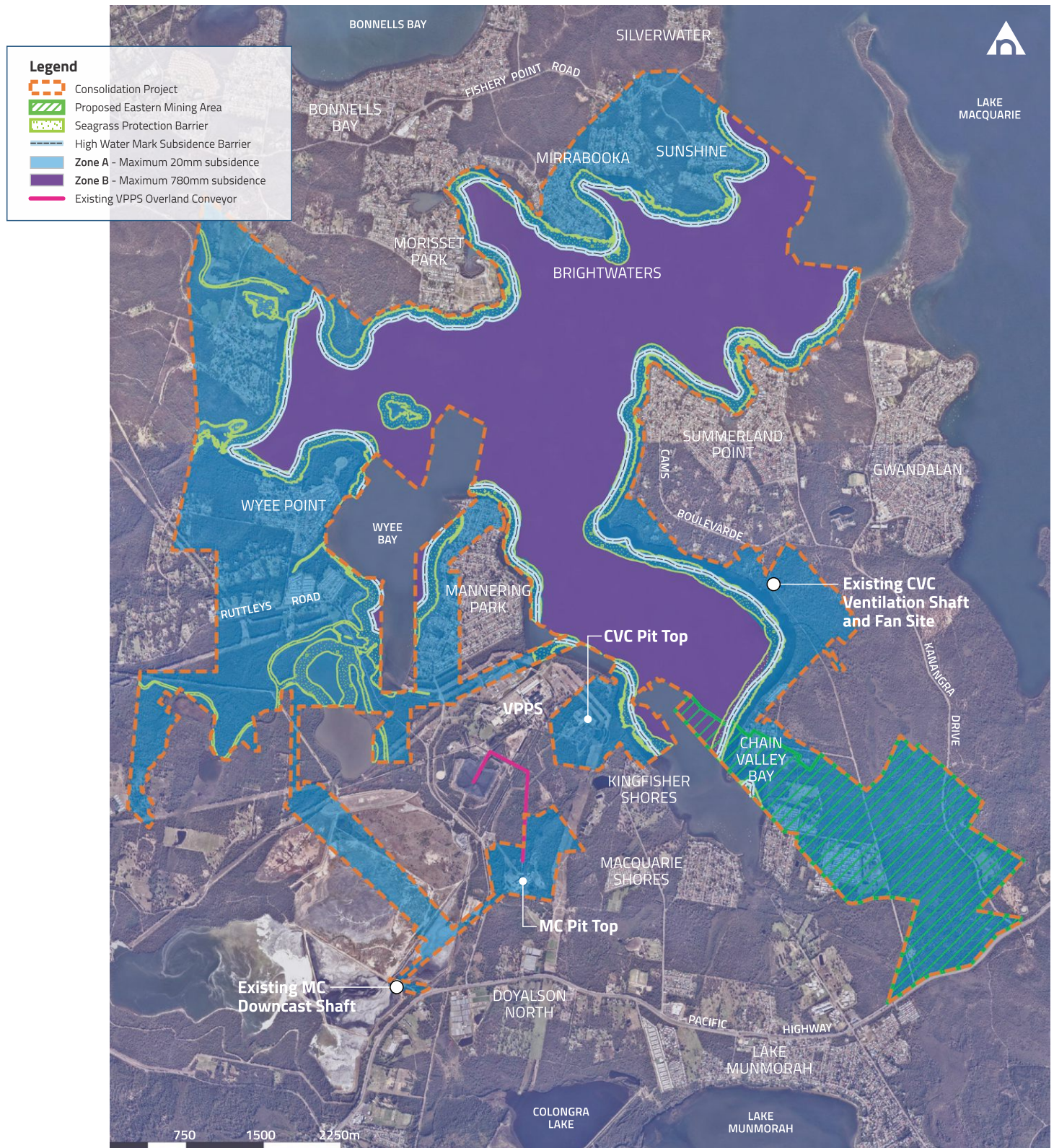


Key Aspects of the Consolidation Project

Component	CVC Approved Operations	MC Approved Operations	Consolidation Project
Life of Mine (LOM)	31 December 2027	31 December 2027	31 December 2029
Annual Underground Extraction	Extraction of up to 2.1 Mtpa ROM coal	Extraction of up to 1.1 Mtpa of ROM coal	Up to 2.8 Mtpa ROM (total from all mining areas)
Annual Surface Handling	Up to 1.5 Mtpa ROM Coal	Up to 2.1 Mtpa ROM Coal	Combined handling cap of up to 2.8 Mtpa ROM coal. Up to 1.5 Mtpa from CVC and up to 2.8 at MC
Resource	Fassifern seam	Fassifern seam Great Northern seam	Fassifern seam Great Northern seam
Mining Method	First workings only under land areas. Pillar extraction and miniwall mining only under lake and subject to 20 mm subsidence limits on sea grass beds and foreshore areas	First workings only	First workings only under land areas Pillar extraction and miniwall mining limited to areas under the lake and subject to 20 mm subsidence limits on sea grass beds and foreshore areas
Underground Mining Areas	Shown on Figure 1 (includes CVC Mod 4 Application Northern Mining Area)	Shown on Figure 1	Consolidation of MC and CVC approved Mining Areas Extension of mining into the Great Northern Seam to the east of previous CVC mining areas – within the Eastern Mining Area – Refer to Figure 1
Subsidence Commitments	<ul style="list-style-type: none"> Zone A - maximum 20mm, Zone B – maximum 780mm) seagrass and highwater mark subsidence barrier 	<ul style="list-style-type: none"> Maximum 20mm subsidence seagrass and highwater mark subsidence barrier 	<ul style="list-style-type: none"> Zone A – Maximum 20mm subsidence Zone B – Maximum 780mm subsidence (Shown on Figure 1)
Mine Infrastructure	<ul style="list-style-type: none"> Personnel-and-material drifts, ROM coal conveyor drift to MC Upcast and downcast ventilation shaft and fans Coal handling facilities for breaking, crushing, sizing and storing product coal Administration and workshop facilities Water management infrastructure 	<ul style="list-style-type: none"> Coal handling (breaking, crushing, sizing and storing product coal) upcast and downcast ventilation shaft and fans Overland conveyor (from MC Pit Top to VPPS) Underground conveyor to CVC Administration and workshop facilities Water management infrastructure 	<ul style="list-style-type: none"> Continued use of existing CVC and MC infrastructure Coal handling infrastructure recently demolished at CVC will be replaced as required Minor upgrades to surface facilities proposed to support extended LOM and the increase to ROM throughput (including water management structures)
Product Coal Handling and Transportation	<ul style="list-style-type: none"> Product coal from CVC Pit Top to VPPS via truck on private roads only (up to 1.5Mtpa) Transport product coal from approved CVC mining area to MC via the existing underground linkage up 2.1 Mtpa, for subsequent delivery to VPPS via conveyor A maximum of 660,000 tpa of product coal from CVC Pit Top on public roads to the Port of Newcastle for export A maximum of 180,000 tpa of product coal from CVC Pit Top on public roads to domestic customers (other than VPPS) 	<ul style="list-style-type: none"> Up to 2.1 Mtpa ROM coal via overland conveyor to VPPS 	<ul style="list-style-type: none"> Up to 1.5 Mtpa product coal transport from CVC to VPPS via internal haul road and sections of privately-owned Construction Road Up to 2.8 Mtpa product coal transport from MC to VPPS via existing conveyor Maintain current approval for export and domestic limits
Hours of Operation	24 hours per day, 7 days per week	24 hours per day, 7 days per week	No change
Workforce (Operations)	<p>Approximately 220 FTE personnel (including approximately 40 full time equivalent contractors)</p> <p>NOTE – CVC MOD 4 currently seeks approval for up to 330 FTE personnel at CVC within an overall CVC/MC workforce of approximately 390.</p>	170 FTE personnel	<ul style="list-style-type: none"> No change Approximately 390 FTE personnel across the two operations
Water Supply and Demand	<ul style="list-style-type: none"> Licensed daily discharge of up to 12.161 ML/day (EPL) Potable water utilised for surface facilities and underground operations supplied by Central Coast Council from potable water supply mains 	<ul style="list-style-type: none"> Licensed daily discharge of up to 4 ML/day (EPL) Potable water utilised for surface facilities and underground operations supplied by Central Coast Council via metered pipeline 	<ul style="list-style-type: none"> No change to current water discharge requirements Potable water utilised for surface facilities and underground operations supplied by Central Coast Council Additional minor water management infrastructure including pipeline linkages (potable) between VPPS and pit top facilities along existing infrastructure easements

Table 1

Figure 1



What Changes?

- Minor extension of mine life of 2 years (to end 2029) to align approved extraction and production rates with nominal life of VPPS
- Extension of approved mining to access coal from Great Northern Seam in the Eastern Mining Area
- Combined production **reduced** to 2.8 Mtpa from MC and CVC

What stays the same?

- Continued concurrent operation of CVC and MC
- Continued use of existing CVC and MC infrastructure
- No change to approved mining methods, coal processing, hours of operation or workforce
- Negligible subsidence impacts (maximum 20mm) under foreshore and land areas

What approvals will be required?

The Project requires a new development consent under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). A development application (DA) is being prepared to be submitted to DPIE in accordance with the EP&A Act. As a State significant development (SSD), the DA will be required to be accompanied by a comprehensive Environmental Impact Statement (EIS) and this must address specific assessment requirements specified by the Secretary for the DPIE (SEARs). The SEARs have been issued and the EIS is expected to be lodged in October 2021.

A detailed Social Impact Assessment (SIA) will be prepared in accordance with the DPIE's Social impact assessment guideline for State significant mining, petroleum production and extractive industry development. The indicative planning and approvals process and SIA processes (including stakeholder engagement) applicable to the Project is summarised in **Figure 3**.

Project Specialist Assessment Results

A summary of the key findings of the specialist assessments undertaken to support the EIS for the Project is provided below.

Social Impact Assessment

A Social Impact Assessment (SIA) is currently underway to identify, predict and evaluate social impacts of the Project and develop appropriate management and enhancement strategies.

The key issues raised by the community during the scoping phase for the Consolidation Project that have been addressed through the detailed specialist environmental assessments include potential impacts on residential properties due to subsidence, amenity impacts relating to noise (from pit top operations), impacts on air quality, and impacts relating to climate change (greenhouse gas), biodiversity, heritage and economic impacts.

This second round of community engagement will further inform the SIA assessment and determine any strategies required to address social impacts and opportunities associated with the Project.

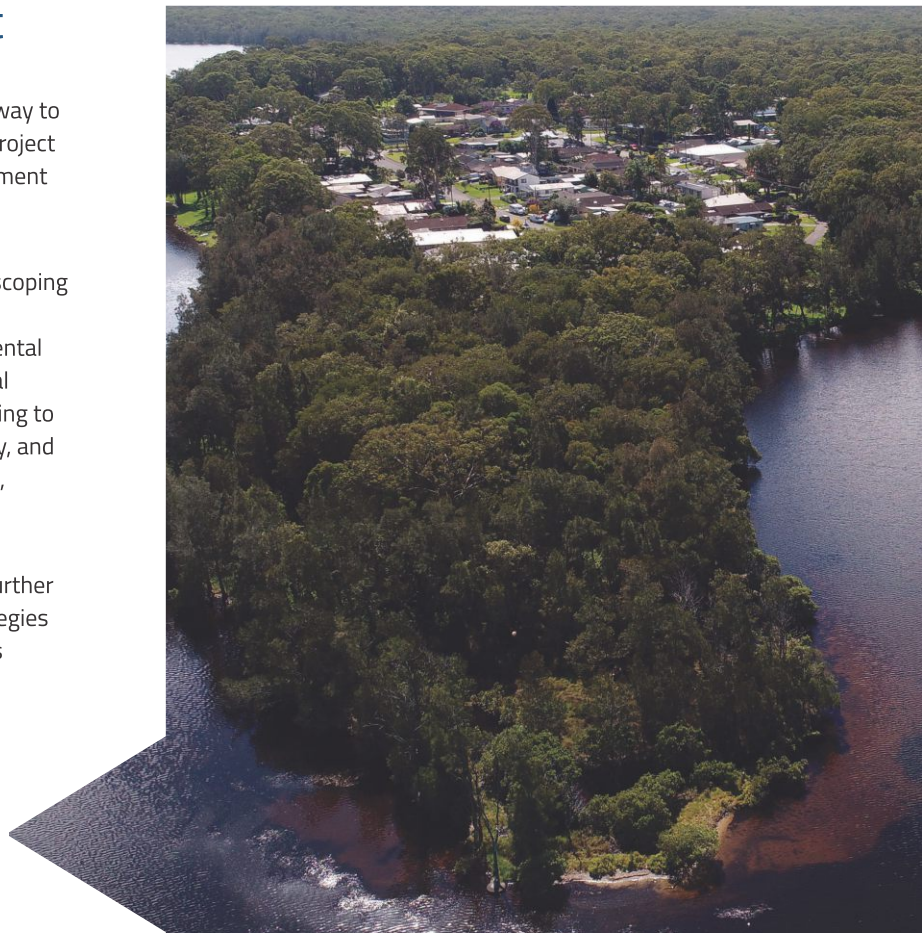
Subsidence

An assessment has been undertaken to assess the stability of the proposed workings within the proposed Eastern Mining Area including subsidence effects and potential impacts. The proposed mining involves first workings only with no secondary extraction, either partial or total, with negligible surface subsidence effects or impacts predicted.

Subsidence impacts were raised as an issue of concern during the first round of consultation with the community, particularly in relation to previous subsidence events in Chain Valley Bay associated with mining at Newvale Colliery. These previous subsidence events were associated with secondary extraction, the proposed mine plan is fundamentally different from the previous subsidence event.

The mine design for the Eastern Mining Area incorporates first workings only with a conservative pillar design which leaves stable coal pillars to achieve a maximum 20mm of subsidence. Secondary extraction is **not** proposed under residential land or foreshore areas. The first workings, continuous miner mining technique is well understood and subsidence effects and pillar stability can be predicted with a high degree of confidence.

Despite less than a total of 20mm of predicted subsidence, Delta Coal will routinely monitor the very small surface movements predicted as a result of proposed mining within the Eastern Mining Area.



Noise

The management of noise impacts from CVC and MC are a key focus of the existing operations and significant expenditure and improvements have been introduced at MC and CVC to mitigate these impacts. Noise from mining operations is one key concern raised during the consultation process, particularly by those people located near to the surface facilities. A detailed noise impact assessment has been undertaken for the Project and will be included in the EIS.

The noise assessment has been prepared in accordance with the NSW Noise Policy for Industry (NPfI). Noise has been modelled to cover multiple operational scenarios including the independent operation of either CVC or MC or concurrent operation of both pit tops.

The modelling indicates that the Project can be managed such that noise levels in the surrounding areas are predicted to remain within criteria established under the NPfI and noise levels will be similar to the approved CVC and MC operations. The noise assessment has determined that there are no predicted exceedances of the sleep disturbance criteria and no increase in road traffic noise relative to existing approved operations.

Delta Coal remains committed to managing noise impacts from the surface facilities in relation to all private residences. Existing commitments in relation to the management of noise are implemented through the Noise Management Plans for the MC and CVC operations.


Air Quality

A detailed air quality impact assessment for the Project has been undertaken to understand potential impacts associated with the proposed operational changes. The modelling is based on local and regional meteorological data and takes into account cumulative impacts including emissions from other air pollution sources.

Similar to the noise assessment, modelling includes air quality emissions associated with multiple operational scenarios including the independent operation of either CVC or MC or concurrent operation of both pit tops. The model predicts Project Only and Cumulative Impacts of dust in various particle size fractions including Total Suspended Particulates (TSP), PM_{10} , $PM_{2.5}$ and depositional dust in the areas surrounding the surface facilities and then compares these to government health and amenity criteria.

The modelling indicates that the Project will have similar air quality impacts to the existing approved CVC and MC surface facilities. The Project is not predicted to result in any exceedance of the applicable annual average and incremental 24-hour average PM_{10} and $PM_{2.5}$, TSP or dust deposition criteria at any residences during the life of the Project. Pit Top operations will continue to be managed in a way which minimises the contribution to off-site PM_{10} and $PM_{2.5}$ levels.

Delta remains committed to managing air quality impacts from the pit top facilities in relation to all private residences. Existing commitments in relation to the management of air quality impacts at CVC and MC are managed through the implementation of the site's Air Quality Management Plan.



The key change from previous noise and air quality assessments is that the impacts from both operations are now considered as a single operation. Under the Project CVC and MC will be regulated as a single operation whereas currently they are regulated as separate operations.

Consolidation Project

Other Environmental Assessments

Specialist Assessment	Overview of Results
Water Resources	<ul style="list-style-type: none"> The local area and immediate area surrounding the proposed Eastern Mining Area has been previously mined through both first workings and secondary extraction resulting in depressurisation of the groundwater system There is likely to be localised groundwater drawdown in the aquifers associated with the Great Northern Seam within the vicinity of the proposed Eastern Mining Area, however this will not result in any impacts to groundwater users or groundwater quality Existing groundwater licences held by Delta Coal will be sufficient to cover extraction of groundwater from the proposed underground workings No impacts to surface water flows, quality or downstream water users is predicted No additional water licences will be required as a result of the Project. The Project does not result in any change to currently approved discharge arrangements. The proposed underground mining operations will not have any direct connectivity with Lake Macquarie
Greenhouse Gas Emissions	<ul style="list-style-type: none"> A specialist greenhouse assessment has been undertaken to assess the emissions from operational activities, electricity use and the indirect downstream emissions generated by third parties (both VPPS and transportation for approved export/domestic use) The assessment indicates that downstream emissions represent approximately 80% of the Projects total emissions All reasonable and feasible measures to minimise the release of greenhouse gas emissions from the operations will continue to be undertaken Close proximity to VPPS assists in reducing transport related emissions associated with coal used by the VPPS which would otherwise be transported from other locations
Biodiversity	<ul style="list-style-type: none"> The Project will utilise existing infrastructure with no additional surface disturbance proposed, therefore the assessment of impacts associated with biodiversity are focussed on the proposed Eastern Mining Area Predicted maximum vertical subsidence impacts of 20mm will not impact biodiversity within the proposed Eastern Mining Area There are no predicted impacts on groundwater dependent ecosystems (GDE's) associated with the extension of mining into the proposed Eastern Mining Area
Archaeology and Historic Heritage	<ul style="list-style-type: none"> No new Aboriginal Sites were recorded within the proposed Eastern Mining Area, four known sites were inspected during the field survey The negligible predicted subsidence impacts from the Project will have negligible impacts on any Aboriginal sites located over the proposed Eastern Mining Area, including any sites not currently identified No additional Aboriginal heritage management or mitigation strategies are required as a result of the Project No historic heritage sites would be impacted as a result of the Project
Economic Impact Assessment	<ul style="list-style-type: none"> The Project will result in additional revenue through the extraction of additional coal resources and provide ongoing employment to the current Delta Coal workforce The Project will provide a cost effective and reliable coal supply to VPPS to 2029 A detailed cost benefit analysis is currently being undertaken and will be provided with the EIS
Traffic	<ul style="list-style-type: none"> There will be no increase in employees or significant construction activities as a result of the Project, therefore no change in traffic impacts relative to the approved operations is predicted

Table 2

How can I be involved?

Consultation with the community continues to be a key component of the environmental and social assessment for the Project. **Figure 3** illustrates the assessment process and the stage of the project.

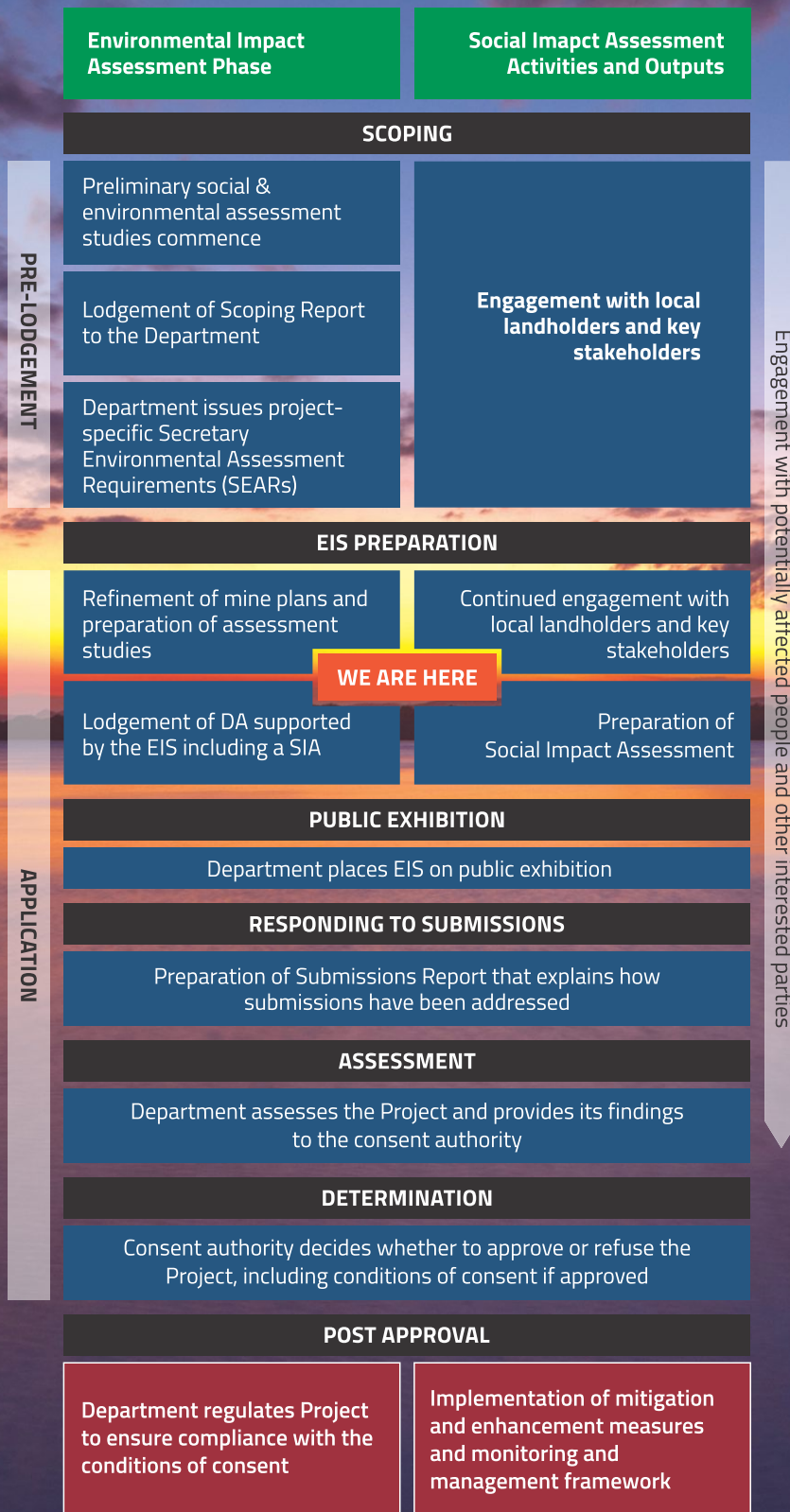


Figure 3: Phases of environmental impact assessment and key social impact assessment activities and outputs

Community Engagement Update

As part of the community engagement program, Umwelt and Delta would like to hear from landholders in the vicinity of the Project Area and other key stakeholders within proximal communities and the broader region, to inform the SIA and EIS.

Given the ongoing COVID-19 restrictions, we are unable to hold community information sessions or any face-to-face engagement as originally planned. We would therefore like to invite you to contact the Project team directly on the contact details below if you would like to discuss the Project or if you have any questions. The Project team will be able to provide additional detail on the outcomes of the assessments, answer questions, explain the DPIE assessment process and record any project issues that are of importance to you.

Alternatively, community members can have their say via the online survey, please scan the QR code below or go to the link <https://deltacvc.questionpro.com> to access the survey.



Scan QR code to
access online survey

Engagement with the community and capturing stakeholder views is an important part of the assessment process and we encourage all community members to get in contact to have their say.

Further Information

If you would like to know more about the Project or be involved in the SIA community engagement program, please contact Sarah Bell from the Project team using the details below.

We look forward to your involvement.

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